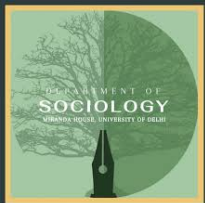# COMPENDIUM OF STUDENTS' PROJECT REPORTS

Academic Session
2023-24

DEPARTMENT OF
SOCIOLOGY

MIRANDA HOUSE,
UNIVERSITY OF DELHI

FOREWORD

"The function of sociology, as of every science, is to reveal that which is hidden." — Pierre Bourdieu

The Department of Sociology, Miranda House, is committed to fostering a robust culture of student-led research, recognizing it as an essential component of sociological inquiry. While independent research projects are not a mandatory requirement of the curriculum, the department actively encourages students to engage in empirical research, thereby honing their analytical skills and deepening their understanding of social realities.

In the academic session 2023-24, students conducted research based on primary sources, exploring sociological themes of interest. These projects involved fieldwork and methodologies such as questionnaires, interviews, focus group discussions, and case studies. Secondary sources provided theoretical frameworks, integrating classroom learning into broader sociological debates. These research endeavors demonstrate the the application of the a critical perspective that enables students to transcend individual experiences and contextualize them within larger social structures and historical processes. By engaging in systematic inquiry, students develop not only methodological competence but also the capacity for reflexivity and critical thinking indispensable for understanding and interpreting the complexities of contemporary society.

This compendium presents a selection of student research projects undertaken during the session, reflecting the intellectual curiosity, methodological rigor, and analytical depth that define the academic ethos of the Department of Sociology, Miranda House. It stands as a testament to the department's dedication to nurturing young scholars who contribute meaningfully to sociological scholarship and public discourse.

The projects were undertaken by the B. A. (Hons.) Sociology, IIIrd year students for their course work in 'Sociology of Health and Medicine', 'Environmental Sociology', under the guidance of Dr. M. Kamminthang. Along with this, the work of Ist year students on "Introduction to Sociological Research", under Dr. M. Kamminthang and Dr. Ritika Gulyani, has been included. This Research Compendium is compiled and edited by Shivanki Prasad of the Department of Sociology, Miranda House. We would like to thank the Teacher-in-Charge, Dr. Avantika Barwa of the Department for facilitating the publication.

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Navigating Health Challenges:
Experiences of Women with PCOD and PCOS

Authors:

Fidha MA, Hana CP, Fathima Rana Foumi, Farha, Rajiya Ashraf, Naja Yousef

Introduction:

Polycystic Ovary Syndrome (PCOS) is a multifaceted endocrine disorder affecting a substantial number of women globally. It can cause problems in the menstruation cycle and difficulty in conceiving. In this disease, many small cysts develop in the ovaries of women, hence its name. PCOS is globally considered to be the foremost reason for infertility in women. Despite extensive research on PCOS, there is a noticeable gap in understanding the specific challenges faced by unmarried women living with this condition, particularly concerning marriage and fertility. This study seeks to explore that unmarried women with PCOS experience heightened anxiety related to marriage and fertility issues.

The societal significance of this research lies in recognizing that PCOS extends beyond its physical manifestations, impacting various aspects of a woman's life, including her mental and emotional well-being. For unmarried women, the pressures surrounding marriage and expectations of fertility can exacerbate the already complex nature of PCOS, potentially leading to increased anxiety and stress. Understanding these nuanced experiences is crucial for developing holistic approaches to support and manage PCOS in unmarried women.

By delving into their experiences, perceptions, and societal pressures, this research aims to offer a comprehensive understanding of how PCOS influences the emotional and psychological well-being of unmarried women. Furthermore, it seeks to highlight the need for tailored healthcare interventions and support systems that address the unique challenges faced by this demographic.

Through this study, we hope to contribute to a more nuanced understanding of PCOS and advocate for improved care and support for unmarried women living with this condition.The objective of this study was to conduct a self-assessment of the quality of life of women with PCOS and to analyze the factors influencing the aforementioned quality of life scores.

RATIONALE

Unmarried women with Polycystic Ovary Syndrome (PCOS) or Polycystic Ovary Disorder (PCOD) often confront a distinctive array of challenges concerning marriage and fertility. PCOS/PCOD's influence on hormonal balance, menstrual cycles, and ovulation significantly impacts fertility, contributing to apprehension among unmarried women about their reproductive capabilities when considering starting a family. This concern is further compounded by societal expectations to conceive within specific timelines, fostering heightened anxiety.

The visible symptoms of PCOS/PCOD, such as weight gain, acne, and excessive hair growth, can detrimentally affect self-esteem and body image, leading to fears of rejection or judgment from potential partners and casting doubt on their ability to secure a suitable relationship. Moreover, cultural norms often impose substantial pressure on women to marry and bear children promptly, intensifying the fear of societal judgment or being labeled as inadequate due to their condition. Managing PCOS/PCOD necessitates medical intervention, lifestyle adjustments, and potentially fertility treatments, introducing uncertainties about treatment outcomes and concerns regarding the side effects of medication, further exacerbating anxiety about fertility and reproductive health.

Despite its prevalence, Polycystic Ovary Syndrome (PCOS) or Polycystic Ovary Disorder (PCOD) continues to suffer from a troubling lack of awareness and understanding within both society and the healthcare system. This deficiency in awareness leaves unmarried women grappling with PCOS/PCOD struggling to find the necessary support and information to effectively navigate their concerns. The dearth of support and understanding only serves to amplify the stress and anxiety experienced by these women, as they contend with a condition that impacts not just their physical health, but also their emotional well-being and societal expectations. Indeed, the stigma surrounding PCOS/PCOD further exacerbates the challenges faced by unmarried women, particularly concerning issues related to marriage and fertility.

Addressing this complex issue requires a comprehensive approach that encompasses not only medical care but also emotional support and awareness initiatives. By destigmatizing PCOS/PCOD, raising awareness, and providing essential resources, society and the healthcare system can better support unmarried women in managing their condition and navigating their journey towards health and well-being.

STATEMENT OF THE PROBLEM

Research Questions:

1. What are the dimensions of anxiety experienced by unmarried women with PCOS regarding marriage?
2. How do unmarried women with PCOS perceive and address concerns about fertility?
3. What factors contribute to anxiety related to marriage and fertility among unmarried women with PCOS?
4. How do cultural and societal norms influence the perception and management of anxiety related to marriage and fertility among unmarried women with PCOS?

Polycystic Ovary Syndrome (PCOS) is recognized as one of the most common endocrine disorders affecting reproductive-aged women worldwide. It is characterized by a constellation of symptoms, including menstrual irregularities, hyperandrogenism, and polycystic ovaries. While PCOS is primarily known for its reproductive and metabolic implications, emerging research highlights its significant impact on mental health and well-being.

Among the psychosocial challenges associated with PCOS, anxiety related to marriage and fertility emerges as a prominent concern, particularly for unmarried women diagnosed with the condition. The prospect of marriage and family planning can evoke feelings of uncertainty, apprehension, and distress, as individuals navigate the complexities of intimate relationships and reproductive aspirations in the context of a chronic health condition. Unmarried women with PCOS often grapple with a myriad of emotional and practical considerations, including concerns about their ability to conceive, fears of rejection or stigma from potential partners, and uncertainties about disclosing their PCOS diagnosis. These challenges are further compounded by societal expectations, cultural norms, and personal beliefs surrounding marriage and fertility, which can exacerbate feelings of anxiety and inadequacy among affected individuals.

RESEARCH COMPENDIUM

Despite increased awareness of the psychological impact of PCOS, research focusing specifically on the experiences and perceptions of unmarried women with the condition regarding marriage and fertility remains limited. Existing studies predominantly focus on clinical manifestations, treatment modalities, and reproductive outcomes, overlooking the lived experiences and psychosocial intricacies of PCOS-related anxiety within the context of intimate relationships and family planning.

Given the profound implications of anxiety related to marriage and fertility on the well-being and quality of life of unmarried women with PCOS, there is a critical need to delve deeper into this underexplored area of research. By elucidating the multifaceted dimensions of PCOS-related anxiety and its intersections with marriage and fertility concerns, this study aims to fill existing gaps in knowledge and inform holistic approaches to care and support for affected individuals. Furthermore, comprehending the sociocultural influences shaping perceptions of marriage and fertility among unmarried women with PCOS is essential for developing interventions and support services that are culturally sensitive and responsive to their unique needs. By acknowledging the diverse cultural backgrounds and societal expectations that influence individual experiences, healthcare providers and policymakers can tailor interventions to address the specific challenges faced by unmarried women with PCOS in different cultural contexts.

This research endeavor aims to shed light on the lived experiences and psychosocial intricacies of PCOS-related anxiety concerning marriage and fertility. By exploring the multifaceted dimensions of anxiety and its intersections with marriage and fertility concerns, this study seeks to empower unmarried women with PCOS to navigate their reproductive health with agency and resilience. Ultimately, by amplifying the voices of affected individuals and advocating for their holistic well-being, this research endeavor aspires to contribute to a more inclusive and compassionate approach to PCOS care and support.

METHODOLOGY

In this study, the goal was to investigate how unmarried women with Polycystic Ovarian Syndrome (PCOS) perceive anxiety related to marriage and fertility. To achieve this, we used qualitative study by conducting both unstructured and telephonic interviews. We had also used a snowball sampling method in the

research. We selected participants purposely, considering their willingness to share experiences and ensuring diversity in age and cultural backgrounds.

Unstructured interviews were conducted face-to-face with the participants, focusing on predetermined questions about anxiety levels, views on marriage, and fertility concerns. Telephonic interviews were also carried out to reach a wider geographical area and maintain participant confidentiality.The qualitative data from interviews underwent thematic analysis, identifying patterns related to anxiety, marriage, and fertility concerns. Ethical approval was obtained, and participants provided informed consent, with confidentiality and anonymity maintained throughout the study.

During the interview some of the participants had openly spoken about their difficulties and the issues that they face in this stage. As we know PCOD/PCOS affects the patients differently, like most of them have severe pain before or during periods. While some of them have sudden hair growth and for some pimples used appear in different spaces on the face. All these effects were spoken by participants during their interview. In the face to face interview, we were also clearly able to see these changes in them.

Researchers prioritized open communication with participants, fostering a safe environment for expression, including active listening and empathy. The combined use of structured and telephonic interviews, along with deep engagement, facilitated a thorough understanding of the anxiety experienced by unmarried women with PCOS regarding marriage and fertility. These findings contribute to existing literature and may guide tailored interventions and support services for this demographic. In the aspect of anxiety towards marriage and fertility, it was seen more for some of the parents than of the participants. Some of us even got a chance to talk to the parents and also their concerns regarding this issue. During one of the telephonic interviews with a married one, who is pregnant now is in a proper bed rest for 4 months as directed by her doctor due to PCOD. A high chance of abortion in other ways also makes them tensed and anxious about the pregnancy. The major element that helped as now all these were the snowball sampling technique, as it gave a lot of information regarding this issue.

LITERATURE REVIEW

Polycystic ovary syndrome affects 6-10% of women in the developed world, making it the most common disorder among women of reproductive age. The symptoms typically associated with polycystic ovary syndrome: amenorrhea, oligomenorrhea, hirsutism, obesity, subfertility, anovulation and acne can lead to a significant reduction in female life quality. Polycystic ovary syndrome decreases quality of life and marital sexual functioning among women. A negative effect of hirsutism severity on general well-being and marital sexual life is also observed.

Women with polycystic ovary syndrome (PCOS) fail to conform with societal norms for outer appearance. Many PCOS patients thus feel stigmatized in the sense of a loss of "feminine identity." In addition to somatic impairment, mood disturbances such as depression and limitations in emotional well-being, quality of life, and life satisfaction, the diagnosis of PCOS also has a negative impact on sexual self-worth and sexual satisfaction. Both obesity and hirsutism are major determinants of the physical component of quality of life in affected women. However, its psychological aspect appears to be inherent and specific for PCOS. Confirmation of the diagnosis and provision of detailed information to affected women, together with the availability of interdisciplinary treatment aimed at improving PCOS-related symptoms, such as hirsutism, obesity, menstrual irregularity, and infertility, will also reduce psychological distress and improve sexual self-worth. New treatment options, including insulin sensitizers, psychological counseling, and participation in a PCOS support group, are likely to further improve life satisfaction and coping of affected women.

PCOS can significantly affect the quality of life (QoL) of women. This is evident in comparisons of QoL scores before and after treatment, where women with PCOS report lower scores associated with mental health issues, infertility, and sexual dysfunction. Moreover, factors such as age, BMI, educational status, and marital status play a major role in altering HRQOL in PCOS cases. The anticipation of marriage and fertility issues can lead to increased levels of anxiety and depression among unmarried women with PCOS. The complexities of hormonal imbalances and reproductive health challenges contribute to these feelings. Evidence suggests that treatment, including therapy, medications, and lifestyle management, can decrease the psychosocial burdens and improve the QoL

experienced by women with PCOS. Social support also crucial in managing anxiety among women with PCOS, highlighting the need for psychological care during patient treatment. This suggests that unmarried women with PCOS do experience heightened anxiety regarding marriage and fertility. This is due to the multifaceted nature of PCOS, which affects physical health, mental well-being, and social aspects of life. Effective treatment and social support are key to alleviating these concerns and improving overall quality of life.

This review synthesizes findings from various studies, providing a comprehensive overview of the current understanding of the psychosocial impact of PCOS on unmarried women, particularly in relation to anxiety about marriage and fertility. For a more detailed analysis, specific studies and their methodologies can be further explored.

FINDINGS:

PCOD /PCOS is the same thing, probably the disease just limited to the ovary we called PCO. But it starts showing effects on other parts of the body, informing of high blood sugar, hypertension,obesity and multiple other problems then called PCOS.

50% of PCOD people actually go diagnosed and the other 50% do not know about they have PCOD. The person who have PCOD Are at the risk of diabetes and 5-6% people are increased risk of endometrial cancer.These are very alarming statistics. So we really need to understand and treat the disease well. There is so many symptoms. Firstly problems in the periods that may be irregular, delayed, scanty periods. In some cases it may be early or prolong. The second one is women are gaining either weight or she finds it difficult to lose weight. Then these women show male pattern hormone excess in their body which means that they may have increased body hair, scalp hair loss, acne on body, husky voice and sometimes it leads to infertility. The quality of sleep less, mood changes, anxiety, depression host these problems by PCOD. There are Rotterdam criteria to find PCOD in women. Basically it has 3 components. irregular periods signs, signs of male hormones excess in the body, by ultrasound scan. The radiologists say the volume of ovary is more than 10ml and it shows more than 20 follicles in each ovary. It's the point of diagnosing PCOD. Genetic Components may also be a cause of PCOD Issues. If there is one woman in the

family who is diabetic or prediabetic or other than she is suffering risk of PCOD then probably other women in the family also have PCOD. But, somehow 20 years back the mothers and our grandmothers never suffered PCOD. Though they're from the same genetic pool. So probably they had those genes or those genes not expressed because of right life styles. In rural areas women doesn't suffering PCOD issues they may be similar to our grand mother's life style. Now, we have poor lifestyles, these genes are expressed and lead to PCOD and that could be one of the reasons. Our faulty lifestyle is the second cause which means sedentary lifestyle, wrong diet, a lot of stress in life, and inadequate poor quality of sleep. The basic culprit in these things is insulin resistance. Insulin is a hormone secreted by pancreas in the body. Purpose of insulin is to pick up the glucose from the blood and use it for the energy in the various parts of the body. Now, during these phases the cells are not able to pick the glucose from blood and the body compositions are to produce more insulin leading to high insulin in the body and it turns to stimulate ovary bulkier and produce abnormal hormones which are mostly male pattern hormones. The other cause of PCOD is chronic low grade inflammation and the presence of chemical pollutants in the body like Use of plastics,aluminium foil for packing foods,room freshener, floor cleaner etc.

CONCLUSION
Remember it's a new disease, your mom and grandma didn't have PCOD. Modern lifestyles are mostly readymade products which are so easily available, young girls are consuming which are totally avoided.Ladies who have PCOD are found to have high insulin level diet they include high refined carbohydrate like maida preparation, starchy food, sugary food can cause insulin resistance therefore avoid white breads biscuits pastas, refined products, artificially coloured products, readymade packed foods instant eat all grains. Even oats meals regulate your insulin level. Include milk in your diet by having curd, cheese and eating fresh fruits between breakfast and lunch. Add dark green leafy vegetables, berries, nuts and avoid spicy food, strong tea, coffee, white sugar, greasy or fried foods and drink at least 8-10 glasses of water per day.
Exercise is very very important in improving productive health. Routine walk is also recommended at least 5-6 km everyday or go 10000 steps a day. Women suffering from PCOD have a lot of mood swings which do not make them happy

 or sad but all other people around them are harassed and they're really disturbed because of that person. It's important to develop a feeling of letting go and living life systematically. Doctor requested that you try to concentrate your breath level when you're feeling low. Someone says it's difficult to understand a woman because situations and reactions are various. Same kind of situation helps women and it also irritates women so it's herself who has to take a chart of her mind, her emotions and see if she behaves in a balanced, happy and cheerful way. This shall pass but you should do your job well by remaining healthy and happy.

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Sociological Analysis on COVID 19-
IT'S IMPACT OVER THE MENTAL HEALTH

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INTRODUCTION

One of the biggest global crises in generations, the COVID-19 pandemic has had severe and far-reaching repercussions for health systems, economies and societies. Countless people have died, or lost their livelihoods. Families and communities have been strained and separated. Children and young people have missed out on learning and socializing. Businesses have gone bankrupt. Millions people have fallen below the poverty line.

As people grapple with these health, social and economic impacts, mental health has been widely affected. Plenty of us became more anxious; but for some COVID-19 has sparked or amplified much more serious mental health problems. A great number of people have reported psychological distress and symptoms of depression, anxiety or post-traumatic stress. And there have been worrying signs of more widespread suicidal thoughts and behaviours, including among health care workers.

Some groups of people have been affected much more than others. Faced with extended school and university closures young people have been left vulnerable to social isolation and disconnectedness which can fuel feelings of anxiety, uncertainty and loneliness and lead to affective and behavioural problems. For some children and adolescents being made to stay at home may have increased the risk of family stress or abuse, which are risk factors for mental health problems. Women have similarly faced greater stress in homes, with one rapid assessment reporting that 45% of women had experienced some form of violence, either directly or indirectly during the first year of the pandemic.

IMPACT OVER THE MENTAL HEALTH

While mental health needs have risen, mental health services had been severely disrupted during the covid pandemic. This was especially true early on in the pandemic when staff and infrastructure were often redeployed to COVID-19 relief. Social measures also prevented people from accessing care at that time. And in many cases, poor knowledge and misinformation about the virus fuelled fears and worries that stopped people from seeking help.

Mental health concerns and treatment usually take a backseat when the limited resources are geared for pandemic containment. In this global humanitarian crisis of the COVID-19 pandemic, mental health issues have been reported from all over the world. The pandemic impacted the globe, altering lives of people in all domains, and added insecurity, thereby taking a toll on their mental health. Addressing the parallel surge of psychological problems and identifying the vulnerable population is of equal concern. The issues like morbidity and mortality of COVID-19 affected the mental state of every human being. However, social separation and isolation due to the restrictive measures considerably increased this impact. According to the World Health Organization (WHO), anxiety and depression prevalence increased by 25% globally.

OBJECTIVE OF THE STUDY

In this study, we aimed to examine the lasting effects of the COVID-19 pandemic on the population and symptoms of anxiety and depression in the population during the coronavirus pandemic.

RATIONALE

The first mention of the novel coronavirus came in 2019, when this variant was discovered in the city of Wuhan, China, and became the first ever documented coronavirus pandemic .At this time there was only a sliver of fear rising all over the globe. However, in March 2020, after the declaration of a global pandemic by the World Health Organization (WHO), the situation changed dramatically . Answering this, yet an unknown threat thrust many countries into a psycho-socio-economic whirlwind .Various measures taken by governments to control the spread of the virus presented the worldwide population with a series of new challenges to which it had to adjust. Lockdowns, closed schools, losing employment or businesses , and rising deaths not only in nursing homes came to

be a new reality. Risks of changes in the mental state of the population came mainly from external risk factors, including prolonged lockdowns, social isolation, inadequate or misinterpreted information, loss of income, and acute relationship with the rising death toll. According to the World Health Organization (WHO), since the outbreak of the COVID-19 pandemic, anxiety and depression prevalence increased by 25% globally .

Unemployment specifically has been proven to be also a predictor of suicidal behavior .These risk factors then interact with individual psychological factors leading to psychopathologies such as threat appraisal, attentional bias to threat stimuli over neutral stimuli, avoidance, fear learning, impaired safety learning, impaired fear extinction due to habituation, intolerance of uncertainty, and psychological inflexibility.

The rationale behind investigating the impact of COVID-19 on mental health stems from the recognition that pandemics not only pose a threat to physical health but also have profound implications for psychological well-being. Understanding the interplay between COVID-19 and mental health is crucial for several reasons:

Global Scale of the Pandemic: COVID-19 is a global health crisis that has affected virtually every corner of the world. As such, its impact on mental health is not limited to specific regions or populations but extends universally, making it imperative to address on a global scale.

Unique Stressors and Challenges: The COVID-19 pandemic presents unique stressors and challenges that can exacerbate pre-existing mental health conditions or precipitate new ones. These stressors include fear of infection, uncertainty about the future, social isolation, economic hardship, and stigmatization, among others.

Longitudinal Effects: The mental health impacts of COVID-19 are not confined to the duration of the pandemic itself but can have long-lasting effects that persist even after the virus is brought under control. Understanding these longitudinal effects is essential for developing strategies to support individuals in the post-pandemic recovery phase.

Intersectionality: The impact of COVID-19 on mental health intersects with various social determinants, including socioeconomic status, race, ethnicity, gender, age, and pre-existing health conditions.

RESEARCH COMPENDIUM

Recognizing the intersectional nature of these impacts is critical for addressing disparities in mental health outcomes and ensuring equitable access to support services.

Healthcare System Capacity: The strain placed on healthcare systems by the COVID-19 pandemic extends beyond the management of physical health to encompass mental health services as well. Understanding the mental health burden of the pandemic is essential for allocating resources and building capacity within healthcare systems to meet the growing demand for mental health support.

Public Health Response: Incorporating mental health considerations into the public health response to COVID-19 is essential for developing holistic and effective strategies for pandemic management and recovery. Neglecting mental health can undermine efforts to control the spread of the virus and mitigate its long-term social and economic consequences.

Thus we put forth the research question for studying the repercussions caused over the mental health due to Covid 19 as following.

RESEARCH QUESTION - Has covid 19 pandemic made people more resilient or has it left them more vulnerable than before in reference to their mental health?

STATEMENT OF THE PROBLEM

The emergence of COVID-19 and the subsequent implementation of containment measures such as lockdowns, social distancing, and quarantine have significantly altered the daily lives of individuals across the globe. While these measures were deemed necessary to curb the spread of the virus, they have inadvertently precipitated a mental health crisis of unprecedented magnitude. Several interrelated factors contribute to this crisis:

Isolation and Loneliness: Social distancing measures have resulted in increased isolation and loneliness, depriving individuals of vital social connections and support systems. The prolonged separation from friends, family, and communities has exacerbated feelings of loneliness, leading to profound emotional distress and exacerbating pre-existing mental health conditions.

Uncertainty and Fear: The uncertainty surrounding the trajectory of the

RESEARCH COMPENDIUM

pandemic, coupled with fear of infection and its consequences, has engendered widespread anxiety and stress. Individuals grapple with the fear of falling ill, losing loved ones, or experiencing financial hardship, amplifying feelings of helplessness and insecurity.

Disruption of Routine and Structure: The disruption of daily routines and structures due to lockdowns and restrictions has destabilized individuals' sense of normalcy and predictability. Work-from-home arrangements, closure of schools, and limited access to recreational activities have blurred the boundaries between work and personal life, leading to heightened stress and burnout.

Economic Hardship: The economic fallout of the pandemic, including job losses, business closures, and financial insecurity, has profound implications for mental health. Financial stressors can exacerbate feelings of anxiety, depression, and hopelessness, leading to a vicious cycle of psychological distress and economic hardship.

Stigmatization and Discrimination: Certain communities, such as healthcare workers, frontline responders, and individuals from marginalized backgrounds, have faced stigmatization and discrimination in the wake of the pandemic. Such experiences can have profound psychological consequences, including feelings of shame, guilt, and alienation.

Access Barriers to Mental Health Services: Despite the escalating demand for mental health support, access barriers to essential services persist. Limited availability of mental health resources, long wait times for appointments, and stigma surrounding help-seeking behaviors pose significant challenges to individuals in need of support.

METHODOLOGY

The methodology used for collection of data comprises of the primary sources including the government circular and reports including that of the UN and WHO as well as country wise statistics .Apart from the primary sources the secondary sources used includes the academic research papers by many eminent scholars and their work over the same, articles as well.

Other information derives from the questionnaire circulated through social media for respondent to fill their personal experiences experienced during the Covid-19,this method was based on Convenience Sampling which is part of non

probability sampling due to paucity of resources and time constraints.

LITERATURE REVIEW
The literature review synthesizes recent research to examine the various ways in which COVID-19 has influenced mental health, including psychological distress, anxiety, depression, and other related outcomes.

Psychological Distress and Anxiety:
Numerous studies have reported elevated levels of psychological distress and anxiety among individuals during the COVID-19 pandemic. For instance, research by Wang et al. (2020) in their work on "A longitudinal study on the mental health of general population during the COVID-19 epidemic in China" found that a considerable proportion of the population experienced symptoms of anxiety in response to the pandemic-related stressors, such as fear of infection, uncertainty about the future, and social isolation. Similarly, a meta-analysis by Salari et al. (2020) in "Mental Health in COVID-19 Pandemic: A Meta-Review of Prevalence Meta-Analyses" highlighted the global prevalence of anxiety symptoms during the pandemic, with variations across different regions and population groups.

Depression and Mood Disorders:
The pandemic has also been associated with increased rates of depression and mood disorders. Studies have documented higher levels of depressive symptoms among individuals during periods of lockdowns, quarantine, and social distancing measures Gao et al., 2020 in "Mental health problems and social media exposure during COVID-19 outbreak"; and Pierce et al., 2020 in "Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population" . Factors such as economic hardship, social isolation, and loss of social support networks contribute to the exacerbation of depressive symptoms during the pandemic Holmes et al., 2020 in "Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science".

Suicidal Ideation and Behavior:
Emerging evidence suggests a rise in suicidal ideation and behavior in the context of COVID-19. Research by Gunnell et al. 2020 in " Suicide risk and prevention

during the COVID-19 pandemic" indicated an increased risk of suicidal ideation and suicide attempts during the pandemic, particularly among vulnerable populations such as healthcare workers, frontline responders, and individuals with pre-existing mental health conditions. Factors contributing to suicidal risk include job loss, financial stress, social isolation, and limited access to mental health services by Mamun & Ullah, 2020 in "The COVID-19 pandemic and serious psychological consequences in Bangladesh: A population-based nationwide study".

Impact on Vulnerable Populations:

Certain populations are disproportionately affected by the mental health consequences of COVID-19. Healthcare workers, for example, face significant stressors related to their frontline roles, including fear of infection, long working hours, and moral dilemmas by Pappa et al., 2020 in "Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis". Individuals with pre-existing mental health conditions also experience heightened vulnerability due to disruptions in treatment access and support services Rajkumar, 2020 in "COVID-19 and mental health: A review of the existing literature"

Resilience and Coping Strategies:

Despite the challenges posed by the pandemic, individuals demonstrate resilience and employ various coping strategies to protect their mental health. Research by Li et al. (2020) in " COVID-19 pandemic and mental health consequences: Systematic review of the current evidence" identified adaptive coping mechanisms such as seeking social support, maintaining routines, engaging in physical activity, and practicing mindfulness as effective ways to mitigate the negative impact of COVID-19 on mental well-being.

Thus literature reviewed highlights the significant impact of COVID-19 on mental health, encompassing a wide range of adverse outcomes including anxiety, depression, and suicidal behavior. Vulnerable populations, including healthcare workers and individuals with pre-existing mental health conditions, face heightened risks and require targeted interventions and support. However, amidst these challenges, individuals exhibit resilience and employ coping strategies to navigate the psychological effects of the pandemic. Further

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Despite the challenges posed by the pandemic, individuals demonstrate resilience and employ various coping strategies to protect their mental health. Research by Li et al. (2020) in " COVID-19 pandemic and mental health consequences: Systematic review of the current evidence" identified adaptive coping mechanisms such as seeking social support, maintaining routines, engaging in physical activity, and practicing mindfulness as effective ways to mitigate the negative impact of COVID-19 on mental well-being.

Thus literature reviewed highlights the significant impact of COVID-19 on mental health, encompassing a wide range of adverse outcomes including anxiety, depression, and suicidal behavior. Vulnerable populations, including healthcare workers and individuals with pre-existing mental health conditions, face heightened risks and require targeted interventions and support. However, amidst these challenges, individuals exhibit resilience and employ coping strategies to navigate the psychological effects of the pandemic. Further

research is needed to better understand the long-term mental health consequences of COVID-19 and to develop effective interventions to support individuals and communities in the post-pandemic recovery phase.

FINDINGS

Q2 According to the questionnaire circulated and responses received there are 43.8% respondents had agreed that they experienced Anxiety,18.8% respondents experienced depression,56.3% experienced stress,25% experienced panic attacks 31.3% experienced sleep distrubances 6.3% experienced other issues related to mental health during the Covid 19 pandemic.
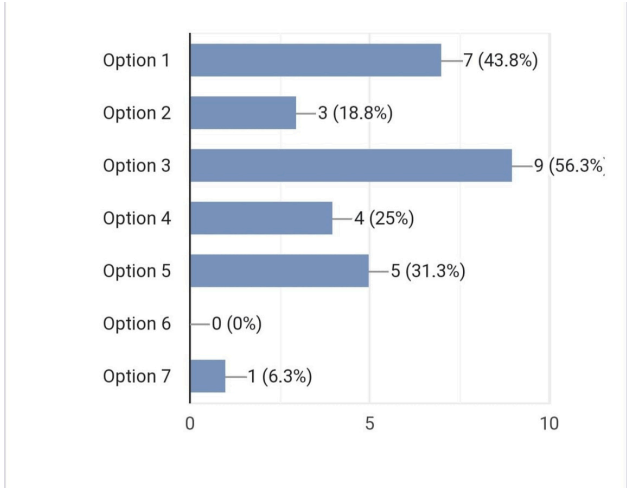
Q3 According to the responses received for whether the respondents experienced the above situations before the pandemic also for which 56.3% said No while 43.8%said yes for the same.
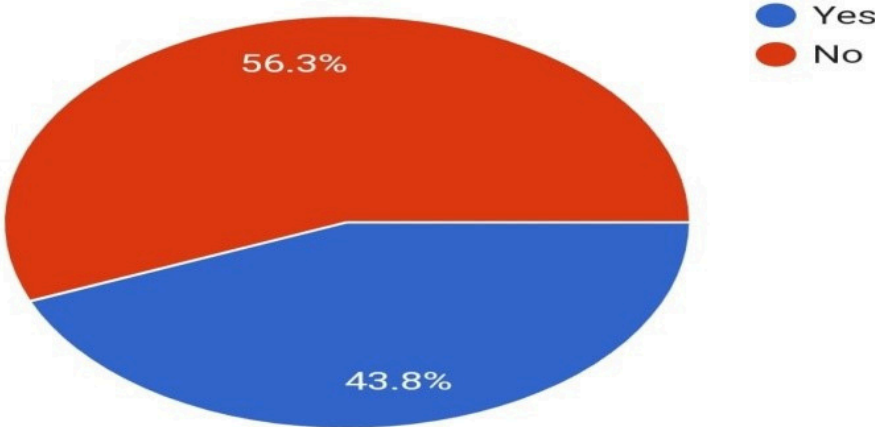
Q4 According to the responses received for which aspects of pandemic had been most challenging to the mental well-being of the respondents so for this 37.5% responded social isolation being the factor whereas 43.8% said economic uncertainty, 37.5% fear of contacting the virus,56.3% concerned about their loved ones,12.5% for disruption of daily routines while 6.3%responded for others issues being the reason.

Option	Value
Option 1	6 (37.5%)
Option 2	7 (43.8%)
Option 3	0 (0%)
Option 4	6 (37.5%)
Option 5	9 (56.3%)
Option 6	2 (12.5%)
Option 7	0 (0%)
studies, future	1 (6.3%)
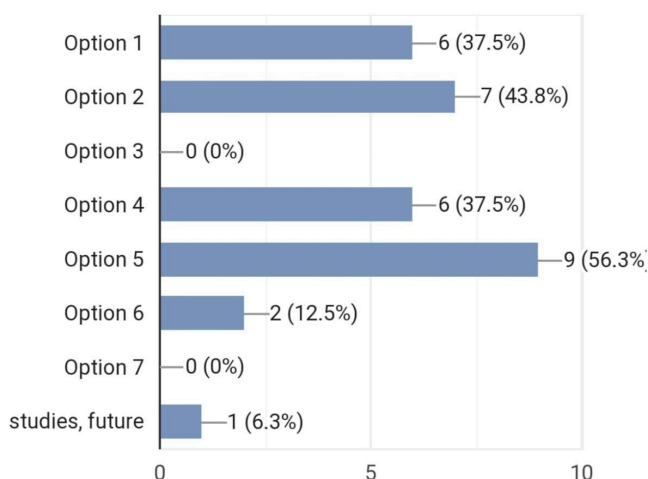
Q5 According to the responses received for the coping mechanism used by respondent 43.8% responded that excercise helped them,43.8%for meditation and deep breathing exercises,25% for spending time outdoors 31.3% into creative activities 43.8% connecting with friends and family virtually,6.3% seeked professional help
while 6.3% responded for others.

Option	Value
Option 1	7 (43.8%)
Option 2	7 (43.8%)
Option 3	4 (25%)
Option 4	5 (31.3%)
Option 5	7 (43.8%)
Option 6	1 (6.3%)
Option 7	1 (6.3%)

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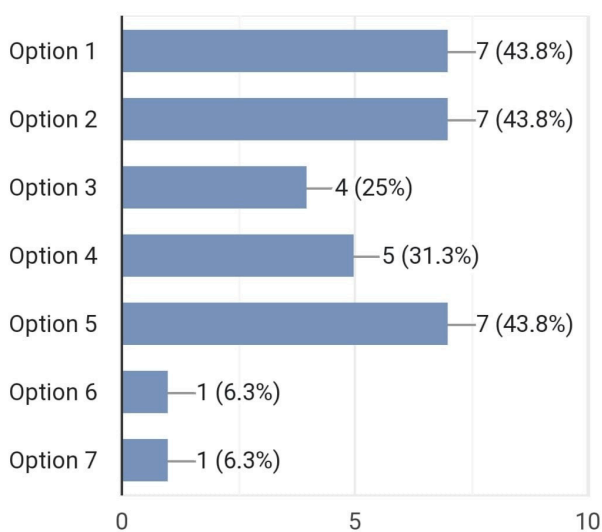
Q6 According to the responses received for how mental health had impacted daily life of respondent during pandemic for this respondent gave miscellaneous replies for the same.

Q7 According to the responses received for which coping mechanism found to be most effective for them and how it helpedthem for this respondent gave miscellaneous replies for the same.

Q8. According to the responses received for consumption of news and information about Covid 19 each day 68.8% said less than 1hour 25%said 1-2hours while 6.3% responded for more than 4hours.
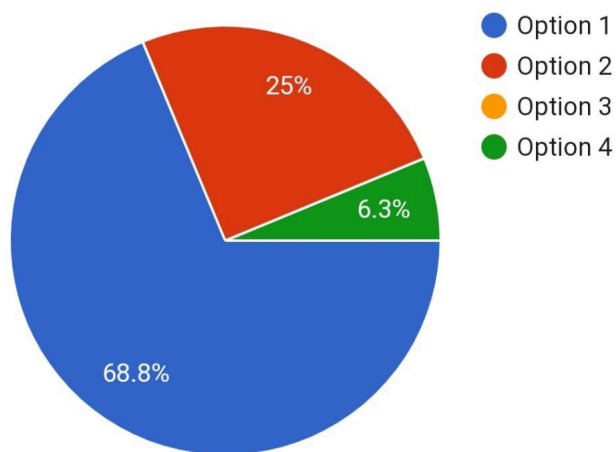
Q9 According to the responses received for whether the excessive media consumption affected our mental health for this 25% said that it hadn't impacted while 31.3% said it impacted positively, 12.5% said it made them hope for futurr whereas ,31.3% responded how it made them vulnerable about then ongoing situation.

RESEARCH COMPENDIUM
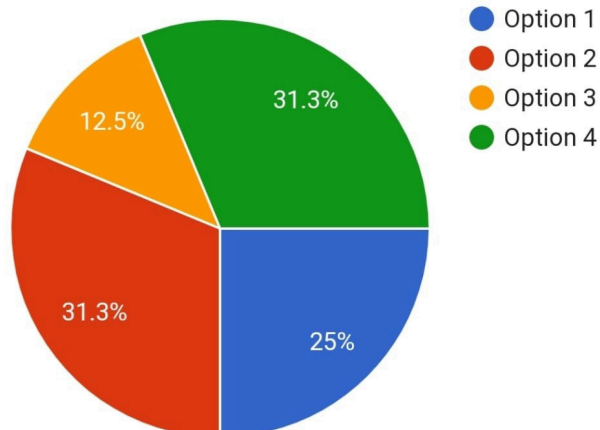
Q10 According to the responses received for whether the responded faced difficulty accessing the mental health services during the pandemic 12.5% said yes whereas 87.5% responded a No for the same.

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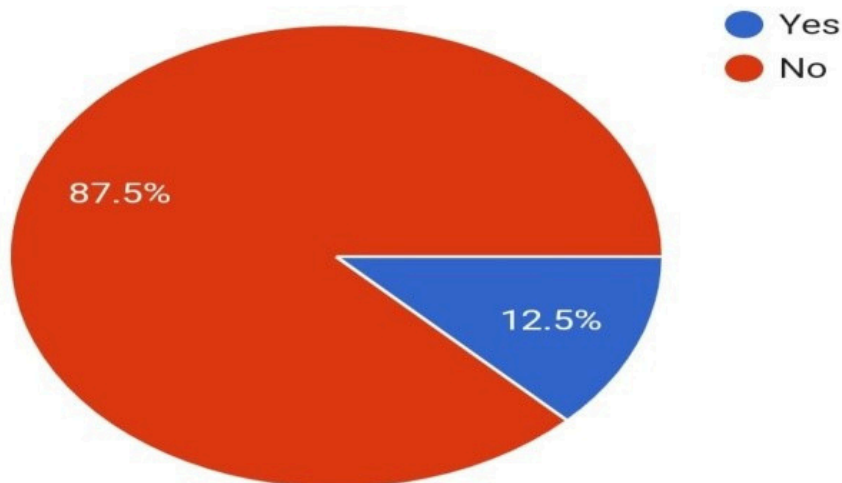
Q11 According to the responses received if incase the respondent faced difficulty in accessing their mental health what exactly did the challenges they had faced in the same for which the respondent gave miscellaneous replies for the same.

Q12 According to the responses received whether the respondent sought counseling services during pandemic for this 12.5% responded a yes whereas 87? 5% responded No.

RESEARCH COMPENDIUM
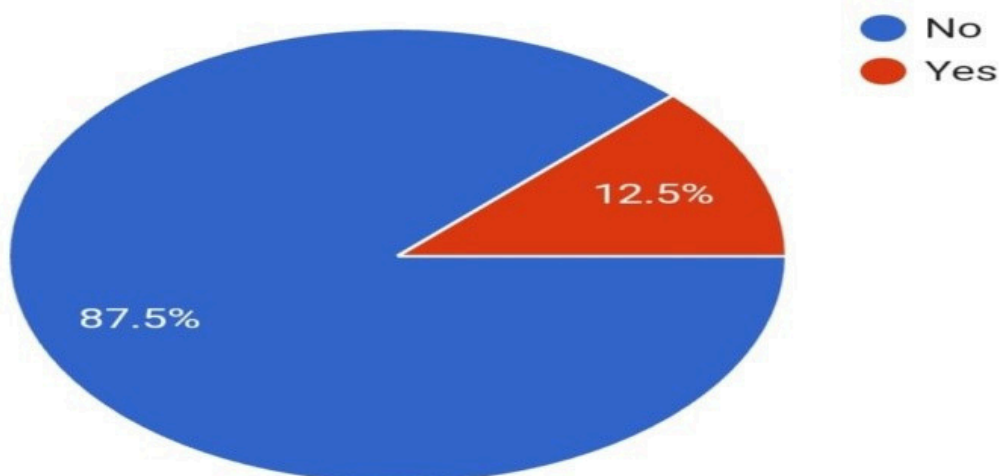
Q13 According to the responses received whether the therapy found to be successful for that 35.7% responded not helpful,42.9% said it be somewhat helpful whereas 21.4%found it very helpful for the same.

.

Legend:
- Not helpful
- Somewhat helpful
- Very helpful

42.9%
21.4%
35.7%
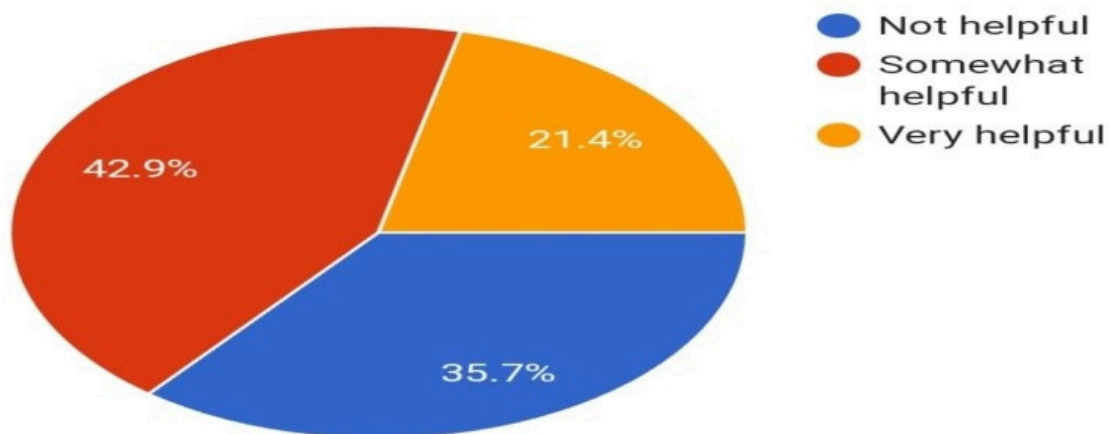
Q14 According to the responses received for this 33.3% very optimistic 20% optimistic, 33.3%pessimistic ,7% very pessimistic whereas 6.7% felt vulnerable than before.

Legend:
- Option 1
- Option 2
- Option 3
- Option 4
- Option 5
- Option 6

33.3%
6.7%
20%
33.3%

RESEARCH COMPENDIUM
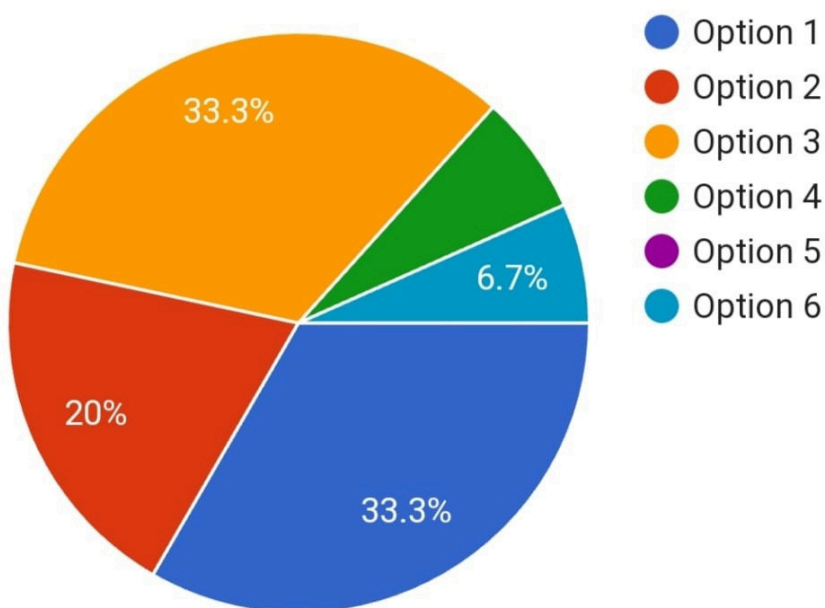
Q15 According to the responses received for how do responded think their mental health and been impacted due to covid 19 as accessed to situation before pandemic for which 46.7% said that it has improved much, 26.7% said it made them more resilient,whereas 13.3% stated how it has increased their anxieties and 13.3% had said they became more vulnerable than before

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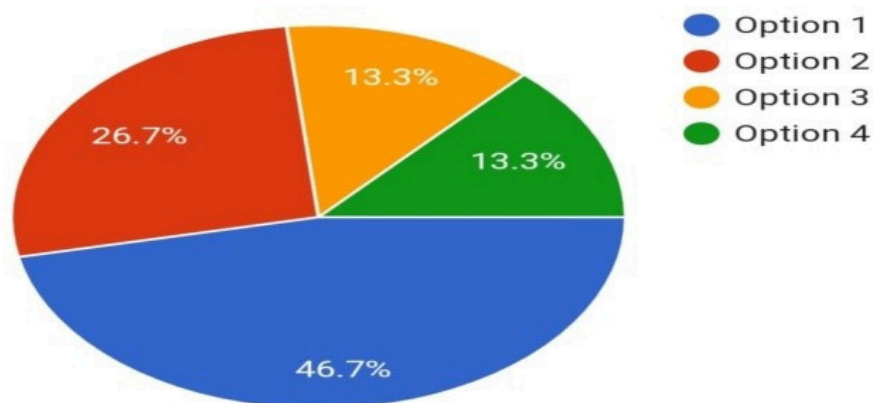
Q16 According to the responses received for whether the respondents think they have evolved since pandemic in terms of mental well-being for this 62.5% said they have evolved and able to deal with things better, 6.2% said they survived through the pandemic,25% said they became more resilient whereas 6.3% said it had left then more fragile and triggered than before.

RESEARCH COMPENDIUM
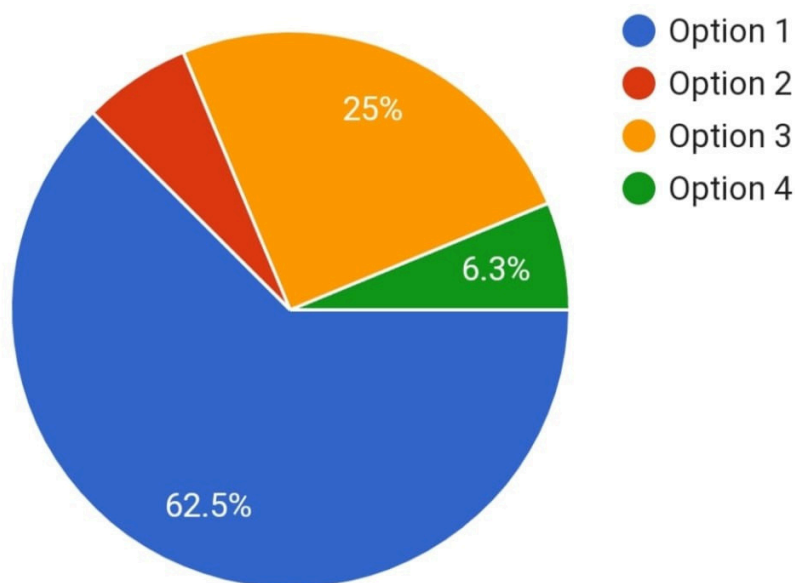
Q17 According to the responses received for experiences of respondent about the mental health during pandemic , therapy sessions and coping mechanism respondent gave miscellaneous replies for the same.

DATA ANALYSIS

Thus,the responses received by all the respondent put forth how covid 19 had impacted majority of the people in less or more capacity, as a result also impacting their mental health. Respondents also pointed out the different factors leading the same and the different coping mechanism used by them all for tackling the crisis, however the questionnaire showcase the majority of the people people that the pandemic though had impacted the mental health but also made them much more resilient to adapt to the circumstances and come out as stronger selves. The responses also suggested how therapy isn't that popularly used by the people for various reasons hunting towards how it needs to be destigmatized and made available as aim to provide better health care facilities to all.

CONCLUSION

The COVID-19 pandemic has brought about not only a global health crisis but also a profound mental health challenge. As this project has demonstrated, the impact of COVID-19 on mental health is multifaceted, spanning from heightened levels of anxiety and depression to increased risk of suicidal ideation and behavior. Vulnerable populations, including individuals with pre-existing mental health conditions, and those facing socioeconomic disparities, are particularly susceptible to the adverse mental health effects of the pandemic.
However, amidst the challenges, there are signs of resilience and adaptive coping strategies employed by individuals to navigate the psychological toll of the crisis. From seeking social support to maintaining routines and engaging in mindfulness practices, individuals demonstrate a capacity to cope with the stressors brought about by COVID-19.
Moving forward, it is essential to prioritize mental health in the ongoing response to the pandemic. This includes ensuring access to mental health services and support, addressing the social determinants of mental health, and implementing policies that promote psychological well-being. Furthermore, efforts to

destigmatize mental illness and promote resilience should be integrated into public health messaging and community-based interventions.
Ultimately, addressing the mental health consequences of COVID-19 requires a comprehensive and collaborative approach involving policymakers, healthcare providers, communities, and individuals themselves. By acknowledging the mental health toll of the pandemic and working together to support one another, we can emerge stronger and more resilient in the face of adversity.

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https://pubmed.ncbi.nlm.nih.gov/32437915/Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151415/COVID-19 and mental health: A review of the existing literature

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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7260522/ COVID-19 pandemic and mental health consequences: Systematic review of the current evidence
APPENDIX I

<div align="center">

Participant Consent form

(Consent to take part in research)

</div>

I

_____

_____ voluntarily agree to participate in this research study over "Impact of COVID -19 on Mental Health"

I agree to provide my best knowledge over the subject and also agree to justify over my responses in case, if required in future for clarification.

I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.

This questionnaire filling shall be done in my name and disguising any details of it which may reveal my identity or the identity of people I speak about. I understand that disguised extracts from my questionnaire may be quoted and that it shall be used for research purposes for which I agree upon.

I understand that a transcript of my responses shall be provided to me for reviewing and asking for my consent over the same. I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time.

I understand that I am free to contact the person involved in the research to seek further clarification and information Names, degrees, affiliations and contact details of researcher. **RESEARCH COMPENDIUM**

QUESTIONNAIRE
COVID-19 - Impact on Mental Health

Thank you for taking the time to participate in this survey. Your responses will help us understand the effects of COVID-19 on mental health, coping strategies, and the utilization of therapy services. Please answer the following questions honestly.

Q1 Demographic Information:
1. Name
2. Age:
3. Gender:
4. Location :

Q2 Have you experienced any of the following mental health problems as a result of the COVID-19 pandemic? (Check all that apply)
• Anxiety
• Depression
• Stress
• Panic attacks
• Sleep disturbances
• None
• Other (please specify): _____

Q3 Do you think you have experienced the above situations before pandemic also?
·Yes I had experienced such situation but during pandemic it got intensified
·No I had never experienced anything such before it was only during pandemic the things got so worse.

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Q4 Which aspects of the pandemic do you find most challenging in terms of your mental well-being? (Check all that apply)
·Social isolation
·Economic uncertainty
·Unemployment
·Fear of contacting the virus
·Concerns about loved ones' health
·Disruption of daily routines
·None
·Other (please specify): _____

Q5 How do you think have these mental health problems impacted your daily life during the pandemic? (e.g., work/school performance, relationships, physical health)(If not ,then go to question 8)

Q6 What coping mechanisms have you employed to manage your mental health during the pandemic? (Check all that apply)
•Exercise
•Meditation/Deep breathing exercises
•Spending time outdoors
•Creative activities (e.g., art, music)
•Connecting with friends/family virtually
•Seeking professional help
•None
•Other (please specify): _____

Q4 Which aspects of the pandemic do you find most challenging in terms of your mental well-being? (Check all that apply)
·Social isolation
·Economic uncertainty
·Unemployment
·Fear of contacting the virus
·Concerns about loved ones' health
·Disruption of daily routines
·None
·Other (please specify): _____

Q5 How do you think have these mental health problems impacted your daily life during the pandemic? (e.g., work/school performance, relationships, physical health)(If not ,then go to question 8)

Q6 What coping mechanisms have you employed to manage your mental health during the pandemic? (Check all that apply)
•Exercise
•Meditation/Deep breathing exercises
•Spending time outdoors
•Creative activities (e.g., art, music)
•Connecting with friends/family virtually
•Seeking professional help
•None
•Other (please specify): _____

Q7 Which coping mechanism(s) have been most effective for you in managing your mental health and has it increased your resilience than pre pandemic conditions?

_____

Q8 How much time did you spend consuming news and information about COVID-19 each day
·Less than 1 hour
·1-2 hours
·2-4 hours
·More than 4 hours

Q9 Do you feel that excessive media consumption had also affected your mental health?
·Hadn't impacted
·Impacted positively
·Made me hopeful for future
·Made me more vulnerable to the ongoing situations

Q10 Have you had faced difficulty accessing mental health services during the pandemic?
·Yes
·No

Q11 If yes,what exactly was your difficulty in accessing your mental health and how did you cope have you coped up with that situation?

_____

Q12 Have you sought therapy or counseling services for your mental health during the pandemic?
- Yes
- No

Q13 If yes, how helpful have you found therapy or counseling in managing your mental health during the pandemic?
·Not helpful
·Somewhat helpful
·Very helpful

OR

Q13 If you have not sought therapy or counseling, what barriers have prevented you from doing so? (Check all that apply)
·Financial constraints
·Lack of access to therapy services
·Stigma surrounding mental health
·Uncertainty about effectiveness
·Other (please specify): _____

Q14 How optimistic were you about your mental health improving as the pandemic situation evolved and things got back to normal ?
·Very optimistic

·Optimistic
·Neutral
·Pessimistic
·Very pessimistic
·Vulnerable than before
Q15 How do you think your mental health is impacted due to covid 19 pandemic as accessed to situation before pandemic?
·It has improved much before
·It has made me more resilient than before
·It has further increased by anxieties and mental problems
·It has made me more vulnerable than before

Q16 How do you think you have evolved since pandemic in terms of your mental wellbeing?
·Evolved a lot personally and able to deal with things better
·Survived through the pandemic
·Became resilient more than before
·It has left me more fragile and triggered than before

Q17 Is there anything else you would like to share about your experiences with mental health, coping mechanisms, or therapy during the COVID-19 pandemic in brief

Thank you for your participation , your responses are confidential and will only be used for research purposes. Thank you for your help!

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RESEARCH COMPENDIUM

ACCESSIBILITY OF GYNAECOLOGICAL MEDICINE
AMONG YOUNG WOMEN STUDYING IN DELHI

Authors: A Rituparna
Aarti Mahato
Akanksha Goma
Riya Changai
Vatsalya Saxena

ABSTRACT
Food, water, shelter, clothing and medically necessary health care are the basic necessities of human beings. Sexuality education empowers children and young people to make informed, healthy, and respectful decisions about relationships, sexuality, and mental and physical health. Sexuality education administered in a secure and supportive learning environment, together with access to health services, has a beneficial and long-term impact on young people's health and well-being. Several social and technological advances over the last decades have

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spurred the need for good-quality sexuality education, which can assist young people to deal with their sexuality in a secure and pleasant manner. Sexual well-being of the female youth isalso linked with the accessibility to gynecologists. Prioritizing female health care and considering gynecologists as the center of attention in our research, they are the doctors who specialize in female reproductive health and treat issues related to the female reproductive tract which basically includes the uterus, fallopian tubes, ovaries and breasts.

The advance technology and website uptime in the contemporary era has made the accessibility of a gynecologist a duck soup. In India, the gynecologist can be accessed via both the virtual and physical platforms. The virtual accessibility contains off the shelf pool of advice , preventive measures and solutions to various female reproductive health ailments. The interaction in a close proximity with proper diagnosis between the gynecologist and the patient only takes place in a physical realm.

In person gynecologists are basically found in hospitals and clinics with varying degrees of experience and expertise. The geographical, cultural and socio - economic diversity in India makes the availability and accessibility of gynecologists to each and every woman an uphill battle.

INTRODUCTION

The change in the lifestyle has highly impacted the health and overall well-being of the Indian population. According to UNFPA, India is experiencing a demographic window of opportunity, a youth bulge that will last till 2030. In addition, as per the observer research foundation, India has the world's largest youth population with 66% of its population below the age of 35. The Youth in a country are vital for the growth and development of a nation. Expeditiously moving ahead with the aim of transforming our nation as developed country,a lot of new challenges are awaiting in the queue to be looked upon. Young women aged between 19-24 facing severe health issues is one among them. There are a variety of health issues faced by these young women specifically related to their reproductive parts which are supposed to be cured by a gynecologist. The change in the lifestyle has highly impacted the health and overall well-being of the Indian population. According to UNFPA, India is experiencing a demographic window of opportunity, a youth bulge that will last till 2030. In addition, as per

the observer research foundation, India has the world's largest youth population with 66% of its population below the age of 35. The Youth in a country are vital for the growth and development of a nation. Expeditiously moving ahead with the aim of transforming our nation as a developed country, a lot of new challenges are awaiting in the queue to be looked upon. Young women aged between 19-24 facing severe health issues is one among them. There are a variety of health issues faced by these young women specifically related to their reproductive parts which are supposed to be cured by a gynecologist. In a developing nation which gives great importance to culture and patriarchal norms and values , sexual wellbeing of women and their access to gynaecologic medicine is valuable enough to be discussed. Sexual wellbeing of young women(19-24) are focused in our research. A critical period of time in an individual's sexual development is the transition period between childhood and adulthood. Adolescents can experience newly emerging sexual desires and encounter opportunities to experiment with sexuality; however, emotional maturity has often not yet fully developed. As a result, adolescents and young people are more likely to engage in what can be considered "high-risk" sexual activity. This increased likelihood of engaging in high-risk sexual activity makes sexual health a critical health issue within this age group (under 25). Sexual well-being of the female youth is also linked with the accessibility to gynecologists. A gynecologist is one who specialize in female reproductive health and treat issues related to the female reproductive tract which primarily include the uterus, fallopian tubes, ovaries and breasts. Lack of abundant health facilities for the population of young women can hinder the growth and prosperity of a nation. Accessing a gynecologist is very challenging in a country where two-thirds of the population live in rural areas. The regional disparities along with the socio-economic and cultural background plays a vital role in shaping the health and well being of a young woman. According to UNFPA India, a young woman is defined as the one who lies between the age group of 19-24 years. A sensible sexuality education is a prerequisite in the contemporary scenario to steer clear of reproductive diseases.

The website uptime and technological advancement have opened the doors for virtual gynecological guidance and in person gynecological visits as well.

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Accessing a gynecologist is very challenging in a country where two-thirds of the population live in rural areas. The regional disparities along with the socio-economic and cultural background plays a vital role in shaping the health and well being of a young woman. According to UNFPA India, a young woman is defined as the one who lies between the age group of 19-24 years.

A sensible sexuality education is a prerequisite in the contemporary scenario to steer clear of reproductive diseases.

The website uptime and technological advancement have opened the doors for virtual gynecological guidance and in person gynecological visits as well. However, the advanced technology is highly restricted to a few young women belonging to a certain socio-cultural and economic background.

The socialization accompanied by the socio-cultural and economic background of a young woman has a significant impact on the process of accessing a gynecologist or the gynecological medicine. Accessing gynecologists have a salient role to play in the holistic awareness of the young women regarding the issues related to reproductive health.

The Supreme Court of India has recognized reproductive rights as both a component of the right to health and a component of personal liberty under Article 21 defining them as the right to "access a range of reproductive health information, goods, facilities and services that enable individuals to make informed free and responsible reproductive behavior decisions".

Every woman goes through gynecological examination at some point in their lives. The examination should be performed in a way that makes it a positive experience for women. Women's reluctance to undergo gynecological examination, due to the nature of the examination, fear or concerns about the gynecologist's attitude, may result in delay or avoidance of examination with potentially harmful health effects. There can be multiple causes for this reluctance ranging from physical to psychological and social reasons. Everyone would have their perception of their dream gynecologist who is professional, sensitive, non judgemental, trustworthy, respecting privacy and confidentiality etc. The distance of difference between the ideal and the real can vary according to different things like one's social position, economic condition, cultural background etc. Accessing a gynecologist is the elementary issue faced by young women.

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TThe circumstances turn severe due to the miscommunication between the gynecologist and the patient. Thus, issues of accessibility of gynecologists across regions and for young women belonging to various socio-cultural and economic backgrounds need urgent attention.

The ideal patient-provider relationship will always include a mutual respect between both parties that then leads to a healthcare partnership. A true patient-provider partnership can lead to better care outcomes and deliver on value-based care priorities. But the provider has a superior role and holds power over the patient . A proper communication between the patient and the gynecologist is the need of the hour to prevent early stage symptoms from turning into hazardous diseases and the spread of false information among the youth.

RATIONALE

In this paper, we aim to conduct research to understand and compare the ideal gynecologist scenario versus the reality faced by the subjects. An ideal gynecologist should not only be well qualified and experienced enough but also someone equipped with providing client confidentiality, maintaining a professional yet trustworthy & safe environment and guiding them with solutions adhering to their socio-economic background. Further we aim to study, if gynecologists tend to avoid direct discussions regarding intercourse and sexual gratification, opting instead for indirect approaches that may leave patients feeling perplexed and uncertain. Finally, we intend to analyze if gynecologists cultivate a conducive atmosphere for patients, recognizing that young women may harbor apprehensions about candidly communicating with medical professionals, given the prevalent societal scrutiny often experienced during such interactions. Through this research we aim to gather insights of the discrepancies between the ideal expected gynecologist scenario and the reality faced by the patients. We hope that through our research we will be able to gather knowledge about the hindrances that occur between the ideal expected and the reality like communication challenges , barriers to accessing healthcare including social and economic factors etc.Through this research we hope to enhance the requirement of patient centered care and the need to address

 societal stigmas that cause miscommunication that hinder the open interaction that is required between doctor and the patients. In the age of development , digitalisation and progress there is still a fair share of population who lack basic facilities especially safe and accessible healthcare in this nation , we would like to highlight the levels of accessibility to gynecologists and sexual wellbeing among young females of different social and economic backgrounds and the approach they get from their gynecologists.

STATEMENT OF THE PROBLEM
The present research seeks to delve into the intricate nexus between the sexual well-being of female youth and their access to gynecologists, examining how these factors intertwine within the broader context of social interactions. Despite advancements in healthcare, disparities persist in accessing gynecological services, particularly among females aged 17-30. This study aims to address this gap by investigating the following key research questions:

1. How do the sexual well-being experiences of female youth correlate with their access to gynecologists?
2. What are the social, cultural, and economic factors that influence the accessibility of gynecological care among young females?
3. What role does the availability of gynecological medicines play in shaping perceptions and practices related to sexual health among this demographic?
4. How do social interactions and community dynamics impact the attitudes and behaviors of young females towards seeking gynecological services and maintaining sexual well-being?

By employing a mixed-methods approach encompassing semi-structured interviews and questionnaires, this research aims to gather comprehensive insights into the lived experiences, perceptions, and challenges faced by female youth regarding sexual health and gynecological care access. The findings are expected to contribute significantly to understanding the complex interplay between healthcare accessibility, social dynamics, and sexual well-being among this demographic, ultimately informing policies and interventions aimed at improving female reproductive health outcomes.

RESEARCH COMPENDIUM

METHODOLOGY

This section outlines the approach and methods employed to investigate the research questions posed in this study. In this research paper, we intend to discuss how sexual well-being of the female youth is also linked with the accessibility to gynecologists. Prioritizing female health care and access to gynecologists constitutes the center of our research. We plan to utilize a mixed module of research techniques for a comprehensive analysis of the given issue.

Data Collection Methods:

We aim to employ several techniques to acquire the data, including questionnaires and semi-structured interviews. In-depth insights can be obtained from participants using semi-structured interviews, which will also capture their individualized experiences and viewpoints. The purpose of the questionnaire would be to collect quantitative information on demographic factors and important concepts that are essential to our investigation.

Purposive Sampling:

There should be clear and well-defined criteria for the purposive sampling. It is a type of non-probability sampling in which researchers rely on their judgment when choosing members of the population to participate in their surveys. It is also known as subjective and judgemental sampling. Purposive sampling is used to select participants who meet particular criteria related to the research objectives. Participants are chosen based on their involvement in the target community and their ability to provide valuable, insightful data.

Inductive Approach:

This study takes an inductive approach to investigate the dynamics of social interactions among the females between the age-group of 17-30 about their sexual health and access to gynecological medicines. Inductive reasoning is used to generate broad ideas and theoretical frameworks from specific observations and empirical facts, resulting in a more nuanced understanding of complex social phenomena.

LITERATURE REVIEW

Women's attitudes and expectations regarding gynecological examination. The study found that women often have negative experiences during gynecological examinations, as they feel vulnerable and lack

sufficient information about the procedure. This can lead to fear, embarrassment, and reluctance to undergo the examination, which can have harmful health effects. The study also found that communication between doctors and patients play a crucial role in shaping women's experiences. The study also found that communication between doctors and patients play a crucial role in shaping women's experiences. Providing information about the examination and the findings, as well as addressing women's concerns and preferences, can make the examination a positive experience. Many women prefer to see a female doctor for gynecological problems due to their comfort level and concerns about discussing sensitive issues with male doctors. Women also expressed preferences for a single doctor or a doctor and nurse to be present during the examination, while some wished to have their partner present. Women expect doctors to explain their health situation after the examination and to have an understanding and gentle manner. They also expect nurses to be understanding and to offer information and assistance during the examination. The study used a descriptive, cross-sectional survey method and included 433 women ranging in age from 18 to 76 years. Most women attended the gynecological outpatient clinic for specific problems, and a significant percentage had not undergone pelvic examinations previously. The study found that a majority of women felt anxious or worried during the examination, while almost half were embarrassed about undressing. Fear of discovering a pathological condition or severe illness was a common concern, along with worries about cleanliness and the possibility of experiencing pain. A significant percentage of women preferred a female doctor, citing comfort, religious beliefs, and cultural objections as reasons. Women with lower education levels, unemployment, lower income, or feelings of shame during the examination were more likely to prefer a female doctor.

The study highlighted the importance of information provision and respectful behavior during gynecological examinations. Women expected doctors to explain their health situation, have a gentle manner, and listen to them. Nurses were expected to have a gentle manner and offer information and assistance. The findings of this study can contribute to improving health programs and enhancing the experience of gynecological examinations for women.

Overall, the study emphasized the need to make gynecological examinations a

positive experience for women by addressing their concerns, providing information, and maintaining respectful communication. By doing so, healthcare professionals can help alleviate fear and discomfort and promote women's well-being during these examinations.

FACTORS INFLUENCING WOMEN'S ACCESS TO HEALTHCARE SERVICES IN LOW INCOME AND MIDDLE INCOME COUNTRIES

A study was conducted to identify the factors influencing women's access to healthcare services in low- and middle-income countries (LMICs). The study primarily relied on secondary data.

Access to healthcare services is defined as timely access to affordable, accessible, and acceptable quality healthcare in order to achieve the best health outcomes. It plays a crucial role in disease prevention, management, and reducing complications associated with various diseases. The factors influencing access to healthcare services can be divided into four levels: individual, interpersonal, community, and system level.

At the individual level, economic status is a significant factor. Women in LMICs are often economically marginalized and financially dependent on their male partners. Even women who earn an income are not fully independent, as they require permission from their male partners to spend money. Women's wages are also unequal to men's, further emphasizing the importance of financial support from male family members. Limited knowledge and beliefs about diseases and treatments also hinder access to healthcare services at the individual level. Many women lack awareness about diseases, leading to delays in prevention and early recognition. Additionally, myths and misconceptions are prevalent in these countries, causing women to seek traditional healers instead of accessing healthcare services.

At the interpersonal level, social norms and lack of support from family and friends act as barriers. Women often lack decision-making power in their households, including decisions regarding their own healthcare. In some societies, women are not allowed to travel alone due to cultural and religious reasons, requiring the accompaniment of male family members to access healthcare facilities. Women also face stigma for disclosing their disease

conditions, leading to a reluctance to seek healthcare. Community-level factors include support from community members and transportation facilities. In male-dominant societies, women are often denied their fundamental rights, including equitable access to education and healthcare. Stigma associated with certain diseases also discourages women from disclosing their conditions. Lack of proper transportation, particularly in rural areas, further limits women's access to healthcare services.

System-level factors include the availability and quality of healthcare services and providers, the role of the medical fraternity, health insurance coverage, and the implementation of effective policies. Lack of affordable and quality healthcare facilities, as well as a shortage of qualified professionals and essential equipment, pose significant barriers. Healthcare professionals' negative attitudes and mistreatment of women also discourage access to healthcare services. In addition, the concept of health insurance coverage is not common in LMICs, leaving many women to cover healthcare costs out-of-pocket. Finally, the lack of effective policies to empower women's access to healthcare facilities add to the barriers in LMICs.

ANALYSIS

Women in India endure "extensive gender discrimination" in access to healthcare, according to a study of outpatient consultations at a major tertiary care hospital in Delhi published in the online journal BMJ Open. Young women (30 and under) and those who live farther away from the hospital are most likely to face difficulties in accessing gynecological help.

In this paper, we aimed to investigate the accessibility of gynecologists among young women who have migrated from other parts of India to Delhi or are residents of Delhi. A structured questionnaire was designed to gather data on the factors influencing their access to gynecological services and their overall experiences within the healthcare system.

Overview of the Questionnaire

The questionnaire included closed-ended and open-ended questions about demographic information, healthcare utilization habits, barriers to receiving

gynecological care, and service satisfaction. It was distributed to women aged 18 to 25 who had migrated for employment or education.

Data Collection and Analysis Techniques

We compiled around 30 questions that ranged from asking basic data about the respondents to their experiences with gynecologists and their input on subjects like taboo and stigmatization of sexual health and access to sexual healthcare. There were a total of 42 respondents who responded to our questionnaire. We have implemented quantitative methods to summarize demographic characteristics and healthcare utilization patterns and inferential statistics were used to examine associations between variables like income level and access to gynecologists. Qualitative data from open-ended questions were analyzed using thematic analysis to uncover important themes relating to access hurdles, experiences with healthcare professionals, and suggestions for enhancing the features of healthcare services.

Discussion of the findings

This study provides valuable insights into the experiences and perceptions of young women about gynecological care and sexual health education. Most respondents used social media or peers for sex education, underscoring the importance of digital platforms in disseminating health information among this demographic. When faced with a health issue, many respondents prefer to seek professional guidance rather than relying on online resources or home treatments. The survey found that respondents encountered hurdles to seeking health care, including fear of judgment, stigma from family, shyness, financial constraints, and geographical distance. The majority of respondents consulted a gynecologist and reported having moderate access to healthcare. Most respondents disclosed that they had direct communication with their gynecologists, with few experiencing the opposite. However, many respondents reported no difference between their ideal and real experiences with gynecologists. A minority felt that discussing sexual well-being was taboo, indicating a social influence on perceptions. Respondents reported feeling understood and following prescription directions from their gynecologists.

Through our research, we have been able to get an insight into the people belonging to different socio-economic backgrounds and were introduced to various problems they face while trying to access healthcare as women belonging to a particular age group of 18-25.

Here are some of the responses that were shared by our respondents:

Respondent 1: Analyzing the answer who is a 21-year-old female from Kerala, they have developed their awareness about sexual well-being from sources like peers, social media, and other resources. In case of any problems regarding the reproductive system, they like to consult a doctor. Their experience with gynecologists has been normal in terms of friendly behavior, confidentiality, professionalism, and direct communication whereas their experience with gynecologists in terms of understanding, qualification, and non-judgmental is quite good. The hindrance they face in accessing a Gynecologist is unavailability (distance). They prefer to go to private hospitals. In their experience, they found it slightly intimidating that the dynamic they consult would prescribe their oral medicines for every concern even for the ones that could be solved by just a change in dietary plans and physical exercises so they feel a little misguided and lack proper communication. They also don't like the practice of being asked if they are married first instead of asking if they are sexually active.

Respondent 2: According to the analysis of the answers by an 18-year-old respondent, it can be seen that their knowledge or source of sexual health awareness mostly comes from school, peers, and social media, they prefer to consult a doctor in case of any problem regarding the reproductive system. Their experience regarding the doctors being friendly, non-judgmental, and understanding has been average however their experience regarding the doctors having direct communication and confidentiality has been bad according to the charts. They find it financially hard to access a gynecologist, other than that their experiences have been pretty normal like visiting the doctor in time of need only, agreeing that culture and society do affect your thoughts on this, and taking prescribed medicines. They are diagnosed with PCOS which makes their menstrual cycle irregular and problematic, they have tried switching to different medications like allopathy, homeopathy, etc but nothing has worked out for them yet. PCOS is considered a common diagnosis among women however it is a serious problem for the person bearing it.

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Respondent 3: Respondent 3 is a 21-year-old undergraduate student from Miranda House whose family income is less than 1 lakh. They consider their school, social media, and others to be their source of sex education. They have visited a gynecologist and opted to consult a doctor in case of any problem in their reproductive system. They consider shyness, family stigmas, and preconditions to be their hindrance in accessing a gynecologist. They felt awkward, uncomfortable, and nervous their first time visiting a gynecologist. They preferred consulting doctors from a clinic and those referred by their family and friends. They do not feel that their gynecologist avoids direct communication. They visit a gynecologist whenever they feel a need to. they rated their access to the gynecologist to be moderate. they say they have never been misunderstood by their gynecologist. They find a difference between their ideal gynecologist and the one they visited. They do not find it taboo to talk about sex and sexual well-being. They feel that society and culture influence their thoughts on it.

Respondent 4: They are 21-year-olds pursuing their graduation from Miranda House. They are unemployed and their family income is around one lakh. They are from Kerala and stay in Delhi. They got their primary sex education from their peers and social media. They have consulted a gynecologist and consider consulting gynecologists over the internet or home remedies. Fear of being judged and shyness are the hindrances they find in accessing a gynecologist. Their first experience with a gynecologist was good, professional, and normal. They preferred to consult doctors from government and private hospitals, and references from family and friends had a role in their choice of doctors. They visit their gynecologist every month and they find it easy to access a gynecologist. They feel that it is taboo to talk about sex and sexual well-being and they feel that society and culture have a role to play in shaping their perceptions about the same. They have been prescribed medicine by their gynecologist and followed it regularly.

Respondent 5: Taking their responses whose origin is from Delhi, for analysis tells us that their general knowledge regarding sexual health awareness comes mostly from peers and social media, their experience of expecting understanding and friendly behavior from professionals has been normal, and experiences of confidentiality, communication, judgment, qualification has also been good.

Some of the hindrances they feel in accessing a gynecologist would be fear of being judged and financial restrictions. One of their experiences tells us how they visited a male gynecologist once and there was no assistant doctor. There that day which made the physical checkup a little uncomfortable for them.

Respondents 6 – 10: Two respondents residing in Delhi, belonging to an economically sound background had awkward experiences with their gynecologists who were being suggested by their family and friends. There occurred a miscommunication between the gynecologists and the respondents, the then patients. Instead of asking direct questions the gynecologist preferred to ask intimate questions indirectly which affected the respondents awkwardly. The respondent went clueless and the actual disease could not be disclosed.

Respondents 11 – 14: Another set of respondents from Uttar Pradesh are pursuing their undergraduate courses. Though gynecologists are easily accessible to them, they are primarily concerned about the family stigmas and social conditions for visiting a gynecologist, which are caused by the result of socialization. They have never been misinterpreted by their gynecologists. One of them was being suggested by the gynecologist to have a baby at the age of 25 due to the PCOS issues the respondent was suffering from. The lack of professionalism among gynecologists can cause distress among the patients and may hinder their overall well-being.

Respondents 15 – 20: These set of respondents who were mostly from Delhi, stated that they also faced certain difficulties in seeking gynecological help for the first time as there was enough taboo and stigma about "young women and sexual health". But, they were aware of sexual well-being and health because of social media and their peers, which made them less reluctant to ask for professional help when they felt they needed it.

An overview of the other respondents: the generalized response of these women, having the same place of residence i.e. New Delhi tells us that the source of their knowledge about sexual health awareness comes from peers and social media, people would mostly consult a doctor if in case of any problem rather than googling or ignoring the symptoms. According to the responses, access to educated, well-qualified, and maintained professionals is easily accessible however access to doctors who are friendly, understanding, direct communication, confidential, and non-judgmental seems a little complicated and

women's reproduction health is quite sensitive so it is expected to be an important topic which is supposed to be handled with gentle listening and no judgment. It can be seen that most women are afraid of being judged in case of consulting a gynecologist regarding sexual health problems, and then there are mostly financial issues as well. 60% of the women had a good and normal first experience with a gynecologist, however the rest had problems like being nervous talking about the personal stuff for the first time, and some of them were judged or misunderstood at many points. 70% of the women find it moderate and easy to get to a gynecological professional, and 70% of women agree that culture and society affect our thoughts on this. It is observed that 80% of the women consider government hospitals and doctors referred by knowns for a professional consultancy, 90% of the women visit a gynecologist whenever they feel there's a need, and 10% monthly or rare checkups.

But in stark contrast, the other set of women and their experience with the gynecologist has mostly been bad in terms of friendly behavior, understanding, non-judgmental, direct communication and professionalism. The various hindrances they face regarding Gynecologist accessibility is shyness and family stigmas and preconditions, social norms and expectations. Their first experience was a little awkward but good and professional. They prefer to get checked at private hospitals. While they also experience taboo related to sexual well-being and cultural influences

Through this study, we could perceive the conjunction of theory and practice as the idea of stigma is overshadowing among the respondents. It is evident that, even though these young women who have responded may not stigmatize seeking sexual healthcare, a majority did experience prejudices while taking the first step and asking for professional help. Thus, thereby we extend our hand toward theory to understand why and how stigma is extremely influential while talking about women's accessibility to gynecological healthcare.

Stigma is a social, cultural, or psychological attitude that coincides with but differs from conventional thinking in reproductive healthcare. Stereotyping can be either negative or good, but stigma is always bad. According to sociologist Erving Goffman, stigma can harm an individual's social identity and isolate them from society, leading to discredit and rejection. In a groundbreaking study, he

demonstrated that a spoiled identity often prevents stigmatized persons from presenting themselves in the way they deserve to be seen. Language use can be stigmatizing, whether intentional or unintentional. The effect is magnified through the language of authority figures such as patriarchs in the family, and even medical professionals. In our societies, where we are conditioned to view the indulgence of human sexuality through the lens of sin, however, resorting to and providing sexual and reproductive health services is a major source of stigma. Thus, these concepts of stigma and access to gynecological healthcare are more complicatedly interlinked than we ought them to be.

These findings highlight the complex interplay of socioeconomic factors, cultural beliefs, and healthcare infrastructure in shaping women's access to gynecological care. The disproportionate access based on income underscores the need for targeted interventions to address barriers faced by marginalized populations.

LIMITATIONS

The study's limitations include its reliance on self-reported data, inherent response biases, and limited geographical reach. Future study might look into the interaction of migrant status, gender, and access to healthcare, as well as the impact of policy interventions on increasing the accessibility and quality of gynecological care.

CONCLUSION

It is a fundamentally human activity that includes tackling a multitude of complicated challenges to ensure that gynecological care in India is both comprehensive and accessible. These difficulties are not merely technological or logistical; rather, they are deeply entwined with social issues such as individual experiences, cultural norms, and socioeconomic gaps.

Obstacles that prevent marginalized women from visiting compassionate and skilled gynecologists must be removed. Establishing trust and recognizing the variety of requirements of patients are essential. Even if technology opens up new possibilities, human connection in healthcare should be enhanced, not replaced. Encouraging sexual well-being necessitates a kind approach that

acknowledges the special circumstances of each individual and gives them agency over their healthcare path.

The data collection technique used was Questionnaire which was distributed to women aged 18 to 25 who had migrated for employment or education.

The results of this sociological study provide insight into the complex experiences and difficulties that young women have in relation to sexual health education and gynecological treatment. The dependence on peers and digital platforms for sex education is indicative of changing patterns in this group's information consumption. In spite of this, people clearly prefer expert advice when dealing with health-related difficulties, demonstrating the confidence people have in medical professionals.

But obstacles include financial limitations, social shame, fear of being judged, and physical remoteness prevent people from accessing healthcare. There were worries regarding communication, confidentiality, and understanding from healthcare practitioners, despite the fact that the majority of respondents reported having reasonable access to gynecologists and having pleasant experiences.

The data also shows the impact of society, as some respondents believed that talking about one's sexual health was inappropriate. This demonstrates how cultural norms and beliefs continue to influence the ways in which people seek medical attention.

The culmination of this study provides a nuanced understanding of the multifaceted challenges young women face in accessing gynecological healthcare. Across various demographics and backgrounds, a common thread emerges: the pervasive influence of stigma. Whether stemming from societal norms, cultural beliefs, or personal experiences, stigma acts as a formidable barrier to seeking and receiving essential reproductive healthcare services.

One of the most striking findings is the significant role played by socioeconomic status in determining access to care. Women from lower-income families often

grapple with financial constraints that impede their ability to access quality healthcare. This underscores the urgent need for targeted interventions aimed at addressing disparities in healthcare access and provision. Additionally, the reliance on self-reported data and the limited geographical reach of the study highlight the necessity for more comprehensive research to capture the diverse experiences of women across different regions and contexts.

Furthermore, the study underscores the importance of destigmatizing discussions around sexual and reproductive health. Stigma not only deters individuals from seeking care but also perpetuates misinformation and fear surrounding these critical issues. Efforts to challenge stigma must be multifaceted, encompassing education, community outreach, and policy reform. By creating an environment that fosters open dialogue and empowers individuals to prioritize their health without fear of judgment or discrimination, we can begin to dismantle the barriers that hinder access to gynecological healthcare.

Moreover, the study underscores the need for healthcare professionals to adopt a patient-centered approach that prioritizes empathy, understanding, and effective communication. Women should feel empowered to advocate for their health needs and preferences, free from the fear of being misunderstood or judged. Building trust and rapport between patients and providers is essential in ensuring positive healthcare experiences and improving health outcomes.

In conclusion, this study sheds light on the complex interplay of factors influencing women's access to gynecological care. From socioeconomic disparities to entrenched societal stigmas, addressing these challenges requires a concerted effort from policymakers, healthcare providers, and communities alike. By prioritizing equity, education, and empathy, we can work towards a future where all women have equal access to the reproductive healthcare they need and deserve.

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RESEARCH COMPENDIUM

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RESEARCH COMPENDIUM

"My Therapist Will Hear About This":
Online Therapy Among College Students in Delhi

Authors:

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ABSTRACT

This research study attempts to explore the preferences of college students in taking therapy. Through the study we aim to understand the reasons behind students preferring online therapy over in person therapy. The objective is to connect it to the socio economic reasons behind such preference and also explore the idea of anonymity that exists when we talk about online therapy. In addition, the study will be talking about accessibility of therapy, especially in online mode and also about social media as a source of information regarding the same. Research hypothesis: "College students in cities prefer to take online therapy sessions rather than in person therapy sessions." Research question(s)-
1. What is the more preferred mode of taking therapy among college students?
2. What are the reasons behind preferring one over the other?

INTRODUCTION

In recent years, the landscape of mental health care, particularly within educational institutions, has undergone a significant transformation. This paradigm shift is particularly evident within Delhi University, where the uptake of therapy among students has seen a notable surge. This burgeoning trend, characterized by a preference for online therapy platforms, prompts a critical inquiry into the underlying factors propelling this shift.

This research aims to delve into the nuanced preferences and motivations that guide Delhi University students towards online therapy modalities. At the heart of our investigation is an exploration of the socio-economic determinants shaping these preferences, alongside an examination of the perceived benefits associated with the anonymity afforded by digital therapeutic interventions. Additionally, we seek to scrutinize the accessibility of therapy services, particularly in the online realm, and dissect the role of social media in disseminating information and fostering awareness regarding mental health support systems. By embarking on this project, we aspire to unravel the multifaceted dynamics underpinning the escalating demand for online therapy among the students. Our findings hold the promise of not only illuminating the contours of contemporary mental health-seeking behaviors but also furnishing valuable insights for stakeholders tasked with devising more tailored and responsive interventions to address the evolving needs of university students grappling with mental health challenges. The surge in the uptake of therapy among students at Delhi University reflects broader societal shifts in attitudes towards mental health care. Increased awareness and reduced stigma surrounding mental health issues have likely contributed to this trend. Furthermore, the convenience and flexibility offered by online therapy platforms align well with the busy schedules and lifestyle preferences of university students. Many students may find it easier to fit online therapy sessions into their hectic academic and extracurricular activities. Socio-economic factors also play a significant role in shaping students' preferences for online therapy. While traditional face-to-face therapy sessions may be prohibitively expensive for some students, online therapy can offer a more affordable alternative. Additionally, the anonymity provided by digital platforms may appeal to students who are concerned about privacy or who feel uncomfortable seeking help in a face-to-face setting, especially within the confines of a close-knit university community. Accessibility is another crucial aspect to consider. Online therapy eliminates geographical barriers, allowing students to access mental health support regardless of their location. This is particularly beneficial for students living off-campus or those studying remotely. Moreover, the availability of therapy services through online platforms may be more convenient for students who have limited transportation options or who struggle to find the time to attend in-person appointments.

RESEARCH COMPENDIUM

Social media also plays a pivotal role in shaping students' attitudes towards mental health and therapy. Platforms like Facebook, Twitter, and Instagram serve as powerful tools for raising awareness, sharing resources, and normalizing discussions surrounding mental health issues. Through targeted advertising and community-building efforts, social media can help connect students with relevant support services and encourage them to seek help when needed. In conclusion, the increasing demand for online therapy among Delhi University students reflects a broader shift towards more accessible, convenient, and stigma-free mental health care options. By understanding the underlying motivations and preferences driving this trend, stakeholders can develop more effective interventions to support the mental well-being of university students.
 I. Literature Review The emergence of mental health problems during adolescence is well documented and the evidence supporting psychological intervention during this period is clear. However, even gold standard treatments are ineffectual if young people in the community do not access them. The World Health Organization estimates that 14% of the global population suffers from some form of mental or neurological disorder, and 75% of those in need do not receive any treatment (World Health Organization [WHO], 2016). There are a number of barriers that prevent young people from accessing mental health services, including, perceived stigma, concerns around confidentiality, and a lack of knowledge and accessibility of services. Particularly in Asian societies, stigma associated with mental health problems appears to deter many from seeking professional help (Heflinger and Hinshaw, 2010). Studies have also found that Asians are generally not as comfortable with self-disclosure and are less likely to psychologize their problems compared to those from western societies (Haroz et al., 2017). One of the most recent strategies to circumvent such barriers has been online service delivery. Given the strength of such cultural barriers, qualities inherent in online counseling such as relative anonymity and physical distance could make it an attractive option for many who would otherwise remain untreated (Chester and Glass, 2006). Online therapies are well-placed to address barriers to mental health services. Many studies have been done to test if online methods of psychotherapy are as effective as traditional counseling. Although online psychotherapy appears to be just as useful as in-person psychotherapy. Many college students still have reservations about this delivery method. Only

Three studies to date have asked young people about their perceptions of online therapies. Of these, two featured university students (Horgan & Sweeney, 2010; Mitchell & Gordon, 2007) and one examined adolescents' attitudes towards online counseling (Glasheen et al., 2015). Intentions to access online therapies have been found to be consistently high among university students, although they maintain a preference for face-to-face alternatives. University students also appear to value the benefits of online therapies, including privacy, accessibility, anonymity, and confidentiality.It appears that the benefits of accessibility and privacy offered by online therapies may encourage young people to use these, yet are insufficient for them to prefer online therapies, over face-to-face support. This suggests that additional factors may be influencing their service decisions. Concerns may stem from factors such as the lack of accessibility, and other socio-economic reasons. Research in this area is clearly in its early stages and limited in its current scope and depth. However, understanding adolescents' attitudes towards these services is an important step towards informing strategies to increase the uptake of mental health treatment. Limited research has specifically examined attitudes toward online mental health services among college students, particularly in non-Western contexts. To address this gap, this study looks at the Delhi University students' perceptions of online therapies, including their knowledge of online therapy, relative preferences for, and the likelihood of utilizing, online as opposed to face-to-face counseling services, attitudes towards online as well as face to face therapies (perceived problems, and perceived helpfulness), and intentions to use online therapies. The second aim was to assess factors predicting attitudes and intentions to use the preferred therapy. Given the cultural barriers and stigma surrounding mental health in Asian societies, exploring attitudes toward online mental health services in this context is crucial for informing the development and implementation of effective interventions. There are also signs that technology provides access to supportive mental health resources for younger people. Gen Z respondents are more likely than other generations to use digital wellness apps and digital mental health programs. (Erica et al. 2023)

METHOD

This study employed a qualitative research design primarily through interviews and questionnaires to get insights into the subjective preferences and opinions of students on therapy. Delhi university students were surveyed on their preference for therapy (online or offline(in person)) and also the reasons behind their choice. A questionnaire was developed to know whether the students, in a situation where they have to seek therapy, are likely to go for online therapy or offline therapy. Purposive sampling was used where the participants were selected from a concerned age group (18- 25 years). Students from diverse socio-economic, regional and cultural backgrounds were included in the sample size. Respondents were asked about the accessibility of both online and offline therapy and also about the hurdles that can arise. Interviews were also conducted to get data about the same. Transcripts of interviews were analyzed using thematic analysis. Students answered two 5-point Likert scale type questions, the first intended to measure the degree to which they would prefer to use either online or in-person therapy and the second to know their accessibility to them. Responses were dichotomized for analysis. Ethical guidelines were followed throughout the research process. Participation was voluntary and informed consent was obtained from all participants. The privacy and confidentiality of the participants was ensured. The participants did not receive any form of compensation.

SCOPE OF RESEARCH

Through this research we aim to understand the factors and the reasoning that affect their choice of taking either online therapy or in person therapy. Therapy is gradually becoming a well known concept among the students of Delhi University and this research will help us to understand the socio-economic conditions that are leading the students to take up online therapy instead of in person therapy. The study will also be able to find out about the relevance and reliability of the alternate therapy services through social media and applications. The study, with the help of a questionnaire, will be able to take responses from students of various colleges in Delhi University coming from diverse socio-economic backgrounds. This study undertakes a qualitative research method to get detailed responses from the respondents to make a detailed analysis of the

findings. It is expected from the study that it'd be able to prove our hypothesis that college students are more likely to incline towards online therapy instead of offline and also be able to explain the factors leading to the choices and the beliefs of the respondents. Besides these findings it is also identified that there could be some limitations to the process like sampling errors, late responses, misinterpretation of the questions etc. so the solutions to these would also be identified to minimize the errors in the study.

RESEARCH PROBLEM

College going students go through a transition from a relatively protected environment at school and home to becoming independent in many ways. This age group(18-25 years) is confronted with several challenges and conflicts, they are sometimes feel overburdened with studies and the extra curricular activities, constantly running between commitments and not being able to spend enough time on their own health and well-being. College is a time often associated with stress, anxiety and the prevalence of diagnosable mental disorders. Statistics related to mental health in young adults are more alarming then ever. Due to rapid increase in availability of technology, online therapy has provided new ways to reach students who require help, but due to several reasons, can't go for offline therapy. It may be more accessible to students who are more frightened of going to in-person therapy, due to the stigma associated with mental health problems. Although traditional face-to-face therapy is the method preferred by most professionals, a large portion of those who could benefit from it, do not seek them out. This study looked at the preferences of college students in seeking therapy and also at the reasons behind their choice. The study also looked at the accessibility of both online and offline therapy. The aim of this research is to find out if college students in Delhi prefer to take online therapy sessions rather than in-person/offline therapy sessions.

LIMITATIONS

The study can be constrained by various factors.
 1. Firstly, time is the biggest constraint since respondents take a long time to send in their responses. Late responses lead to limited time for detailed analysis.
2. Given the depth and conceptuality of the topic, there is always a fear of

misinterpretation of the questions or incomplete understanding of the topic on the side of the respondents. Given it was a survey method, the unavailability of the surveyor with the respondent can lead to some discrepancies in their answers.

3. Some of the respondents can be unaware of the various concepts of therapy through social media and mobile applications, which makes the analysis difficult given the smaller sample size. The sampling method used was purposive sampling and hence it can show some generalisability issues since unlike random sampling it may not be able to reflect the traits of a wider group.

ANALYSIS

VII. Analysis

Are you familiar with the concept of therapy? (In reference to treatments that aim to help a person identify troubling emotions, thoughts and behaviors).
20 responses

100% of the respondents were familiar with the concept of therapy while only 90% were aware that therapy is also available in an online mode.

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misinterpretation of the questions or incomplete understanding of the topic on the side of the respondents. Given it was a survey method, the unavailability of the surveyor with the respondent can lead to some discrepancies in their answers.

3. Some of the respondents can be unaware of the various concepts of therapy through social media and mobile applications, which makes the analysis difficult given the smaller sample size. The sampling method used was purposive sampling and hence it can show some generalisability issues since unlike random sampling it may not be able to reflect the traits of a wider group.

ANALYSIS

VII. Analysis

Are you familiar with the concept of therapy? (In reference to treatments that aim to help a person identify troubling emotions, thoughts and behaviors).

20 responses

Are you aware of that therapy can be offered online also (through texts, calls and video calls) and not only in person?

20 responses
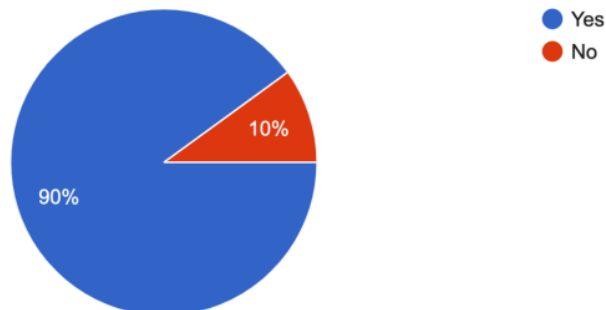
- Yes
- No

10%

90%

100% of the respondents were familiar with the concept of therapy while only 90% were aware that therapy is also available in an online mode.

How did you first learn about therapy?

20 responses

- Through social media
- Through friends
- Through school/ college
- Media representation (movies, shows)
- Doctors to be specific
- Through television

45%

10%   30%
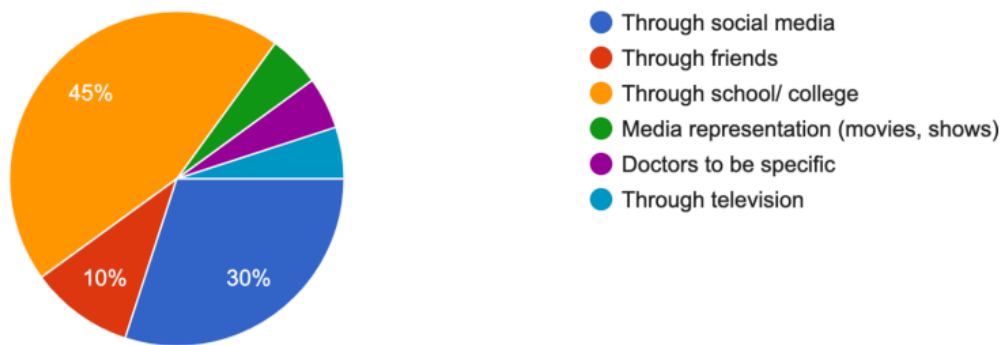
The most popular means for respondents to learn about therapy was through school or college and social media

How accessible do you think offline therapy (in-person) is?
20 responses
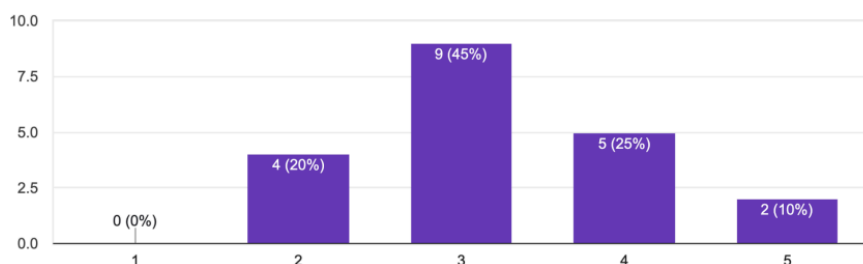
How accessible do you think online therapy is?
20 responses
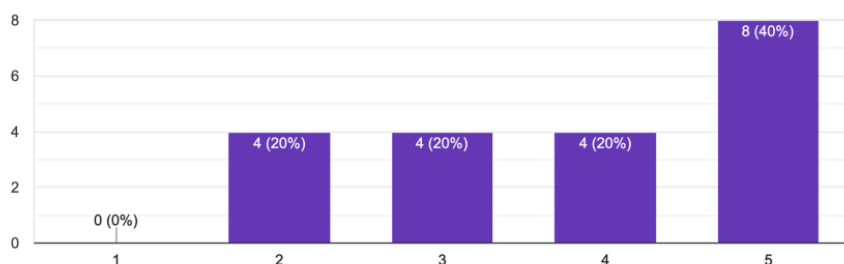
An interesting insight surfaced during the research where a majority of the respondents rated the accessibility of offline therapy as a 3 on a scale of 1-5 (where 1 is not at all accessible and 5 is very accessible) compared to online therapy which the majority rated as a 5 (on a scale of 1-5). This finding goes to show that, for various reasons, students in Delhi University believe that online therapy is drastically more accessible than offline, in-person therapy.

Select options that can be potential external barriers while seeking offline therapy for students in Delhi University.
20 responses
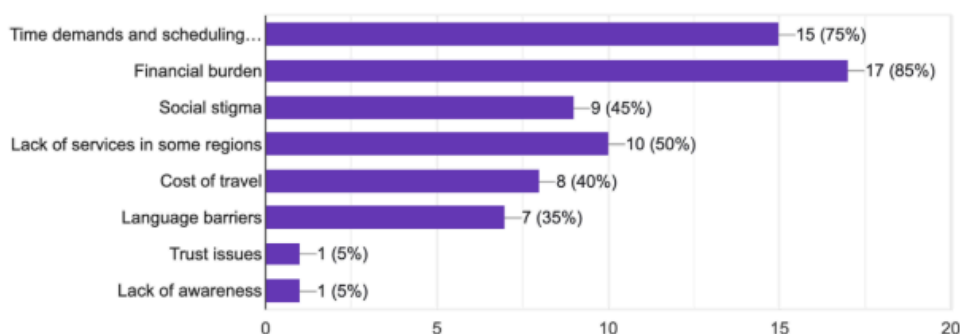
When asked about potential barriers that could stand in the way of students in Delhi University seeking offline therapy, some of the common issues that came to light were time demands and scheduling conflicts, cost of travel, financial burdens, low accessibility due to lack of services in some regions and the social stigma behind individuals seeking therapy.

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Select options that can be potential external barriers while seeking online therapy for students in Delhi university.

20 responses
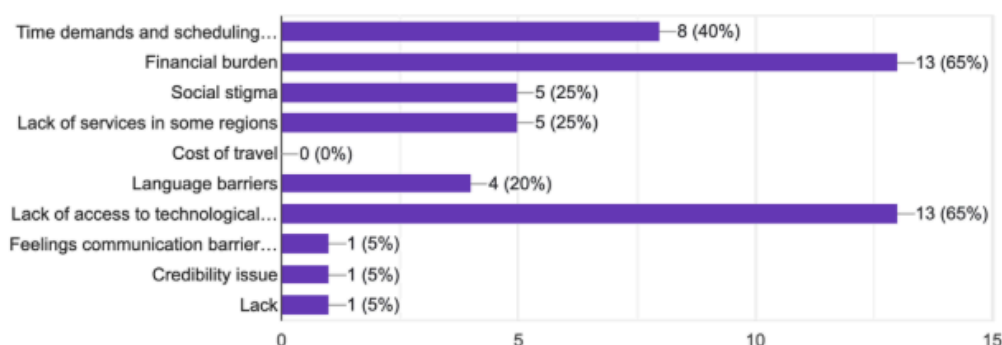
Meanwhile, when asked about barriers that could stand in the way of students in Delhi University seeking online therapy, the potential issues that could stand in the way of someone seeking online therapy were the financial burden and lack of access to technological resources.

This suggests that potential barriers like travel costs, time demands and scheduling conflicts and social stigmas are less likely to prevent students from seeking online therapy, as compared to offline.

In a situation where you have to seek therapy, how likely are you to go for therapy in person?

20 responses
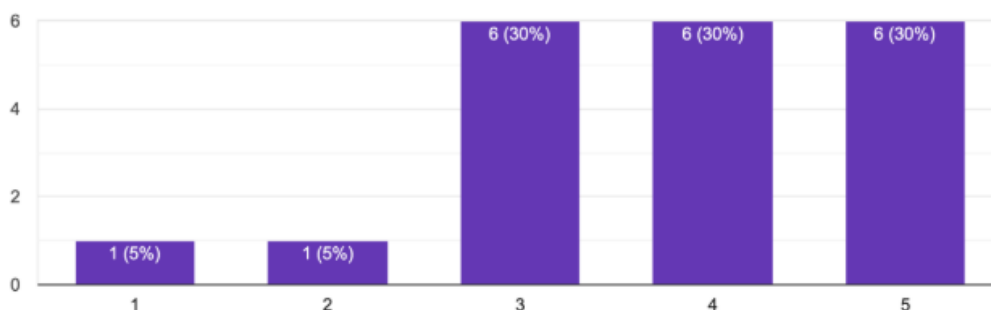
Despite all the above findings, however, when asked about preferences in modes of therapy, the majority of the respondents are still more likely to pick offline therapy over online therapy, should a situation ever arise where they feel the need for it.

In a situation where you have to seek therapy, how likely are you to go for online therapy?

20 responses

RESEARCH COMPENDIUM
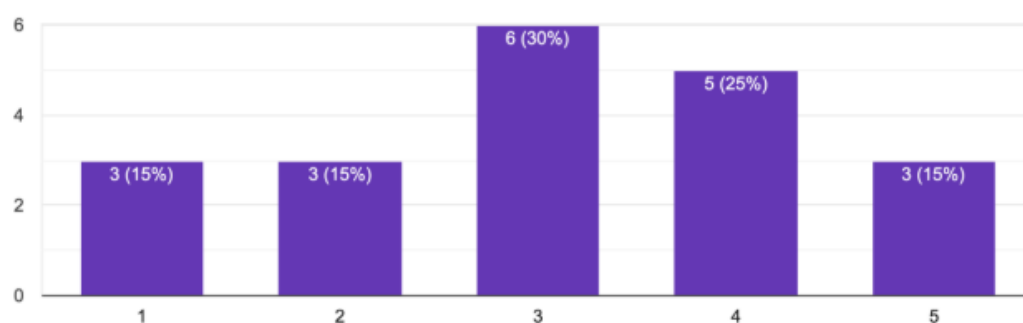
However, when asked which medium of therapy would be best suited for students, there was no clear preference. Many respondents listed reasons why online therapy would be more affordable, convenient and accessible while others said that they would prefer offline therapy as it is easier to establish trust and open up to a therapist when meeting in-person.

If you go to therapy or if you ever plan to attend, will you consult your parents/ family members/ guardians?
20 responses
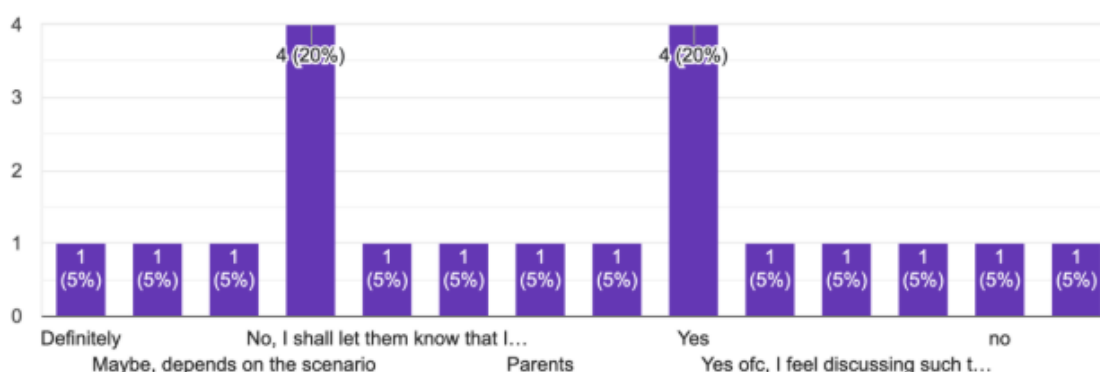
We further asked the respondents whether or not they would consult their parents/guardian if they ever sought out therapy. The responses to this were split with 55% saying they would, 35% saying they would not, while 10% was unsure.
A few of the respondents did state that online therapy cannot be compared to offline therapy as the level of comfort that one gets when meeting a therapist in person remains unmatched. Some respondents were also of the opinion that information on social media is very unreliable and therefore getting mental health support through social media and wellness and mental health applications would be a dangerous alternative. However, on the whole, the majority of respondents felt that online therapy is a good alternative to offline therapy because it is more accessible and easier to avail.

FINDINGS
The key findings of the study regarding college students' preferences for online therapy are as follows:
1 . Majority Preference for Online Therapy: A significant number of respondents rated online therapy as more accessible compared to offline therapy, with a majority giving online therapy a higher rating on a scale of 1-5.
2 . Factors Influencing Preference: Reasons for preferring online therapy included convenience, affordability, and accessibility, while some students highlighted the importance of trust and openness in face-to-face interactions for offline therapy.
3 . Barriers to Offline Therapy: Common barriers to seeking offline therapy included time demands, scheduling conflicts, travel costs, financial burdens, low accessibility in certain regions, and social stigma associated with seeking therapy.

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4 . Cultural Factors: Stigma associated with mental health problems, particularly in Asian societies, was identified as a significant deterrent to seeking traditional face-to-face counseling, making online therapy with its relative anonymity and physical distance more attractive to many individuals

5 . Mixed Views on Consulting Parents/Guardians: Responses were split on whether students would consult their parents/guardians if they sought therapy, with 55% saying they would, 35% saying they would not, and 10% being unsure.

These findings highlight the complex interplay of factors influencing college students' preferences for online therapy over traditional in-person therapy and shed light on the importance of accessibility, affordability, cultural perceptions, and individual preferences in shaping their choices.

A WAY FORWARD:

Moving forward, this research opens up avenues for further exploration and action in the realm of mental health care within educational institutions. Some key steps for future directions based on the findings of the study are as follows :

1 . Interventions that cater to the diverse needs and preferences of college students in Delhi should be made, taking into account factors such as socio-economic status, cultural barriers, and technology access. These interventions should aim to bridge the gap between traditional in-person therapy and online therapy, ensuring inclusivity and effectiveness.

2 . Awareness campaigns should be launched to destigmatize mental health issues and promote the benefits of seeking therapy, both online and offline.

3 . Accessibility of mental health services should be improved by expanding online therapy options, providing financial assistance or subsidies for therapy sessions, and establishing partnerships with telehealth providers to ensure students from all backgrounds can access the support they need.

4 . The scope of research can be expanded to include longitudinal studies, comparative analyses with other educational institutions, and qualitative investigations into the experiences of students from diverse backgrounds. This will deepen our understanding of the evolving trends in mental health care and inform evidence-based practices.

By implementing these, we can advance the dialogue on mental health care among college students in Delhi and beyond, foster a culture of openness and support around mental health issues, and ensure that all students have equitable access to quality therapy services, whether online or in-person. This proactive approach will contribute to creating a more inclusive and supportive environment for student well-being and academic success.

CONCLUSION

With a specific focus on college students' preferences for therapy options, this research study on "My Therapist Will Hear About This: Online Therapy Among College Students in Delhi" illuminates the changing landscape of mental health care within educational institutions. The results show that students at Delhi University are increasingly choosing online therapy platforms over conventional in-person sessions. Moreover, the research underscores the importance of addressing stigma surrounding mental health in Asian

societies and the role of digital platforms in providing anonymity and distance for individualsseeking therapy. By exploring students' preferences, motivations, and perceptions towards online therapy, the study contributes valuable insights for informing the development and implementation of effective mental health interventions tailored to the needs of college students in Delhi.

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XII. Appendix

Link to questionnaire responses:

Online Therapy Among College Students in Delhi (Responses)

RESEARCH COMPENDIUM

HEALTH SEEKING BEHAVIOUR:
INTERSECTIONALITY BETWEEN GENDER AND CLASS

Authors:

Michelle Pao, Nandeibam Aishwa, Fiona Olivero, Yashaswini Bahuguna

ABSTRACT

This paper delves into the dynamics of health seeking behaviour with emphasis on the intersecting influences of gender and socio-economic class. Drawing from semi structured and unstructured interviews, the study examines how gender and class shape individuals decisions, access, and experiences within healthcare systems. It highlights the multifaceted ways in which societal norms, economic

resources, and power structures intersect to create differing health seeking behaviour among individuals and consequently resulting in disparities in health status of various groups. The paper underscores the importance of adopting an intersectional lens to understand the complexities of healthcare utilisation and emphasises the need for tailored interventions that address the unique challenges faced by diverse class and gender groups. It ultimately seeks to inform efforts to promote equitable access to healthcare services.

Keywords: Health seeking behaviour, Gender, Socio-Economic Class, Intersectionality, Lay Referral System, Accessible Healthcare Facilities

INTRODUCTION

Health seeking behaviour can be defined as any action which was by individuals who perceive themselves to have a health problem or to be ill and consequently look for an appropriate remedy. Health seeking behaviour is preceded by a decision-making process which is further governed by individuals and their social class, gender and household behaviour. Therefore, the nature of health seeking behaviour is not uniform for everyone. It can be contextualised on the basis of gender, socio-economic background, regional background, knowledge base, and belief system, amongst others. This study, however, aims to look at the class, gender, and the intersectionality between class and gender and their influence on health seeking behaviour. Through a sociological lens, this study also draws attention to the role of social and natural constraints in the distribution and experience of health and sickness.

To seek health requires a pause from the hustle and bustle of everyday lives. It requires that a person take time from their normal daily routine and reflect on the symptoms that their body is showing and therefore decide whether to consult a physician or not. Gender plays an important role in this process as gender roles are assigned and most often, the case is that women are associated with responsibility for the home and family. This preoccupation with housework and care-work for the family means that there is a high possibility that women would not prioritise their health even in the presence of symptoms (Tenenbaum Artur, 2017).

The fact that men and women are assigned different gender roles and are socialised into conforming to different gender-based expectations offers an

explanation for differing healthseeking behaviour between the two genders. Moreover, a study in India found that in patriarchal society, since men are decision makers and are in possession of all the resources, they play a paramount role in determining the health needs of women, and hence they decide when and where women should seek healthcare (Patel Ratna, 2020).

Health seeking behaviour and the decision to consult a physician might also depend upon the existence of a lay referral system, which consists of friends, family and others in a person's social context that may influence an individual's response to symptoms or perceived health threats (Freidson 1960, 1970b).

Furthermore, health seeking behaviour is one of the most important attributes that help in understanding how well and frequently people are using health services and also helps check the efficiency of such services. Health services can be broadly classified into public health services and private health services. In previous studies in this field, it has been shown that people prefer private healthcare services because they perceive the quality to be better than public (Sandhya R. Mahapatro, 2021). The socio-economic background, the class to which people belong, becomes significant here as health services are seldom cost effective except in government-run public hospitals. Even among women, the class to which they belong determines the kind of service they can afford and hence gives rise to differing health seeking behaviour among women themselves. Health seeking behaviour, in this study, is also looked at from the perspective of alternatives available to consulting medical professionals and other supplementary activities that can be undertaken alongside medication that can help alleviate the illness or disease. The study attempts to show which class of women can take part in these supplementary activities considering the time available to them and their ability to find an alternative means to get their housework done. Henceforth, this study conducted from a sociological perspective will enable us to understand the influence of the intersectionality of gender and class and within it, the socio-cultural milieu, respondents' perspectives and self-constructed meanings underlying their behavioural patterns in health seeking behaviour.

RATIONALE

There exist disparities in health status among different groups in society. Equitable access to healthcare is one of the main objectives of every nation-state (Banerjee, 2020). However, health seeking behaviour involves decision-making that takes into consideration different socio-economic factors like gender and class resulting in differential behaviour towards seeking healthcare. This is the fundamental reason for this study.

It is also observed that there is a gap in the existing body of literature and knowledge. There is a tendency to view health seeking behaviour as determined only by gender or class as separate units of analysis and fails to recognise the intersectionality between the variables. Hence, this study aims to fill the gap in the existing literature.

The significance of this research thus lies in finding the causes for unequal access of different groups to healthcare services and facilities. This knowledge would provide a better understanding of the potential determinants of health seeking behaviour. This can help improve healthcare utilisation and health outcomes across various populations by promoting the creation of healthcare plans and policies for early diagnosis, prevention, and management of health conditions. Additionally, adequate access to healthcare and timely medical interventions would allow reduction of healthcare costs, disability and death from diseases.

STATEMENT OF PROBLEM

Gender and Class differences influence Health Seeking Behaviour in an intersecting manner leading to differential health status among groups.

METHODOLOGY

The study employs a qualitative method of study and both primary and secondary data are used. The primary data includes data collected through interviews of targeted respondents, which includes men and women in the age bracket of 18 to 70 years, engaged in different professions and belonging to different socio-economic backgrounds. There were a total of 25 respondents and they include women who are working as domestic help in homes and those who are full-time office workers. All interviews were conducted by taking prior consent of the respondents and in the presence of the authors of this paper.

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The format of the interview was unstructured and semi-structured interviews and prompts were also employed to induce responses and to elaborate specific areas so as to shape the conversation as per the needs of the research. The secondary data for this study is gained from the internet and includes articles and published journals, all of which are marked as reference sources.

The sampling technique used is judgement sampling. Judgement sampling, also known as purposive sampling, is a non-probability sampling technique in which samples are chosen on the basis of the decision of the researchers as per the characteristic needed in the sample for the study. The sample size, though limited, is diverse. The identity of the respondents is made anonymous in this paper so as to maintain confidentiality and privacy of the respondents.

RESEARCH QUESTIONS AND RESEARCH OBJECTIVES

1. What is health seeking behaviour?
2. How does gender and class influence the health seeking behaviour of various groups?
3. Do differences in health seeking behaviour lead to differential health status among various
groups?
4. Is health seeking behaviour affected by accessibility to medical facilities?

Objectives

☐ To highlight the intersectional nature of gender and class in influencing health seeking behavior.

☐ To explore the health seeking behaviour of various groups and thereby identify the reason behind differential health status.

☐ To check the feasibility and accessibility of medical facilities to various groups.

☐ To explore alternate health seeking behaviour as opposed to hospital visits, if any.

LIMITATIONS OF RESEARCH

The study has a limited sample size of 25 and therefore, sample results may not reflect population characteristics. The gender dimension considered for the study includes only the gender binary and does not encompass any other gender identities. Assumptions are made that the kind of profession respondents are engaged in reflects their socio-economic position, i.e. their class. Another

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limitation could be that although utmost care was taken to maintain objectivity in research, the possibility of bias cannot be eliminated. Moreover, the study may be constrained by limited resources both in terms of time and budget constraints.

LITERATURE REVIEW

Health is described as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. It is essential to keep ones body healthy because of the obligations and duties one must fulfil in society. Maintaining a healthy body demands not only our individual capabilities, but also the function of the institution. As a result, health-seeking behaviour is an essential factor in determining how well and frequently people use health services. Cornally defines help-seeking behaviour as "a problem-focused, planned behaviour, involving interpersonal interaction with a selected health-care professional"(Cornally, 2011). However, there have been certain inequalities and discrimination in terms of access to healthcare.

Various recent studies have focused on the relationship between gender and health. Healthcare is either directly or indirectly related to gender differences, which is seen not only in healthcare usage but also in nutrition, immunisation, and other relevant areas (Patel Ratna,2020). Gender differences in health-seeking behaviour have been found to be influenced by a variety of factors, including culturally imposed gender roles, age hierarchies, power dynamics, class situations, and economic factors (Das Moumita, 2018).

Furthermore, previous studies have pointed out that the responsibility of women towards home and family act as one of the obstacles for women to not prioritise their own health, even in the presence of symptoms (Tenenbaum Artur, 2017). Female participants are relatively less than men in health seeking because of marital insecurity, financial hardship and exclusion from social events, family and the community, geographical factors, social stigma, lack of information and knowledge, and lack of trust for technologies (Das Moumita, 2018).

While reviewing the literature, it was observed that most of the studies do not focus on the qualitative analysis of the complex gender dynamics which are affecting the health seeking behaviour. There is also a lack of adequate data regarding the patients' cultural background, education and income, which may also be critical determinants of health seeking behaviour. While existing literature has described the female disadvantage in healthcare use-rates, there is a lack of

quantitative consideration and empirical analysis of potential gender disparities in household recognition of illness, type of care service, and monetary expenditure during the use of health services. Although most of the studies focused on the gender binaries and health dynamics, according to the literature we have reviewed, no studies have been specifically done on the intersectionality of gender and class in determining health seeking behaviour. The strata of class people belong to, play a significant role in influencing health seeking behaviour. Economic class interacting with gender unfolds wider gaps in access to healthcare and the relevant behaviour in seeking healthcare. Hence, an in-depth study of the relationship between gender, class and health seeking behaviour needs to be conducted.

FINDINGS AND ANALYSIS

1. **Lay Referral System**

Freidson highlights the presence of a 'lay referral system'; within healthcare contexts, wherein patients gravitate towards particular caregivers influenced by social and cultural frameworks. This notion challenges the traditional notion of sickness as a singular, universally acknowledged state, proposing instead a spectrum shaped by societal norms and medical authority. Goffman further enriches this discourse by elucidating the conceptualization and management of stigma associated with illness. However, both Freidson and Goffman overlook the pivotal role of physicians in shaping and mediating the legitimization of sickness within society (Freidson, 1960; 1970; Goffman, 1963).

Interviews conducted for this study revolve around the pivotal reliance on social networks for accessing healthcare services, a phenomenon commonly referred to as lay referrals. Findings suggest that affluent women leverage their social connections to expedite access to physicians and secure appointments with esteemed practitioners. In contrast, individuals from lower socioeconomic strata predominantly rely on their social networks due to a preference rooted in trust for specific physicians.

In instances where it was generally favoured to have a non-ailing attendant accompany patients who were unwell, female patients often found themselves without a suitable escort aside from their own children or husbands or help.

Additionally, it was observed that women exhibit a preference for companionship due to concerns regarding their ability to effectively communicate, potentially resulting in erroneous diagnoses. Overall, family and networks played a significant role in seeking health and which doctor to seek for help.

2 Gender dynamics in Health Seeking Behaviour

There are many factors affecting health seeking behaviour and utilisation of healthcare services. The factors that determine healthcare utilisation can be broadly divided into physical, socio-economic, cultural, and political factors (Sandhya R. Mahapatro, 2021). Gender difference is one of the main factors that affect health seeking behaviour.

According to the prevailing patriarchal structure of society, men are considered to be the decision makers and are often in control of most of the available resources, consequently playing a paramount role in determining the health seeking behaviour of women. The study focuses on the variables that determine access to healthcare, such as the cost, distance of hospitals from the home, access to medical knowledge, and so on. The study attempts to investigate the differences between genders in the use of healthcare services and in the way that they seek treatment for specific perceived illnesses. One of the key characteristics that aids in determining the frequency and quality of health service utilisation is the health-seeking behaviour.

The severity of the illness and its symptoms are often the determining factor as to whether or not one should visit a hospital. Most women feel burdened and constrained because they feel that there's little time for them to take a break from their hectic household chores in order to see the doctor. Due to lack of transportation from their houses to the government hospitals, they feel that they end up taking the whole day and hence will not be able to finish their chores. Hence, lack of transport facilities acts as a major factor in determining health seeking behaviour of women, often resulting in them neglecting their health till the last moment. In addition, because of the lack of transport, most women prefer to go to primary health centres in their villages and towns for health checks, even if they know that it will do little to help or improve their health without a proper and thorough check up.

Although male respondents also consider that it is necessary to go to hospitals only if the symptoms are severe, they generally do not face any obstacles in obtaining health care. This is due to the easy accessibility of transport and their

ability to drive a vehicle, which means, there are no dual tasks in maintaining both household work and employment. Moreover, it is observed that male respondents do not take into account the obstacles and experiences of women in obtaining adequate health care. In the study, it is observed that a majority of females consider the opinion of their relatives and family members, in particular men, when they seek health care. This is mainly because of their lack of knowledge of the severity of their illness as well as available healthcare facilities. Men, on the other hand, do not usually take opinions from others and seek medical care when they believe that it is necessary.

Nonetheless, regardless of gender, majority of the respondents indicate that they do not regularly undergo medical check-ups due to different reasons. Gendered differences are also observed in the way in which male and female respondents try to manage and negotiate their work-health dynamics. Women who are housewives or those who work as domestic help often negotiate with their health and operate on the idea that if they are not seriously ill, it is necessary for them to finish their work. In cases when they are severely ill, their daughters or mother-in-law often help them with the chores and take care of them. On the other hand, women who work in the formal sector often have domestic helpers and hence are often able to take rest. Meanwhile, it is interesting to note that most of the men stated that they are able to maintain a balance between work and health and added that it is rather important to take rest for a day or two in order to recover and be able to perform their role in the society. Hence, although both men and women are expected to perform their sick role, we could find that oftentimes, women try to negotiate their sick role (Parsons, 1951) because of the domestic chores.

The study also concluded that there is difference in opinion between men and women with regards to gender disparity in health seeking behaviour. While most of the women consider gender disparity between men and women in their health seeking behaviour to exist, men do not hold the same opinion. Women are of the opinion that due to the lack of hospitals in their vicinity, they often have to travel long distances which could aggravate their ill health. Therefore, women consider family support to be essential because they need companionship at the time of seeking health. This could also be attributed to the assumption that women lack the skills of communication or that they will not be able to comprehend their illness properly.

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On the contrary, men believe that one will not neglect their health or symptoms if they give more priority to their health. They are of the opinion that it is important for a sick person to visit hospitals with a companion and this need is not exclusive to women.

It is also observed that because of the gender stereotypes that are attached with both men and women, most of the male respondents attempt to suppress information on their illness because sickness is associated with being vulnerable and the inability to perform basic duties in the society. Because of the conventional gender stereotypes associated with men, they do not want to rely on their family members when they are sick. On the other hand, women are of the opinion that one often feels sceptical to take rest from their daily household chores because society judges them for neglecting their duties.

Henceforth, the cost of healthcare services, distance from healthcare facilities, social norms, levels of education and gender stereotypes may affect health seeking behaviour between men and women. The management of work-health dynamics by both the genders tends to be influenced by the social roles that are expected out of them.

3 Class dynamics in Health Seeking Behaviour

Class as a social category is one of the important factors in influencing the health-seeking behaviour of people. A person's socio-economic status determines the way they seek and access healthcare. It poses constraints in the manner in which healthcare is distributed and the experience of sickness.

Studies have found out that majority of the Indian population is burdened by the heavy cost of expenditure on healthcare services. This burden is ubiquitous across the income classes (Ganeshkumar et al., 2018). However, at the same time, majority of the population prefers private hospitals over government-run public hospitals despite the former hospitals having higher cost of treatment than government hospitals. Most of our respondents are of the opinion that while accessing public hospitals, there are various issues that are faced by the patients such as unsanitary and unhygienic conditions, lack of proper communication and negligence by the doctors, and low quality of their services, among others.

The findings suggest that women from the so-called lower class choose to give birth or were themselves born in government hospitals since it is affordable whereas women of middle and upper class prefer to avail the services of private hospitals because of privacy and better facilities. Our study also revealed that people belonging to the lower class preferred to visit hospitals only in case of emergencies or in cases when the symptoms are severe or critical.

Moreover, the frequency of these people visiting hospitals is less owing to financial constraints and demand for daily wage work. Whereas, on the other hand, people belonging to middle and upper classes visit hospitals when they feel the need to do so, in addition to other emergencies. Hence, the frequency of visits to hospitals are higher than that of low-income groups.

Furthermore, the study also finds that regardless of their social class, all respondents showed a tendency to not keep any fixed monthly budget towards healthcare for various reasons. Respondents with lower income could not afford to keep a separate budget for healthcare every month and would rather put in much of their savings whenever a need arises. Whereas people belonging to the middle and upper classes also do not keep any fixed budget for any emergency healthcare services because of the fact that they are able to acquire enough income savings for any emergency that might arise in the future. However, certain people from the middle class tended to keep a fixed budget for healthcare due to certain cases of any prolonged disease which would incur an expenditure on them in visiting hospitals often.

Moreover, people with lower income do not get regular health check-ups, even if they wish to do, because of financial constraints. While people belonging to the middle and upper classes were able to afford these regular health check-ups either bi-annually, annually or once every 2 years. Lower class members of the society who worked in the informal sector and as domestic helpers tend to neglect their health because of the fear of replacement from their job and reduction from their salary. Hence, the sick role that is expected out of the people to play when they are sick tends to serve only to the middle- and upper-class members of the society.

Henceforth, the socio-economic status of people largely determines the kind of services and institutions they can avail such as private or government hospitals or other alternatives, affordability of medicines, and the frequency of their visit to hospitals, among others. Thus, leading to differential health-seeking behaviour among people belonging to different socio-economic classes.

4 Intersectionality of Gender and Class

Having analysed class and gender and their fundamental role in influencing health seeking behaviour, the study also attempts to look at the intersectionality of it. When the economic class interacts with gender, it results in a wide gap in access to healthcare facilities. The findings of the study indicate the significance of the intersectional approach in identifying the sources of differential health status and health seeking behaviour by giving special cognisance to the low income and socially marginalised groups.

While examining the health-seeking behaviour of individuals with regards to the dynamics of class and gender, it is evident that the gender bias observed among lower class dilutes when one goes up the class hierarchy. Women from lower income families often neglect their health because they are always preoccupied with household chores and performing odd jobs to provide for themselves and their families. They often do not have the time to seek healthcare facilities as seeking health would mean a discontinuation of work for a period of time and consequently, loss of income and replacement. Since there is no alternative source of income, they often tend to ignore signs and symptoms of ill health and choose to work over health. Hence, women from the poorer class take up income-earning opportunities and the opportunity cost of accessing formal care over wage-earning may induce the poor to forgo care resulting in more neglected health as compared to economically well-off women (Sandhya R. Mahapatro, 2021). Meanwhile, women with a steady income and belonging to the higher income bracket have a better health status as they have the resources to pay for the cost of healthcare facilities and their jobs provide them paid leaves as well. Hence, time was seldom a factor for them to forego health seeking behaviour.

The findings of the study also reveal differences in choices of hospitals. Women from a higher income bracket preferred to get treatment from a private hospital and they felt that private hospital settings are more hygienic and comfortable and that it gave them a sense of privacy, away from the hustle and bustle and crowdedness, often the characteristics of government hospitals. Women belonging to the lower end of the class hierarchy expressed their lack of choice when it comes to the kind of hospitals they could opt for due to the inability to afford expensive treatments in private hospitals. Even upon receiving treatment from government hospitals at subsidised rates, women from this category still

struggled to follow up with the prescribed medications as they could not bear the cost with their scarce income.

Additionally, upon investigation on various alternative practices undertaken as against consulting medical professionals, it was found that it was only women belonging to the upper strata of the class hierarchy who were actually engaged in supplementary health seeking activities such as yoga and regular walks. This was facilitated by the fact that they had the economic capacity to delegate a major portion of their household chores to household helps whom they were able to employ by paying a monthly fee. Women from lower income families, however, were domestic help themselves in multiple households in addition to their share of household chores in their own homes, leaving them with little or no time for leisure or to engage in supplementary health seeking activities. Thus, differential health status between the two categories of women is observed with the former enjoying a healthier lifestyle than the later. This disparity in health status is further aggravated by the ever-widening economic class divide.

It is also interesting to note that gender and class informs the way in which individuals perceive ill health. It was observed that men, irrespective of their class position, were often reluctant to perceive themselves as having ill health as illness was associated with being vulnerable and dependent upon others and this affect their dominance as a provider in the household. Women and their definition of ill health, on the other hand, varied across class categories. While women from a higher-class hierarchy perceived of ill health as any discomfort, minor or major that affected the smooth functioning of their daily lives and viewed it as a concern that should be addressed by the help of a healthcare professional, women belonging to the lower end of the class hierarchy however perceived themselves as having ill health only when the symptoms are so severe that it affects their capacity to work, and consequently, their earning capabilities. They do not pay heed to discomforts in their body and do not seek medical attention citing reasons such as lack of time and money to consult a doctor. As a result, due to lack of timely medical intervention, it may often be the case that the symptoms aggravate leading to serious life-threatening situations.

CONCLUSION

There is an intricate interplay between class, gender, and health seeking behaviour. The study underscores this complex relationship and illuminates the multifaceted factors shaping individuals' decisions regarding their health.

The findings elucidate how social dynamics, such as gender roles and socio-economic status, influence the prioritisation of health amidst daily responsibilities. Particularly, the disproportionate burden placed on women in domestic and caregiving roles underscores the complexity of health seeking behaviour. This is where personal health often takes a backseat to familial and societal obligations.

Moreover, the presence of a patriarchal structure further exacerbates disparities in health seeking behaviour where men often assume decision-making authority over women's healthcare needs. This highlights the need for interventions that address not only individual behaviours but also broader societal norms and power structures that perpetuate unequal access to healthcare. By acknowledging these systemic influences, policymakers and healthcare providers can implement more effective strategies to promote equitable health-seeking behaviour and improve healthcare access for all.
Furthermore, the findings of this study highlight the importance of understanding health seeking behaviour within its socio-cultural context, emphasising the significance of lay referral systems and alternative health seeking practices. By adopting a sociological lens, we gain valuable insights into the lived experiences and self-constructed meanings underlying individuals'; health-seeking patterns. Ultimately, by recognizing the nuanced intersections of gender, class, and social constraints, we can develop more holistic approaches to healthcare delivery that address the diverse needs and realities of marginalised populations.

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APPENDIX

Refined Research Questions
How does gender and caste intersect to inform health-seeking behaviors?
Informed Consent Form
TITLE OF STUDY
Health Seeking Behavior: Intersectionality between Gender and Class
RESEARCHERS
Nandeibam Aishwa, Fiona Olivero, Michelle Pao, Yashaswini Bahuguna
PURPOSE OF THE STUDY
This research study aims to acquire an enhanced understanding of how gender and caste intersect to inform health-seeking behaviours.
PROCEDURES
If you agree to participate in this study, you will be asked to do the following:
Answer a multitude of open-ended questions provided by the project coordinator in an interview format, one-on-one, on your personal experiences related to seeking health-based treatment.
This will take approximately 40 minutes of your time. You will also be asked to provide select background information, including your age, gender, and ethnicity. You may opt out of answering some or all questions should you feel uncomfortable. You may also opt out of providing background information.
RISKS
Potential risks include being asked uncomfortable questions, including the request for personal background information. In this case, you may oppose responding to these questions, providing information, and revoke your choice to participate. In addition, all provided information will be withdrawn if you no longer want to participate in this project.

RESEARCH COMPENDIUM

BENEFITS
Participants will also contribute to informing policies pertaining to equitable access to healthcare through their sharing of knowledge and experiences.

CONFIDENTIALITY
All efforts will be made to ensure the confidentiality of identifying information obtained from your responses to the asked questions. No directly recognizable information will be recorded.
Participant data will be kept anonymous and confidential except in cases where the project coordinator is legally obliged to report incidents of abuse and suicide risk.

VOLUNTARY PARTICIPATION
Your participation in this study is voluntary. If you choose to participate in this research study, you will be asked to sign the consent form below. You can withdraw if you no longer participate after signing the consent form.

CONSENT
I have read and understand the provided information and have been made aware of the nature of the research project. I understand that my participation is voluntary, allowing me to withdraw at any time without providing reasoning. I understand I will receive a physical copy of this consent form upon signing it.

 Participant's Signature: _____

STUDYING HEATWAVES
AND ITS IMPACT ON DELHI STUDENTS' LIFE

Authors:

Astonish Baghel, Aradhya Chandrwan, Deeksha Varma, Mereena Abraham

HYPOTHESIS

The overall health and performance of a student is negatively impacted during heatwaves.

INTRODUCTION

The **National Capital Territory of Delhi** is one of the fastest growing megacities in the world. In terms of area, it spreads across approximately 1486.5 sq.km. The location of Delhi is 28.7 degrees N and 77.1 degrees E. Delhi sits on the latitude of 28 degrees lying in the Northern Hemisphere - hence 28.7 degrees N. The longitude of Delhi is at 77 degrees East which means that the city is 77 degrees to the east of the Prime Meridian.

Delhi features a **dry winter humid subtropical climate** (Köppen Cwa) bordering a hot semi-arid climate (Köppen BSh), with high variation between summer and winter temperatures and precipitation. Summer starts in early April and peaks in late May or early June, with average temperatures near 38 °C (100 °F) although occasional heat waves can result in highs close to 45 °C (113 °F) on some days and therefore higher apparent temperature. Extreme temperatures have ranged from –2.2 to 49.2 °C (28.0 to 120.6 °F). Being one of the hottest cities in India, it ranks among the **most susceptible to heat waves.** Majorly ascribable to its large population and also due to the significant concentration of vulnerable groups. Delhi has a population of 16.78 million with a population density of 11,320 persons per square kilometers.

Heat-wave is a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life. Heat-wave is defined as the

condition where maximum temperature at a grid point is 3℃ or more than the normal temperature, consecutively for 3 days or more. World Meteorological Organization defines a heat wave as five or more consecutive days during which the daily maximum temperature exceeds the average maximum temperature by five degrees Celsius. If the maximum temperature of any place continues to be more than 45° C consecutively for two days, it is called a heat wave condition. entration of vulnerable groups. Delhi has a population of 16.78 million with a population density of 11,320 persons per square kilometers.

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RATIONALE

Understanding the impact of heatwaves on Delhi students' lives is crucial for mitigating health risks, safeguarding academic performance, and informing policy measures to ensure their well-being and educational continuity amidst increasingly frequent and intense heat events in the region. By examining the nuanced effects of heatwaves on students' health, attendance, academic performance, and overall quality of life, this project aims to provide actionable insights for policymakers, educators, and public health officials to implement targeted interventions and adaptive strategies.

STATEMENT OF THE PROBLEM

Due to the extreme heat waves, the health and routine life of students gets affected drastically for a period of time in the summers.

SCOPE OF THE STUDY

The scope of this study encompasses a comprehensive investigation into the multifaceted effects of heatwaves on Delhi students, including their physical health, mental well-being, academic performance, attendance patterns, and overall quality of life. By employing a multidisciplinary approach that integrates meteorological data, health assessments, educational records, and socio-economic factors, the study seeks to offer a holistic understanding of the challenges posed by heatwaves and inform evidence-based strategies for mitigation and adaptation.

<div align="center">RESEARCH COMPENDIUM</div>

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RESEARCH COMPENDIUM

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METHODOLOGY

<u>Field :</u> We have conducted our research majorly on Delhi University college students and some of their parents and relatives.

<u>Sample :</u> 30-40 Delhi University students for survey research and interviews conducted on a number of students and some guardians.

<u>Methods employed:</u>

Primary data collection: This involves gathering meteorological data to identify periods of heatwaves in Delhi and correlating them with various indicators of students' lives such as health records, academic performance data, attendance records, and surveys on well-being. Statistical analyses can then be conducted to quantify the relationship between heat wave intensity, duration, and frequency, and their impact on students.

Surveys and Questionnaires: Surveys and interviews are administered to students, parents, and teachers to gather qualitative data on the subjective experiences and perceptions of heatwaves. Our questionnaire covers topics that are related to heat-related health symptoms, coping strategies, changes in daily routines, and the perceived impact on academic performance and overall well-being. This methodology turned out to provide valuable insights into the lived experiences of students during heatwaves.

Objective: Studying the impact of heatwaves on students aims to understand their physical, mental, and academic well-being during extreme heat events. It helps identify vulnerabilities, implement preventive measures, and develop resilience strategies. Research informs educational policies to ensure safe learning environments and support systems for students facing heat-related challenges.

<u>Limitations :</u>

1. Data Availability: Limited availability of reliable data on heatwave occurrences, student health records, and academic performance hinders the study's accuracy.

2. Temporal Constraints: The project's timeframe restricts our ability to conduct a broader and in-depth research on such a seasonal occurrence.

3. Controlling Variables : Difficulty in controlling for confounding variables such as socioeconomic status, pre-existing health conditions, and individual coping mechanisms also largely affected our study's validity.

4. Sample Size : Obtaining a sufficiently large and representative sample size of students across different age groups and demographics has been challenging which could possibly impact the generalizability of the findings.

RESEARCH COMPENDIUM

LITERATURE REVIEW

Delhi as the hottest city in India is one of the most vulnerable to impacts of heat wave due to its large population and high number of lower income groups. The summer season in Delhi begins in early April and continues till the mid of June, with the heat peaking in late May and early June. It is characterized by extreme heat, low humidity, very hot winds and thunderstorms. As population and urbanization, built up areas and concretisation expands in Indian cities, vulnerable populations will increasingly be exposed to high levels of heat. This is because some areas in the city are extremely crowded and continue to be devoid of spaces and vegetation.

Heatwaves, as classified by the World Health Organization, are among the most dangerous of natural hazards which rarely receive adequate attention because their death tolls and destruction are not always immediately obvious. Over the recent years, unparalleled heat waves driven by climate change with more severity, intensity, and frequency have been recorded in Delhi, with 2019 being the warmest year on record.

Causes :

Heatwaves can be caused by a combination of natural and human-induced factors. The main causes are:

1.<u>High Atmospheric Pressure Systems:</u> Heatwaves often occur when high-pressure systems stall over a region. These systems can trap warm air near the Earth's surface and prevent the normal movement of air masses, leading to prolonged periods of hot weather.

2.<u>Global Warming:</u> The long-term increase in Earth's average temperature, primarily driven by human activities such as burning fossil fuels (coal, oil, and natural gas), deforestation, and industrial processes, contributes to the frequency and intensity of heat waves. Global warming leads to overall warmer temperatures, making extreme heat events more likely.

3.<u>Urban Heat Island Effect</u>: Urban areas with high population density, extensive concrete and asphalt surfaces, and limited vegetation tend to absorb and retain more heat, creating localized zones of higher temperatures. This phenomenon, known as the urban heat island effect, can intensify heat waves in cities.

4.<u>Drought and Dry Conditions:</u> Prolonged periods of drought and lack of precipitation can dry out the soil and reduce available moisture, causing the land to heat up more quickly during heat waves.

5. <u>Changes in Wind Patterns:</u> Shifts in wind patterns can transport hot air from one region to another, intensifying heat waves in areas that are not typically prone to such extreme temperatures.

Human Activities: Local factors, such as land use changes, deforestation, and irrigation practices, can alter the surface characteristics of an area and contribute to heatwave development on a smaller scale.

IMPACT OF HEATWAVES

1. Health Risks : Increased risk of heat-related illnesses like dehydration, heat exhaustion, and heat stroke among students.

2. Academic Disruption : Difficulty concentrating, decreased productivity, and impaired learning due to discomfort and fatigue.

3. Attendance Issues : Reduced school attendance and participation in extracurricular activities during extreme heat events.

4. Sleep Disturbance : Disrupted sleep patterns leading to daytime drowsiness and decreased cognitive function.

5. Psychological Stress : Heightened stress levels and emotional strain due to prolonged exposure to high temperatures.

6. Socio-economic Disparities : Vulnerable students from low-income families may face greater challenges in coping with the impacts of heatwaves due to inadequate access to cooling facilities and resources.

When uncompensated, heat stress manifests as heat-related illnesses. **Heat-related illnesses include:**

Heat Cramps: Heat cramps are muscle pains or spasms-usually in the abdomen, arms, or legs-that may occur in association with strenuous activity. Heat cramps may also be a symptom of heat exhaustion. If you have heart problems or are on a low-sodium diet, seek medical attention for heat cramps.

Heat Exhaustion: Heat exhaustion is a milder form of heart-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. Elderly people and those with high blood pressure, and those working or exercising in a hot environment are most prone to heat exhaustion.

Heat stroke: Heat stroke is the most serious-heat related illness. The body is normally very effective at cooling itself. You lose some heat through your skin by sweating. However, when you become dehydrated, your body is unable to produce enough sweat to cool itself. Body temperature may rise to 106 degrees or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

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FINDINGS / DATA ANALYSIS

In developing nations like India, the repercussions of climate change are particularly severe, with children bearing a disproportionate burden. Among them, students emerge as especially vulnerable to the intensifying impact of extreme weather phenomena, notably heatwaves, exacerbated by climate shifts. It is imperative to delve deeper into the profound implications of heatwaves on the health and well-being of children across India. This necessitates a comprehensive understanding of the multi-faceted vulnerabilities they face in relation to heat exposure, encompassing factors like increased school absenteeism and the emergence of physical symptoms indicative of heat-related distress.

Furthermore, our interview response highlights that it underscores the urgent need for the implementation of effective heat risk management strategies within educational settings, especially at the primary level. Such interventions are crucial for safeguarding the health and academic progress of students in the face of escalating climate change challenges. Moreover, policy prescriptions aimed at enhancing resilience to heatwaves and promoting climate-adaptive measures within schools are of paramount importance. Our research highlights that the frequency and intensity of heat waves continue to rise, particularly in regions like India where temperatures soar and poverty levels remain high, the adverse effects on children's cognitive development and educational attainment are anticipated to become even more pronounced, highlighting the pressing need for concerted action at all levels. Emitted greenhouse gasses (GHG) will continue global warming until carbon levels are settled, even after net zero may be achieved, a health-centric adaptation focus should be seriously followed in every sector. This will also help us stay on course for the Sustainable Development Goals.

INDIVIDUAL MEASURES :

Given below are some measures devised by students to prevent the ill effects of the seasonal heatwaves :

1. Diet and Hydration : A lot of students prioritize their health extra cautiously. They keep themselves well fed and drink plenty of water throughout the day to prevent dehydration. Consumption of fruits and liquid diets become all the more important.

2. Appropriate Clothing : Students wear lightweight, light-colored, and breathable clothing to help regulate body temperature and reduce the risk of heat-related illnesses.

3. Shade Structures : Students makes a great use of shade structures or canopies in outdoor areas such as playgrounds and sports fields to attain protection from direct sunlight in the scorching summers.

4. Flexible Schedules : The students implement flexible schedules, such as early morning or late afternoon classes to avoid the hottest times of the day and minimize their heat exposure.

5. Educational Campaigns : Students actively attend and conduct educational campaigns to raise awareness among students, teachers, and parents about the importance of sun safety practices and heatwave preparedness, including recognizing signs of heat-related illnesses and knowing when to seek medical help.

Guidelines and Policies :

In the survey that we conducted, we inquired about the measures that the government could implement
during the peak heat waves period. The summation of the responses to it were as follows :

1. Heatwave Preparedness Education: Implement comprehensive educational programs in schools to educate students about the dangers of heatwaves, how to recognize heat-related illnesses, and preventive measures like staying hydrated and seeking shade.

2. School Schedule Adjustments: Consider adjusting school timings during peak heat wave periods to avoid exposing students to extreme temperatures during the hottest parts of the day. This could involve starting classes earlier in the morning or later in the evening.

3. Cooling Centers: Establish cooling centers in schools and community centers where students can seek refuge from the heat during school hours or after-school activities. Ensure these centers are equipped with fans, air conditioning, and ample water supplies.

4. Green Spaces and Shade: Encourage the creation of green spaces and shade structures in and around schools to provide relief from the heat. Planting trees and installing shade sails or canopies can significantly reduce ambient temperatures in outdoor areas.

5. Regular Monitoring and Alerts: Implement a system for monitoring weather conditions and issuing heatwave alerts to schools and parents. This can help schools make informed decisions about outdoor activities and ensure that parents are aware of the risks associated with extreme heat.

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6. Urban Planning: Include heat resilience in city planning with reflective materials and green
infrastructure.
7. Healthcare Preparedness: Equip facilities to handle heat-related illnesses.

CONCLUSION

Mentions of heat stroke have been found in literature since ancient times. With rising global temperatures, dangerous high heat has begun permeating our routine indoor spaces. This gradual expansion of the realm of extreme heat is potentially the gravest consequence of climate change for India. India has observed a significant mean temperature increase of 0.15 degrees C per decade since 1950, according to a 2020 assessment by the Ministry of Earth Sciences. The observed warming is not occurring evenly across India.

Hospitals across India are seeing an unprecedented surge in patients suffering from heat-related illnesses, with experts warning that the numbers could increase in the coming days as severe heat waves continue to sweep through the country. In the current scenario, the number of cases is on the rise. If proper precautions aren't taken and early signs and symptoms aren't addressed immediately, the number of cases will continue to rise. The Delhi Directorate of Education(DoE) has issued guidelines to safeguard students and staff during escalating temperatures and heatwaves in North India. Schools are required to prominently display posters on heat stress prevention, suspend afternoon assemblies, and refrain from outdoor classes or activities during heatwaves. Additionally, schools must maintain functioning RO systems, offer clean drinking water, and provide heat-related First Aid kits. Sensitizing parents on ensuring students wear protective headgear is also emphasized through School Management Committee members.

As predicted, in the near future, the heat waves are only going to rise, therefore, it is all the more important that the government introduces these aforementioned guidelines and ensures the effective implementation of these measures in all the educational institutions.

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RESEARCH COMPENDIUM

RESEARCH COMPENDIUM

EXPLORING THE SOCIO-CULTURAL FACTORS INFLUENCING MENSTRUAL DISTRESS
AMONG ADOLESCENT GIRLS OF HUDSON LANE, DELHI

Authors:

Anjali Pandey, Banoth Vidyachandana, Muhzina J, Anna Alex, Neha PV

INTRODUCTION

Menstruation, a natural physiological process occurring in females, marks a significant milestone in the transition from childhood to womanhood. Defined as the cyclic shedding of the uterine lining, menstruation typically occurs monthly, signaling the reproductive capacity of the female body. Adolescence, a developmental stage characterized by physical, psychological, and social changes, encompasses the critical period during which girls experience their first menstrual cycle. Adolescence, according to the World Health Organization (WHO), spans the age range from 10 to 19 years, encompassing the onset of puberty and the establishment of social independence. This developmental phase is marked by the interplay of physiological, psychosocial, temporal, and cultural factors, shaping individuals' experiences and perceptions of menstruation. Within this context, menstruation represents more than a biological process; it becomes a socio-cultural construct, imbued with symbolic meanings and societal expectations.

Sociocultural factors, encompassing societal norms, cultural beliefs, and taboos, play a profound role in shaping attitudes, behaviors, and practices surrounding menstruation. Across diverse cultural contexts, menstruation carries a complex tapestry of symbolic associations, ranging from notions of purity and femininity to stigma and shame. These cultural narratives dictate how menstruation is perceived, experienced, and managed by adolescent girls, influencing their physical and emotional well-being.

Menstrual distress, encompassing a range of physical, psychological, and socio-cultural challenges associated with menstruation, emerges as a significant concern for adolescent girls. Physical symptoms such as cramps, bloating, and fatigue, coupled with psychological distress including anxiety, mood swings, and depression, can profoundly impact girls' quality of life during menstruation. Moreover, socio-cultural factors such as restrictive cultural practices, social taboos, and lack of access to menstrual hygiene resources exacerbate menstrual distress, further compromising girls' health and well-being. Understanding the multifaceted nature of menstrual distress among adolescent girls requires a comprehensive exploration of the interplay between biological, psychological, and socio-cultural factors. This research aims to investigate the sociocultural factors influencing menstrual distress among adolescent girls, shedding light on the complex dynamics shaping their experiences and perceptions of menstruation. By unpacking the underlying sociocultural influences, this study seeks to inform targeted interventions and support strategies aimed at

promoting menstrual health and well-being for adolescent girls across diverse cultural contexts.

RATIONALE

Menstrual distress is a common experience among adolescent girls and can encompass a variety of symptoms, including cramps, headaches, nausea, mood swings, and fatigue.

Although menstrual distress is a natural part of the menstruation cycle, it can significantly affect the quality of life and daily functioning of those who experience it. Understanding the factors influencing menstrual distress is essential for developing effective interventions and support systems to help adolescent girls manage their symptoms and improve their well-being.

One of the key aspects that can impact menstrual distress is the sociocultural environment in which adolescent girls grow up. Sociocultural factors such as cultural beliefs, social norms, educational opportunities, family dynamics, and community attitudes can all play a role in shaping how girls perceive and experience menstruation. Exploring these factors among the girls of Hudson lane provided valuable insights into the different ways in which menstrual distress is understood and managed in various contexts.

Objectives of the Study:-

The main objectives of our research are as follows:

● To identify the sociocultural factors influencing menstrual distress among adolescent

girls: By examining the cultural, familial, educational, and social influences, the study

aims to provide a comprehensive understanding of how different environments shape

girls' experiences of menstrual distress.

● To assess the impact of these factors on girls' quality of life: Understanding the extent

to which sociocultural factors contribute to menstrual distress can help tailor interventions to improve adolescent girls' well-being.

● To inform the development of targeted interventions and educational programs: By identifying key areas of influence, the study can guide the creation of programs that address specific needs and concerns of adolescent girls experiencing menstrual distress.

RESEARCH COMPENDIUM

Exploring the sociocultural factors influencing menstrual distress among adolescent girls is critical for understanding how different environments shape their experiences. This understanding can inform the development of targeted interventions, support systems, and educational programs that aim to improve the quality of life for adolescent girls during their menstrual cycles.

STATEMENT OF THE PROBLEM

Menstrual experiences have a pivotal role in regulating the life outcomes of the females. Adolescence is a crucial stage for the development of a girl during which she experiences many personal changes impacting her mental health and personal well-being. For adolescent girls and women in India, menstruation remains shrouded in quiet shame, embarrassment and misconception, stemming primarily from the deep-rooted belief that is a dirty and impure process.

Due to restrictions imposed during menstruation along with the negative attitude of parents in discussing menstruation-related issues with girls has led to poor awareness regarding menstruation and menstrual hygiene among adolescent girls. Menstruation has been stigmatized in our society. Although menstruation is a biological phenomenon, there are many socio-cultural beliefs, restrictions and psychological dynamics that regulate its impacts.

This research aims to explore the major themes and sub themes regarding menstrual experiences and associated distress of adolescent girls and promote menstrual health and well being.

METHODOLOGY

This research on "Exploring the sociocultural factors influencing menstrual distress among adolescent girls " utilized qualitative research methods among the adolescent girls of Hudson Lane, New Delhi. The data were collected adopting focused group discussion to explore the myths and realities regarding menstruation of adolescent girls. This study collected insights from experiences of adolescent girls in physical and psychological conditions and challenges which come out from social restrictions, taboos, beliefs and practices related to menstruation.

A pilot study was conducted which aimed to finalize the efficacy and effectiveness of the focus group discussion and to ascertain other procedural details of the study. This helped a lot in developing a uniform method of analysis. The data of pilot study were not included in the final data of the study. The analysis present here has also been collected from various sources such as journals, magazines and relevant websites.

<div align="center">RESEARCH COMPENDIUM</div>

We as researchers prepared a list of items for focused group discussion based on her insights after the review of literature. Following were the questions included in the focused group discussion.

1. Has your menstruation started?
2. How do you feel during menstruation?
3. Should the information regarding menstruation be shared with boys?
4. Is there any restriction or stoppage of any type imposed during menstruation?
5. What types of restrictions or stoppage are imposed upon you during the menstruation?
6. What do you feel most distressing during your menstruation physical distress or restrictions?
7. Do male members of the family know about your menstruation?
8. Do you cook food during your menstruation?

LITERATURE REVIEW

Menstruation and its psychological and socio-cultural implications have been a topic of interest in various studies. Knight (1991), Mead (1949), and Shuttle & Redgrove (2005) have extensively discussed the cultural practices surrounding menstruation, highlighting the diverse range of beliefs and practices across different societies. These cultural constructions significantly influence the experiences and management of menstruation among women. The onset of menarche and the menstrual process are often shrouded in misconceptions, leading to negative impacts on reproductive health and identity (Bhattacharya, 1999).

Furthermore, beliefs and restrictions related to menstruation, such as those in Hindu and Buddhist traditions, contribute to social stigmas and discrimination against women (Golub, 1992). These beliefs often lead to women detaching themselves from responsibilities and facing lowered well-being, affecting their participation in society (Buckley & Gottlieb, 1988).

The lack of scientific evidence supporting these beliefs underscores the need for a comprehensive understanding of the psychological and socio-cultural antecedents of menstruation (Chrisler et al., n.d.).

Adolescence, a period of exploration and stress, is particularly challenging due to the socio-cultural constructions surrounding menstruation. Adolescents must navigate conflicting roles and integrate them into a consistent self-identity, highlighting the importance of addressing menstrual distress and its impact on identity formation (Çevirme et al., 2010). To fully grasp the complexities of

menstruation, a mixed-methods approach combining qualitative and quantitative research is recommended to uncover the multifaceted psychological, social, and emotional consequences of menstruation (Creswell et al., 2004).Menstruation and menstrual experiences are deeply intertwined with cultural beliefs and societal norms, shaping the way they are perceived and managed by individuals. Anthropologists like Knight (1991), Mead (1949), and Shuttle & Redgrove (2005) have extensively studied the diverse cultural practices surrounding menstruation, ranging from social restrictions to special privileges for menstruating women. The onset of menarche, the first menstrual period, often brings about a plethora of socio-cultural and psychological constraints due to misconceptions and lack of knowledge, leading to shame and stigma among women.

In the Indian setting, the psychological antecedents and correlates associated with menstruation have been explored by researchers at the Department of Psychology, Doctor Harisingh Gour Vishwavidyalaya, Sagar (M. P.). Previous studies have recommended an exploratory research design, combining qualitative and quantitative approaches, to better understand the complex constructs related to menstruation (Creswell, Fetters & Ivankova, 2004; Mudgal & Tiwari, 2015).However, there remains a gap in comprehensively addressing the psychological, social, and emotional consequences of menstruation in scientific research. Ha Ju-Young (2015) explored the psychological health implications of early maturing adolescent girls, highlighting the negative impact on their health, bodies, and subjective happiness. The study underscores the importance of teachers and school nurses in addressing the psychological health needs of adolescents who mature earlier than their peers. Understanding the psychological challenges faced by early maturing girls is crucial for providing appropriate support and intervention.

In a study by Jain et al. (2018), the menstrual experiences of adolescent girls were explored through a qualitative study. The research highlighted the psychological health needs of early maturing adolescent girls, linking early pubertal timing with psychological health problems.

The findings suggest that professionals working with adolescents should pay close attention to the psychological well-being of girls experiencing early maturation. This study sheds light on the complexities surrounding menstruation and its impact on adolescent girls' mental health. Cosgrove and Riddle (2008) conducted a mixed methods study to investigate the relationship between constructions of feminine gender identity and experiences of menstrual

distress. The analysis revealed that women engage in intense premenstrual bodily surveillance during menstruation, influenced by societal constructions of femininity. The study suggests that menstrual distress should be conceptualized as both a lived experience and a social construction, emphasizing the need for a holistic understanding of menstrual health.

In a study by Roberts (1998), the influence of socio-demographic factors on knowledge about menstruation and safe menstrual hygiene practices among students was examined. The research found that age and course of study positively influenced knowledge about menstruation, while Religion and year of study were associated with the practice of safe menstrual hygiene. This study emphasizes the role of education and awareness in promoting menstrual health among adolescent girls. Cultural and religious beliefs play a significant role in shaping attitudes towards menstruation. For instance, Hindu and Buddhist traditions have strict restrictions and taboos surrounding menstruation, considering menstruating women impure or sinful (Golub, 1992). These beliefs, although lacking scientific evidence, contribute to the discrimination and social control of females, impacting their well-being and opportunities in society. Studies have highlighted the prevalence of misconceptions and misinformation among adolescent girls regarding menstruation, leading to negative psychological impacts and mental health disorders (Australian Bureau of Statistics, 2010).

The lack of comprehensive discussions on social and cultural restrictions associated with menstruation in existing research indicates a need for further exploration and understanding of these complex issues.

In Western cultures, the experiences of female adolescents with menstruation vary, with many facing negative feelings and embarrassment due to societal perceptions of menstruation as a sign of growing up. Positive attitudes and experiences towards menstruation are often influenced by supportive maternal figures and educational materials (McPherson & Korfine, 2004; Lee, 2008). Addressing the misconceptions, promoting menstrual hygiene practices, and providing comprehensive education about menstruation are crucial steps towards improving the reproductive health and well-being of adolescent girls. By integrating psychological, social, and cultural perspectives, researchers can develop holistic support programs that empower girls to navigate menstruation with confidence and understanding.

FINDING AND DATA ANALYSIS

The study involving qualitative research aimed to understand the causes and correlations of menstrual distress and its impact on adolescent girl's life of Hudson lane. The qualitative study understands the nature and dynamics of menstrual distress, its antecedents, and correlates. The study found that attitude towards femininity, body image, and personal, relational, and social aspects of identity were significant correlates of menstrual distress The study explored the complex nature of menstrual experience and distress, highlighting the role of personality attributes, identity, interpersonal interactions, emotions, cognitions, outcomes, and social influences. The main causes of menstrual distress are lack of information about menstruation and its consequences, with the first menstrual experiences being painful both physiologically and psychologically for girls. Most girls admit to having negative experiences due to their lack of awareness of the facts and realities about menstruation.

There is no culture of sharing menstrual information at family, society, and peer group levels, with older male and female family members remaining reluctant to share the reality. The experiences of adolescent girls are constructed through interpersonal and social interactions, with mental preparedness and timing of their period prior to menarche influencing their psychological experience. Girls who start menstruating early in comparison to their peer group experience more negative and difficult menarche experiences.

The sharing of menstrual information represents the nature and types of relationships, with the mother being the most important source of information. The experiences of menarche consume longer due to their shocking and painful contents, and hesitation, shame, and fear are major obstacles for girls before sharing their experiences immediately after menarche.

Menstrual distress is influenced by strong social restrictions, false beliefs, and ill practices, which restrict girls from participating in activities such as games, cooking, and religious activities during menstruation. Physiological changes form the basis of menstrual distress, significantly affecting behavioral, emotional, and cognitive outcomes.

Menstrual experiences significantly impact self-perception, social relationships, and well-being of adolescents. Shame is a common feeling, and poor self-concept is linked to gender identity and freedom.

The study supports that menstruation is a complex phenomenon influenced by socio-cultural practices, beliefs, and realities. It reveals that menstrual distress

RESEARCH COMPENDIUM

and attitudes towards femininity shape body image and personal, relational, and social aspects of identity in adolescents.

IMPLICATIONS OF THE STUDY

The study aimed to provide a comprehensive understanding of women's menstrual experiences and distress, revealing the link between it and various life outcomes. It will aid researchers, health professionals, medical practitioners, and policymakers in understanding the dynamics of menstrual distress in girls. The findings can also be applied to promote and prevent women's health problems, attenuating false beliefs and practices associated with women's health. The study also aims to improve women's identity and body image. A notable achievement is the development of a comprehensive menstrual distress questionnaire with desirable psychometric properties.

LIMITATIONS OF THE STUDY

The study has several limitations, including a small sample size for both qualitative and quantitative phases, limited variables for verification, use of participants from a single cultural group, focusing solely on menstrual distress of adolescent girls, and employing only a student population for verification. These limitations are inherent in any human endeavor, and the study's limitations underscore the need for further research and refinement.

CONCLUSION

The findings of the study revealed significant differences between rural and urban girls in terms of socially imposed impurity and restrictions, attitude towards femininity, and personal identity. Menstrual distress encompassed various forms of pain, restrictions, negative thoughts, emotions, low self-concept, health issues, shame, fear, and low blood levels. A positive attitude towards femininity was associated with satisfaction and pride in being female, while a negative attitude suggested resentment .

Urban girls, having better access to educational opportunities, self-concept, autonomy, mass media influence, health awareness, and positive parental attitudes, scored higher in attitude towards femininity, body image, and personal identity. Conversely, rural girls had higher scores in menstrual distress and faced challenges in relational and social identity. The study found significant negative correlations between components of menstrual distress and body image and aspects of identity. Higher levels of menstrual distress were associated with lower body image and identity scores. Conversely, there were significant positive correlations between attitude towards femininity and body image and aspects of identity. The research presents a comprehensive exploration of menstrual

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APPENDIX I

Questionnaire

1. Has your menstruation started?
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Exploring the Factors Influencing Mental Well-being Among Students of Delhi University (North Campus): Understanding Coping Strategies for Better Resilience

Authors:

Viksita Bhardwaj, Sabrath Showkat, Sargam Khatri, Mamatha Rose, Malothu Bhargavi

INTRODUCTION

In recent years, the discourse surrounding mental well-being among university students has garnered significant attention globally. The transition to higher education is often marked by newfound independence, academic pressures, social adjustments, and personal challenges, all of which can profoundly impact students' overall well-being. Within this context, the University of Delhi's north campus stands as a microcosm, reflecting the multifaceted experiences and challenges faced by students in an urban academic environment. We've made an effort to incorporate relevant information in this research project by enlisting almost every issue related to the realm of mental illness related issues among the youth, specifically students, in a setting of University of Delhi. This research hence, aims to provide probable solutions for this bone of contention.

RESEARCH COMPENDIUM

In essence, this project serves as a testament to our commitment to fostering well-being and resilience among university students, recognizing them not just as learners but as individuals navigating a crucial period of personal growth and development. Through collaborative efforts and a holistic approach, we endeavour to pave the way for a healthier, more resilient student community within the University of Delhi's North Campus and beyond.

RATIONALE

Students came in order to pursue education, especially in universities like the University of Delhi (north campus) which is our core study . Understanding their mental illness issues are relevant as it impacts a significant portion of the student population. There has been a growing recognition of the mental health challenges faced by students, especially those in higher education institutions. Factors such as academic pressure, social stressors, and lifestyle changes contribute to the declining mental well-being of students. The University of Delhi's North Campus is a prestigious educational institution in India, attracting students from diverse backgrounds. Understanding the specific challenges and stressors faced by students in this context is crucial for designing targeted interventions and support systems. Understanding coping strategies utilized by students in response to stressors is essential for promoting resilience and adaptive functioning. By identifying effective coping mechanisms and resilience-building strategies, the project can contribute to the development of targeted interventions aimed at enhancing student resilience and well-being.

The findings of the project can inform policy decisions and program development within the University of Delhi and other higher education institutions. By highlighting the specific needs and challenges faced by students, policymakers and administrators can implement evidence-based interventions to support student well-being effectively. Overall, the project addresses an urgent and pressing need to prioritize student well-being in higher education settings. By examining the factors influencing mental well-being among students at the University of Delhi's North Campus and understanding coping strategies for better resilience, the project can contribute to fostering a supportive and nurturing environment conducive to student success and flourishing.

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and pressing need to prioritize student well-being in higher education settings. By examining the factors influencing mental well-being among students at the University of Delhi's North Campus and understanding coping strategies for better resilience, the project can contribute to fostering a supportive and nurturing environment conducive to student success and flourishing.

STATEMENT OF THE PROBLEM

The prevalence of mental health illnesses among Delhi University north campus students is a pressing issue that demands attention. Despite the university's reputation for academic excellence, anecdotal evidence and emerging studies suggest a significant burden of mental health challenges among its student body. However, the existing research landscape is fragmented, with limited empirical studies focusing specifically on Delhi University students' mental health. This gap impedes the development of targeted interventions and support systems necessary for effectively addressing mental health issues in this context. Factors such as academic pressure, competition, societal expectations, financial constraints, and access to mental health resources intersect in complex ways, shaping students' experiences and coping mechanisms. Without a nuanced understanding of these contextual factors, efforts to address mental health issues among Delhi University students are likely to fall short.

The research on mental health illness among Delhi University students represents a critical endeavour in addressing the burgeoning mental health crisis within higher education. By conducting a comprehensive inquiry into the prevalence, determinants, and manifestations of mental health challenges, this study seeks to fill a significant gap in the existing literature and pave the way for targeted interventions and support systems. This research holds significant implications for both academia and mental health advocacy. By providing a comprehensive understanding of mental health issues among Delhi University students, the findings can inform evidence-based interventions tailored to the specific needs of this population. Additionally, the study can contribute to the broader discourse on mental health in educational settings, shedding light on the mental well-being. Furthermore, the research can serve as a catalyst for destigmatizing mental health discussions within the university community and fostering a supportive campus environment. By amplifying the voices of students and advocating for accessible mental health resources, the study aligns with efforts to promote holistic student well-being and academic success. With the help of this study we have come to know that most of the students have not been

diagnosed with a mental health disorder (e.g., anxiety, depression, bipolar disorder, etc) which appears to be contradictory to our hypothesis.

METHODOLOGY

Methodology in research refers to the systematic process or approach that a researcher follows to conduct their ell-being and academic success study. It outlines the steps and procedures used to gather data, analyse information, and draw conclusions. Here`s a breakdown of key components which are included in this research study:

- Research design: This involves outlining the overall plan or structure of the study. It includes decisions about the type of research (e.g., qualitative, quantitative, mixed methods), the research questions or hypotheses, and the overall approach to data collection and analysis. We have conducted interviews and the collection of statistical data by using both structured and unstructured questionnaires. So, our research design has employees both qualitative and quantitative data.
- Simple random sampling: Simple random sampling is a basic method of selecting a sample from a population where each member of the population has an equal chance of being selected and the selection of one member does not influence the selection of another. In our research we have chosen the youth population in Delhi university north campus at random and studies to get a desired result. In order to represent the large group of youths we choose the subjects (youth) randomly.
- Collection of primary data: Collecting primary data involves gathering firsthand information directly from the source for a specific research purpose. This process typically involves various methods of data collection like survey, interview etc, depending on the nature of the research and the type of information needed. So by collecting the primary data we tried to find out the concerns related to the issues of mental health illness among the youth.
- Data analysis: Data analysis is the process of interpreting data to uncover meaningful trends. It involves applying various statistical, mathematical, or computational techniques to extract valuable information from raw data.

Field: Delhi university , North campus

RESEARCH QUESTIONS:

- Have you ever been diagnosed with a mental health disorder(e.g., anxiety, depression, bipolar disorder, etc) ?
- Have you sought professional help for mental health concerns during our

time at Delhi university?

- How often do you experience symptoms of stress (e.g., nervousness, tension, irritability) related to your academic workload?
- Do you feel comfortable discussing mental health concerns with your peers or professors at Delhi university?
- Have you ever missed classes or academic deadlines due to mental health reasons?
- How would you rate the mental health support services provided by Delhi university?
- Are you aware of mental health resources available on campus (e.g., counselling services, support groups?
- What factors do you believe contribute to mental health issues among students at Delhi university?
- What are your coping mechanisms to deal with stress?
- In your opinion, what improvements could be made to support the mental health and well-being of students at Delhi university?

RESEARCH OBJECTIVES

Studying mental health illness among Delhi University north campus students can have multifaceted research objectives, aiming to understand the prevalence, causes, effects, and coping mechanisms related to mental health issues. Here are some research objectives:

1. To determine the prevalence and incidence rates of various mental health disorders among Delhi University students. This involves conducting surveys or assessments to gather data on the frequency of conditions such as anxiety, depression, stress, etc.
2. To Identify the risk factors that contribute to the development of mental health issues among students. This could include factors such as academic pressure, social isolation, financial stress, etc. Additionally, explore protective factors that may buffer against the development of mental health problems, such as social support networks, coping skills, and access to mental health resources.
3. To Investigate the impact of mental health disorders on academic performance and achievement among Delhi University students. This could involve analyzing academic records, GPA scores, dropout rates, and qualitative interviews to understand how mental health challenges affect students' ability to succeed academically.
4. To evaluate the effectiveness of existing mental health interventions and support services provided by Delhi University or external organizations

By addressing these research objectives, studies on mental health among Delhi University students can contribute to a better understanding of the challenges they face and inform the development of targeted interventions and support services to promote student well-being.

LIMITATIONS

Response Bias: Surveying online via Google Form may introduce response bias, as individuals who are more comfortable with technology or have stronger opinions may be more likely to participate, leading to skewed results.

Limited Generalizability: Findings from a single institution, such as Delhi University(North campus), may not be applicable to other universities or student populations with different cultural, socioeconomic, or institutional contexts. This limits the generalizability of the research findings.

Cross-Sectional Design: A cross-sectional study design, which captures data at a single point in time, may not capture the dynamic nature of mental well-being and coping mechanisms among students. Longitudinal studies would provide a more comprehensive understanding of how these factors change over time.

LITERATURE REVIEW

Mental wellbeing plays a significant role in the life of individuals. At the university level, with changing environment, more responsibilites a student can get affected not just physically but mentally too. Our research has also aimed at finding the factors that influence the mental wellbeing of college students. In today's time where the competition in every sector has increased rapidly and it has also affected the mental health of the college students in their academic sphere or on thoughts about their future, it becomes important to understand their coping mechanisms too along with the factors affecting mental health of students. Academic stress and peer pressure are one of the important factors influencing the mental well of being of the college students. Some other factors influencing mental health are consistent health issues due to pollution and other allied factors which eventually leads to mental health deterioration, caste politics, and the persistent struggle to "fit in", Uncertainty of employment, Peer Pressure, Rental conditions Many scholars have also studied and written about the same in their articles. Different coping mechanisms that students employ to enhance resilience and maintain mental well-being are such as, talking to family, friends; listening to music; doing yoga, gym, meditation; reading self-help books; journaling, etc.

RESEARCH COMPENDIUM

In the article titled, "Psychological wellbeing of first year college students, Namrata Punia and Dr. Renu Malaviya aims to examine the relationship between psychological wellbeing and academic performance among college students. They state that psychological wellbeing is a kind of subjective term as it has a different meaning for different individuals. And it is often based on the experience of individual (Campbell, Converse, & Rodgers, 1976). Many empirical research have been conducted on this research problem and the theories related to it have also been put forward in the academic sphere. They note Wellbeing is like an umbrella term for many constructs that help in accessing psychological functioning of individuals [Girum 2012]. They believe psychological wellbeing is a term which combines the prospect of feeling good and functioning effectively. **Ryff** (1989) defines well being as the optimal psychological functioning and experience. **Shek** (1992) defines psychological well-being as that 'state of a mentally healthy person who possesses a number of positive mental health qualities such as active adjustment to the environment and unity of personality' 'state of mentally healthy person who possesses a number of positive mental health qualities such as active adjustment to environmental and unity of personality. They used Demographic Questionnaire, the respondent provided the information regarding their gender, age, grade level, parental status, class, stream of subject and the current living place. It also gathered the information about the participants' college/ university, program of study, and student classification; Psychological Wellbeing Scale, to assess the psychological wellbeing of the respondents the researcher used the Ryff Psychological Wellbeing scale medium form which included 84 questions. The scale consists of the six areas of psychological wellbeing: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with others, Purpose in Life and Self-acceptance.

Their finding reveals that there is a difference in the psychological wellbeing among the first year and last year students of universities. In their findings they have come across the dimensions of psychological well being which includes factors of self-esteem, environmental mastery and self acceptance. First-generation status is linked with low self-acceptance and marginally low levels of personal growth, however there are also no differences among the other four psychological wellbeing dimensions. Several other 212 variables are significantly related to most or all dimensions of psychological wellbeing. Also

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dimensions for women psychological wellbeing are high except autonomy. Age is also a significant factor predicting a psychological well-being. For instance, Being at least 20 years old in the first year of college is negatively related to autonomy, environmental mastery, positive relations with others, and self-acceptance however there can be multiple reasons for doing so. the explanation to this can be specific to college student samples. For example, people who decide to enter college after taking at least a year off after high school are likely to have certain career-related reasons for doing so, which contributes to their higher levels of purpose in life.

Their study also shows that first generation students exhibit decrease in autonomy, personal growth, positive relations with others and self-acceptance. Thus, first- generation students face greater subjective difficulties while adjusting in college (Terenzini et al., 1994; Zwerling & London, 1992), as well as decline in psychological well-being during the first year of college. Within the framework proposed by Gurin and colleagues (Gurin, Dey, Hurtado, & Gurin, 2002), it is possible that students who have taken only one course are at some point in disequilibrium state, in which they try to reconcile with their previous attitudes and worldviews presented in their diversity course. However, by taking multiple courses, students are capable of dealing with these issues and engage with these new perspectives, which then makes contribution in improving well-being (Bowman, 2008).

They both have suggestions that colleges and universities should work toward providing meaningful relationships among all students. They note about the argument provided by Allport (1954) and many others that merely creating the opportunities for social interaction and engagement (e.g., through residence halls) is not sufficient for providing with meaningful relationships, particularly across racial/ethnic groups. Rather, it is crucial that students form quality relationships with one another irrespective of racial/ethnic group. Their findings suggest that programs about group dynamics and conflict meditation may be useful for improving students' interpersonal relationship skills and, their psychological well-being. The results of the study have shown, that majority of students have middle level of well-being; they also do not have depression or average self-evaluated academic performance. The results have also shown that the students, who have medium or high level of academic performance, they tend to have high index of well-being, purpose of life and personal growth on scale. Also, those students who use task oriented coping strategies, have high index of well-being, and personal growth on the scale.

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There has also been a report on academic stress and anxiety to be seen as the major factor influencing mental well being done by Dr. Daisy Sharma, Dr. Richa Sharma and Dr. Madhu Pruthi.

They states that college students are mostly exposed to certain amount of stress. These stressors may involve internal and external pressures by the environment to seek for and succeed, or to overcome economic difficulties, worries about futures, societal problems and opportunities. They also note that academic

Table 1. Showing Frequency Distributions Of Academic Stress and Anxiety Variables

VARIABLES	MEAN	STANDARD DEVIATION	SKEWNESS	KURTOSIS
Parental Pressure	29.2680	10.21533	.213	-.463
School Performance	19.7820	6.47444	-.085	-.705
School attendance	9.2300	4.78988	.717	.226
Romantic Relationships	13.5200	5.51420	.584	.241
Peer pressure	17.0000	6.28546	.430	-.300
Teacher Interaction	14.9840	5.54990	.411	-.235
Future Uncertainty	11.4580	4.68745	.949	.175
School Conflict	13.4080	5.70391	.580	.945
Financial Pressure	11.3500	4.78469	.797	.037
Emerging Adult Responsibility	8.5920	2.97106	.413	.857
ESSA	47.3460	11.35695	-.154	-.427
HAM-A	17.6160	7.84830	.378	.188
STAI-Y1	44.3280	12.42841	.099	-.525

| STAI-Y2 | 44.8537 | 10.04911 | -.361 | -.022 |

Graph 1 - Representing the mean scores of academic stress variables
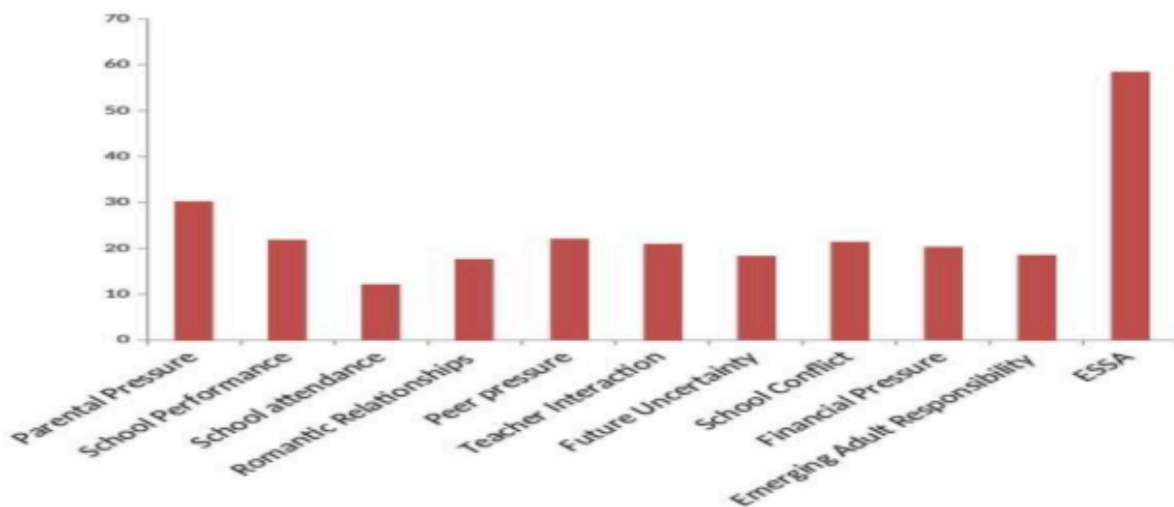
ESSA= total stress score

Graph 2 - Representing the mean scores of anxiety variables

RESEARCH COMPENDIUM

pressure and limited time for social and personal engagement can add to the normal stress of life and tend to have a negative effect on the individual. For many years, there had been rise in the level of stress and anxiety problems among college students. (Bishop, Bauer & Beeker, 1998; Kitzrow, 2003).

In their study the sample was gathered from the students of age group 17-22 years by the use of stratified random sampling technique. The control variables in their study were education and age. The sample size was of 500 students taken from 1st , 2nd and 3rd year graduation students. Five assessment tools were incorporated into the study, these include,

- Adolescent Stress Questionnaire (ASQ)
- Educational Stress Scale for Adolescents (ESSA)
- Hamilton Anxiety Rating Scale (HAM-A) State Trait Anxiety Inventory for adults (STAI)
- Unstructured Interview schedule.

Img.2 (2)

HAM-A= anxiety score,

STAI-Y1= trait anxiety,

STAI-Y2=state/situational anxiety

RESEARCH COMPENDIUM
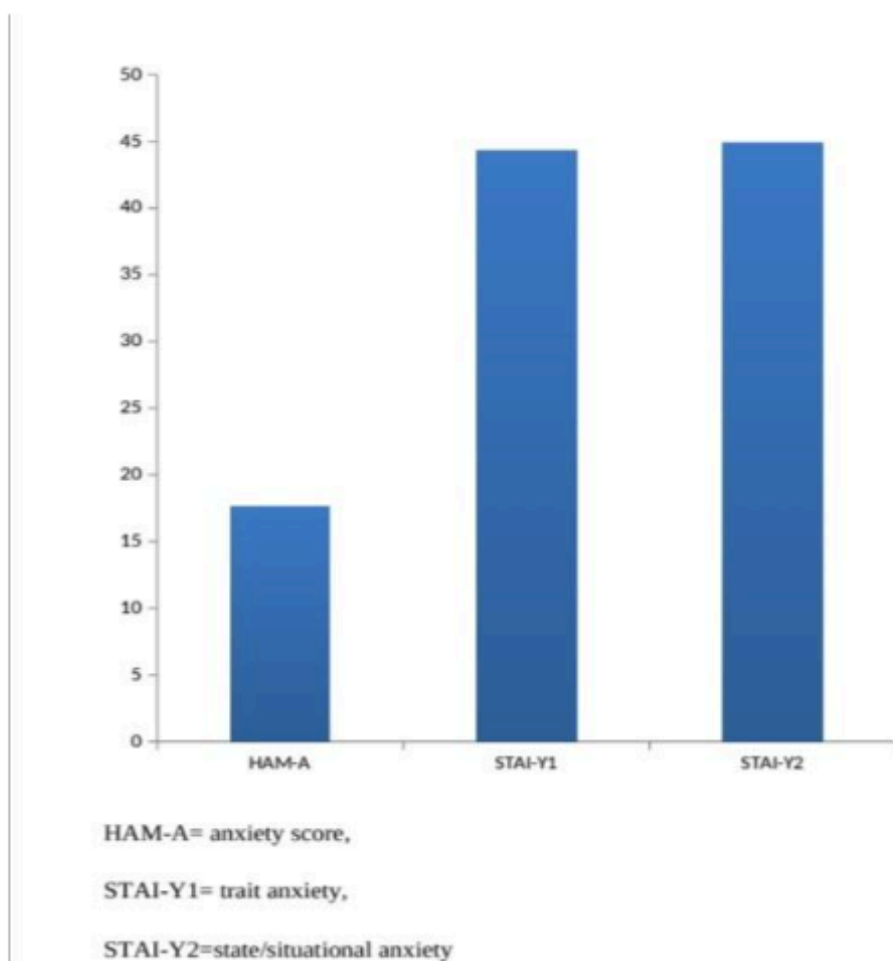
Table 2. Showing Correlations of Academic Stress and Variables

	Parental pressure	School performance	School attendance	Romantic relationships	Peer pressure	Teacher interaction	Future uncertainty	School conflict	Financial pressure	Emerging Adult Responsibility	ESSA	HAM	Stat y1	Stat y2
parental pressure	1	.507	.086	.273	.429	.366	.210	.310	.242	.172	.332	.344	.358	.323
school performance	.507	1	.234	.348	.432	.379	.204	.379	.270	.229	.451	.383	.422	.346
school attendance	.086	.234	1	.326	.324	.165	.374	.321	.333	.349	.227	.144	.073	.092
romantic relationships	.273	.348	.326	1	.433	.355	.247	.328	.345	.262	.330	.259	.210	.215
peer pressure	.429	.432	.324	.433	1	.442	.327	.404	.426	.278	.411	.371	.320	.247
teacher interaction	.366	.379	.165	.355	.442	1	.192	.397	.293	.247	.342	.330	.313	.253
future uncertainty	.210	.204	.374	.247	.327	.192	1	.295	.362	.290	.309	.075	.170	.084
school conflict	.310	.379	.321	.328	.404	.397	.295	1	.300	.297	.318	.135	.172	.049
financial pressure	.242	.270	.333	.345	.426	.293	.362	.300	1	.314	.298	.210	.106	.179
emerging adult responsibility	.172	.229	.349	.262	.278	.247	.290	.297	.314	1	.205	.236	.086	.043
ESSA	.332	.451	.227	.330	.411	.342	.309	.318	.298	.205	1	.407	.368	.434
HAM-A	.344	.383	.144	.259	.371	.330	.075	.135	.210	.236	.407	1	.324	.364
STAI-Y1	.358	.422	.073	.210	.320	.313	.170	.172	.106	.086	.368	.324	1	.532
STAI-Y2	.323	.346	.092	.215	.247	.253	.084	.049	.179	.043	.434	.364	.532	1

**= Correlation is significant at the 0.01 level (2-tailed).
*= Correlation is significant at the 0.05 level (2-tailed).

Through their analysis based in gathered data we can observe that academic stress variables include the parental pressure, peer pressure and teacher interaction, the mean scores analysis of situational anxiety seems higher than trait anxiety which reveals that students tend to have more anxiety during the academic pressure than their routine life The factor analysis also exposed the two factors which shows the interconnection between academic stress and anxiety variables. First factor involves peer pressure: incorporates parental pressure, School performance, school attendance, romantic relationships, peer pressure, teacher/student interaction, future uncertainty, school conflicts, financial pressures, emerging adult responsibilities, overall stress. Second major factor is situational anxiety. They also included about the study done by Schwartz, David; Gorman, Andrea Hopmeyer; Nakamoto, Jonathan; McKay, Tara (2006), where it was observed that for adolescent individuals, increment in

Table 3. Showing Factor Analysis of Academic Stress and Anxiety Variables

Component Matrix

Variables	Components	
	1	2
Parental Pressure	.622	-.254
School Performance	.704	-.205

School attendance	.468	.512
Romantic Relationships	.606	.173
Peer pressure	.733	.092
Teacher Interaction	.633	-.052
Future Uncertainty	.484	.419
School Conflict	.577	.319
Financial Pressure	.564	.353
Emerging Adult Responsibility	.464	.422
ESSA	.677	-.173
HAM-A	.565	-.319
STAI-Y1	.546	-.511
STAI-Y2	.505	-.560

popularity was associated with increment in unexplained absences and also decrease in grade point average. With this, it can be stated that increase in peer pressure leads to increase in academic absences which eventually leads to stress during exam time. Another study which they noted about was done by Mirsa, Ranjita and Mckean (2000) on academic stress among the college students and its relation to anxiety and time management. Their study has helped us in knowing that time management behaviour had a great degree of effect on academic stress. Another thing which they found in their study was that anxiety, time management and leisure satisfaction are the predictors of academic stress in multivariate analysis.

From the above literature review, it can be understood that the factors influencing mental well being among the college students in our study and in other resources are similar. However, there has not been much studies conducted on the mental well being among students of Delhi University (north

campus), so there is also a need for such more studies to be conducted within the concerned area of field.

Endnotes:-

1. Sharma, D., Sharma, R., Pruthi, M. (2015)
2. Sharma, D., Sharma, R., Pruthi, M. (2015)
3. Sharma, D., Sharma, R., Pruthi, M. (2015)

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ANALYSIS

From our analysis of the data procured through the online survey conducted in order to explore the factors which influence the mental well-being among students at the University of Delhi's North Campus and to study the various coping strategies they adapt for better resilience, we culled out some of the major variables contributing to the same.

1.)Academic workload: one of the most frequently occurring factor which is contributing to the mental health issues among students is the increased academic workload. An increased academic workload has lead to an accelerated altercation in the amount of time which

2.) Students earlier used to spend on recreational activities in order to rejuvenate themselves. An illustrated representation of the same has been attached below:

3.) Peer Pressure: second most frequently occurring factor in the list is the unmanageable peer pressure among students. This peer pressure has lead to an altercation in the individual student behaviour towards their academic front and various life aspects in general. An illustrated representation of the same has been attached below:

Findings:-

Q. Have you ever been diagnosed with mental health disorder?
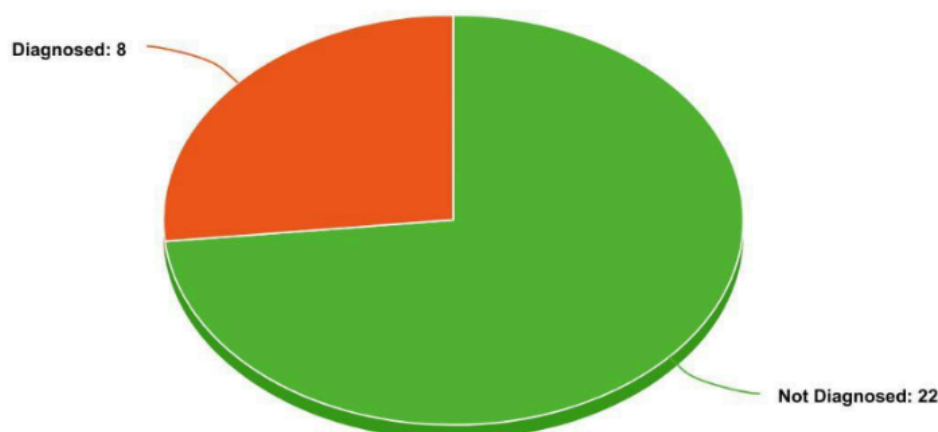
Q. How often do you experience symptoms of stress?
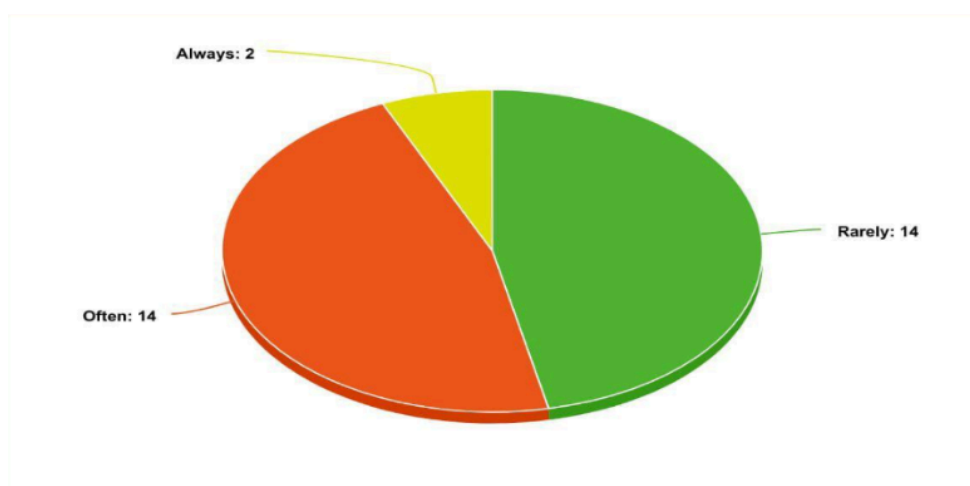
RESEARCH COMPENDIUM

Q. Do you feel comfortable discussing mental health concerns with your peers or professors at Delhi university?

No: 9

Sometimes: 15

Yes: 6

Q. Have you ever missed classes or academic deadlines due to mental health reasons?

Yes: 7

No: 23

Q. Are you aware of mental health resources available on campus (e.g., counselling services, support groups?

No: 14

Yes: 16

RESEARCH COMPENDIUM
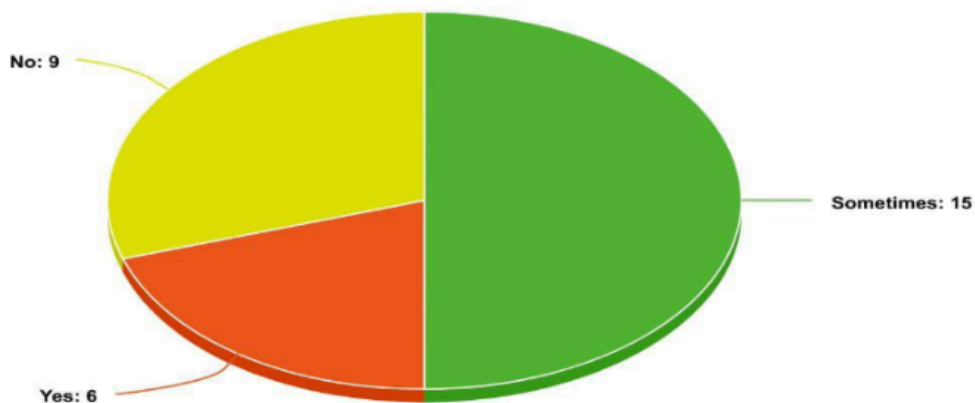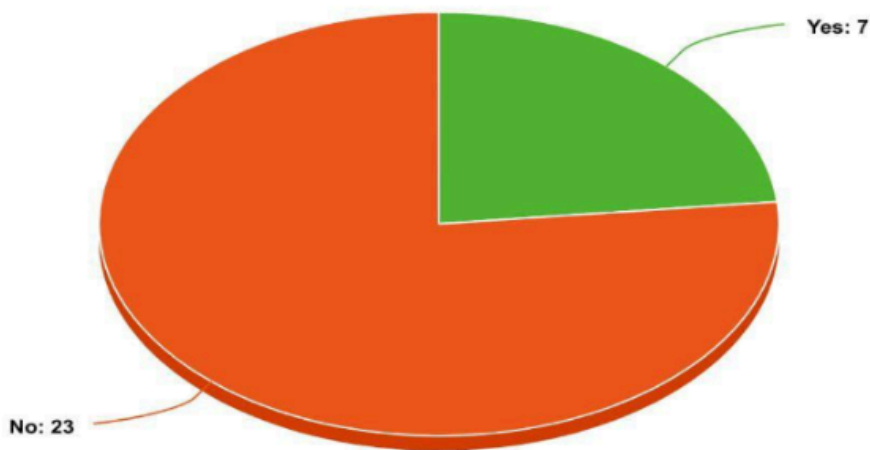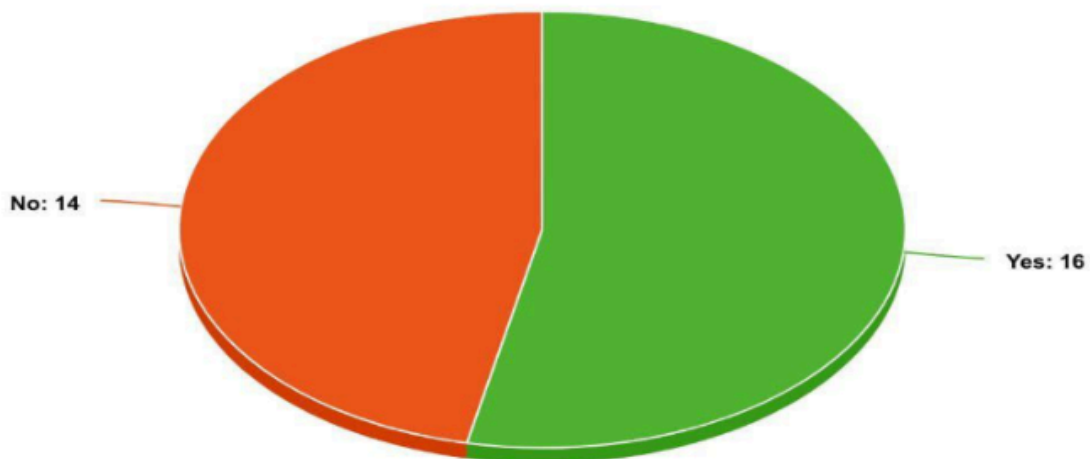
Coping mechanisms:-

In our research we also ask questions regarding the coping mechanism by students during stressful conditions. Some of the major responses that we get are as follows :

<u>Talking to Family Members and close friends</u>: according to respondents this can provide emotional support and a sense of connection. Family members often offer unconditional love and understanding, which can be comforting during stressful times. Similar to family members, close friends offer a support network where students can share their concerns and feelings. Friends can provide empathy, advice, and sometimes even practical solutions to problems.

<u>Practicing meditation</u> which according to them can help to manage stress, improve focus, and cultivate a sense of inner peace. By engaging in mindfulness techniques, they learn to observe their thoughts and emotions without judgment, which can be empowering during challenging situations. Listening to Music which has the power to influence mood and emotions. Listening to calming or uplifting music can act as a form of self-soothing, helping students relax and unwind after a demanding day of classes or studying.

 Improvement that can be made for mental well-being of students:-

According to the respondents some of the measures should be taken consideration that are as follows:

First, increasing awareness about the availability of counsellors is crucial. Many students might not know that counselling services exist or may feel hesitant to seek help. Implementing awareness campaigns through posters, social media, and orientation programs can help in this regard. Delhi University should consider increasing the number of counsellors to meet the growing demand for mental health support. Long waiting times for appointments can deter students from seeking help. By hiring more counsellors, the university can reduce waiting times and provide timely assistance to students in need.

Second, introducing extracurricular activities into the daily schedule of classes can help students manage stress and improve their overall well-being. These activities could include sports, arts and crafts, music, or mindfulness sessions. By providing opportunities for students to engage in activities they enjoy, the university can promote a healthy work-life balance.

Third, conducting Seminars that will focus on mental health awareness and coping strategies beneficial for students. These seminars can cover topics such as stress management, mindfulness, self-care, and seeking help when needed. By organizing regular seminars, the university can create a supportive environment

where students feel comfortable discussing mental health issues and accessing resources.

CONCLUSION

In conclusion, this research sheds light on the mental well-being of students at north campus of Delhi University, focusing on factors like academic and peer pressure. Through the analysis of coping mechanisms such as seeking support from family and friends or engaging in activities like listening to music etc, we've gained valuable insights into how students navigate challenges. Our use of simple random sampling and a combination of structured and unstructured questions has provided a comprehensive understanding of the subject. Moving forward, it's crucial for educational institutions to implement supportive measures based on these findings to promote the mental health and overall well-being of their students.

Impact of Delhi's Weather Conditions
on the Health of Migrant Students

Authors:

Adrija Majumdar, Adrija Sen, Anagha, Deepika and Devanshi

INTRODUCTION

Over more than 50% of undergraduate students of Delhi University are outstation residents. The extremities of weather conditions of the metropolis, the high rate of air pollution have adversely affected the physical health of students coming from diverse geographical locations across the country. The project aims to study the impact of the dynamic living environment of Delhi on migratory students and its various facets. The consequences of such unfavourable living conditions extend beyond physical well-being, influencing other aspects of life including finances, mental wellness and social life. The project aims to study how the contrast in temperature variations throughout the year and the air quality index between the places of origin and destination make it challenging for the students to adapt to new surroundings and how it has impacted their physical wellbeing having a profound influence in their everyday life.

RATIONALE

The vibrant academic and extracurricular environment of Delhi University has attracted tens of thousands of students every year from across the globe promising all-round personality development and raising hope for better career opportunities. However, such aspirational opportunities come at a cost. The extreme weather conditions and high rate of air pollution often become obstacles for those who choose to migrate to Delhi for higher education. One needs to understand this problem through a sociological lens to look at the larger structural issue. The availability of quality academic opportunities needs to be coupled with adequate standards of healthy living. This standard of living is

challenged by physical health impediments faced by the students which have also adversely affected their mental wellbeing.

STATEMENT OF THE PROBLEM

Delhi's environmental conditions, including air quality, water pollution, and extreme weather, are increasingly associated with health issues. Migrant students who are a significant demographic in Delhi, are exposed to these environmental conditions, which could potentially affect their health. There is a lack of comprehensive research on the impact of Delhi's environmental conditions on the health of migrant students. This knowledge gap hinders the formulation of effective strategies and policies to overcome these health challenges faced by students. The research aims to fill this gap by investigating the impact of Delhi's environmental conditions on the health of migrant students.

RESEARCH FRAMEWORK

This section represents the methods used for data collection through the sampling, questionnaires, interviews. While the main objective of this research was the study of the **"Impact of Delhi's Weather Conditions on the Health of Migrant Students".** The sample size ranged from 50-60. Although fieldwork was planned to be in the afternoon hours during the weekdays with the peak times as coffee breaks and lunch breaks in the minds, various barriers distress could still not be avoided. The schedule was select this time in order to attract the maximum number of participants and ensure higher the rate of response. Convenient sampling was the sampling employed for the selection of data. Interview and survey method was employed as the vital approach. The demographic profile of the participants spanned from adolescents who are nearing adulthood to college-going adults belonging to the age group of twenty to mid twenty-five and who are the residents of University Enclave, North Campus area of Delhi, India and the same was the field of study. This population range was selected in a way to understand the impact of the pollution of the Delhi environment on the health of the broad section of students.

LITERATURE REVIEW

- According to Bhargav Krishna, over the last twenty years, Delhi's environmental has been mostly negatively impacted by impoverished migrants' numbers. Consequently, these problems have emerged -air pollution, water shortage, garbage compaction cum soil depletion and urbanization. When the air of Delhi is full of pollution, it gets to result in the incidence of respiratory ailments; Moreover, the amount of solid waste is

being amassed day by day because of the lifestyles of high consumption. Urban sprawl inflicts out-migration has increasingly affected the urban environment, manifesting in congested urban places and lack of services and amenities.

- The note points to several of the ways to control the environmental issues stemming from the ever increasing populations. By way of boosting jobs and quality education in native places of migrants, it can either reduce the pressure of population on, and maybe, the resources of Delhi which makes them unnecessary to move. Besides, regulating land use for keeping urban sprawl in check and protecting hinterland. Moreover, environment friendly methods like adopting electric vehicles, employing latest technologies for waste management and recycling as well as the use of renewable sources of energy will curb the rate at which the environmental resources are degraded. Lastly, we need to spread the word about sustainability and environmental conservation as a strategy to combat the destructive influence of migration in Delhi's context. These solutions, once implemented, can address adequately the factors leading environmental degradation, therefore making Delhi city have a more sustainable and a friendly urban environmental system.

- Air pollution as a matter of the fact has a huge impact on the premature mortality and morbidity in whole world, out of which the Delhi, India is one of the biggest example. Human contact with outdoor air pollution, especially PM2.5, is connected to an increase in the likelihood of premature death and a lot of health conditions including cardiovascular diseases, respiratory illnesses, premature births etc., birth defects, and a neurocognitive decision-making decline. Delhi is known for sky-high pollution levels which, more often than not, surpass WHO guidelines and Indian NAAQS; thus, the over 670,000 premature deaths per year that are caused by pollution in India. Research in Delhi has revealed connections between PM2.5 and daily non-accidental mortality. The older and male groups are more negatively affected by the harmful context. Chronic exposure of air pollution in Delhi not only are similar but is also associated direct to heart and lung diseases. Policymakers in Delhi, therefore, must reform the regulations, establish efficient communication methods and base their decision-making process on the evidence. The results data on air pollution in Delhi hold key importance as air quality regulations may be harmonised around them, exposure levels may be reduced, and

preventable deaths may be avoided. The information about epidemiology is important which is taken into effect for the policymakers, the media houses and the public so that they may build their trust in the moral and ethically sound air rights provision in the polluted cities that are similar to the city of Delhi. However, the initial generation of regional evidence to clarify the short-term effects of PM2.5 exposures is very important for guiding epidemiological evidenced-based policy decisions as well as filling-gaps in the epidemiological research.

- The research paper "Student Migration from North-East India: " by Avijit Mistri and Sudarshan Sing Sardar explores the Aspect of, Pattern, and Challenges" The study indicates that there is a considerable decrease in dietary diversity among students who move to Delhi University in comparison to those who had migrated to the university in the past. People are averagely having a higher IDDS (4.84 before migration to 4.47 after migration). The study also which has been different among different regions of the North Campus is to a point that brings change in dietary diversity. Students' families and their homes migrate to urban areas hence they eat food stuffs only in the form of nuts, dry fruits, white roots and tubers as well as fresh fruits the weekly intakes are also reduced. On the other hand, this drives the rise in intake of fast foods that is a sign of consuming less nutritious diets. The length of the time migrants have been staying abroad affects to some extent the degree of food trade-offs, and students who have been longer migrants show less adaptations. Poverty, gender inequality, and other social risk factors contribute unequally to changes in students' nutrition habits, warranting resourceful inclusive tactic for better nutrition management. The research outcomes point at the need of knowing the effect of migration on eating habits of students and theoretically put together some ideas to encourage healthy eating in that group of students explores the trend of student migration in India as part of larger body of literature on this issue. India is a continent which possesses possibility to be the second source country for outbound students, except China, while there is a lot of research work to be done on internal student migration within the country. India is among the largest countries in the world with its system of education up to the university level, which has more than 1027 universities and over 42 thousand colleges. While immense internal student migration in India is of a large extent in natal, the research in the field remains at the initial stage. The review study

will highlight the education-quality factor as a predictor for student mobility across different social classes. In particular, the higher social class students have more options in institutions and destinations. This contribution of an effective education system in the brighter creation of the society that not only encourage social well-being but economic development is also emphasized. The challenges involved in interstate movement of students within the country include restricted entry to the desired institution or course, and many such factors as unemployment percentage and the state of the economy, that affect the student migration patterns. The literature proposes that improving such quality of education and creating occasions within the North-East zone can lead to a limited number of challenges in the students' migration.

- The study indicates that there is a considerable decrease in dietary diversity among students who move to Delhi University in comparison to those who had migrated to the university in the past. People are averagely having a higher IDDS (4.84 before migration to 4.47 after migration). The study also which has been different among different regions of the North Campus is to a point that brings change in dietary diversity. Students' families and their homes migrate to urban areas hence they eat food stuffs only in the form of nuts, dry fruits, white roots and tubers as well as fresh fruits the weekly intakes are also reduced. On the other hand, this drives the rise in intake of fast foods that is a sign of consuming less nutritious diets. The length of the time migrants have been staying abroad affects to some extent the degree of food trade-offs, and students who have been longer migrants show less adaptations. Poverty, gender inequality, and other social risk factors contribute unequally to changes in students' nutrition habits, warranting resourceful inclusive tactic for better nutrition management. The research outcomes point at the need of knowing the effect of migration on eating habits of students and theoretically put together some ideas to encourage healthy eating in that group of students.

FINDINGS
QUESTIONAIRE

- Total Number of Responses- 64
- The majority of the respondents have been residing in Delhi for **1-3 years**. A significant number have been residing for **less than 1 year**, and a smaller group has been residing for **over 3 years**.

RESEARCH COMPENDIUM

- North India: There are respondents from states like Himachal Pradesh, Punjab, Haryana, Uttarakhand, and Uttar Pradesh. Cities include Bhiwani, Sonipat, Hisar, Rohtak, and Lucknow among others.
- **East India**: Respondents hail from states like West Bengal, Bihar, Jharkhand, and Tripura. Cities include Kolkata, Bokaro, Patna, and Dhanbad.
- **South India**: There are respondents from Kerala, Tamil Nadu, and Telangana. Cities include Chennai and Navi Mumbai.
- **West India**: Respondents are from Rajasthan and Maharashtra. Cities include Bhilwara, Sawai Madhopur, Jaisalmer, Kota, and Nagpur.
- **Central India**: Respondents are from Madhya Pradesh with cities like Gwalior.
- **North-East India**: There are respondents from Manipur, Assam, and Sikkim. Cities include Imphal and Guwahati. This diverse range of hometowns can provide a rich perspective on the impact of Delhi's environmental conditions on migrant students from different parts of India.

Q. How would you rate the air quality in Delhi compared to your hometown?

- a) Much better in Delhi
- b) Slightly better in Delhi
- c) Similar in both places
- d) Slightly worse in Delhi
- e) Much worse in Delhi
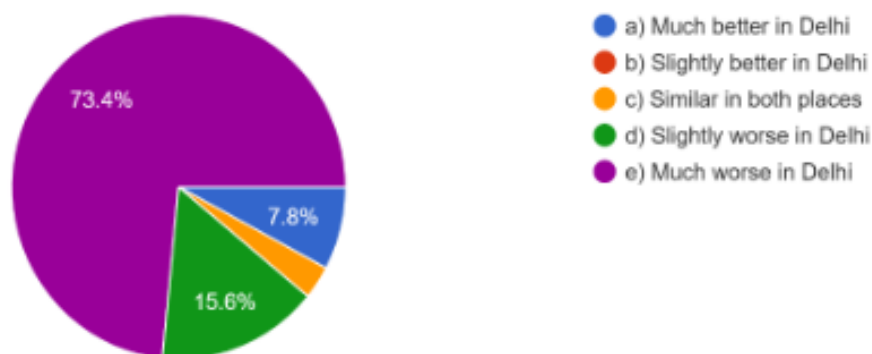
This indicates that the majority of the respondents perceive the air quality in Delhi to be much worse than in their hometown. A smaller group finds it slightly worse, and very few respondents find the air quality similar or much better in Delhi compared to their hometown.

Q. What kind of accommodation do you occupy in Delhi?
   a) College/University Hostel: 11 responses
   b) PG: 27 responses
   c) Flat: 14 responses
   d) Others: 3 responses

Q. What facilities do you have to mitigate the extreme weather conditions?
- **a) Air conditioner**: 21 responses
- **c) Cooler**: 3 responses
- **d) Fan only**: 14 responses
- **e) All of the above**: 17 responses

RESEARCH COMPENDIUM

Q. Are you finding any physical health challenges with respect to Delhi's extreme climate and air pollution?
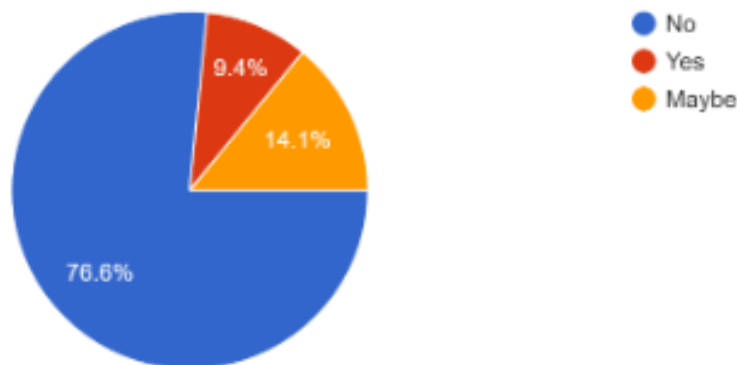
From this data, we can infer that most of the respondents live in PG accommodations and face health challenges due to Delhi's extreme climate and air pollution sometimes. The majority have either all the facilities (air conditioner, cooler, and fan) or just a fan to mitigate the extreme weather conditions. However, further analysis would be needed to draw more detailed conclusions. For instance, it would be interesting to see how these factors correlate with each other and with other variables such as duration of stay in Delhi, hometown, or satisfaction with living conditions.

Based on the responses provided, it appears that the majority of individuals did not have a past record, diagnosis, or symptoms of similar health challenges before migration. Here's a simple breakdown:

- No: This was the most common response, indicating that most individuals did not experience similar health challenges before migration.
- Yes: A smaller number of individuals indicated that they did have similar health challenges before migration.
- Maybe: Some individuals were unsure or could not definitively say whether they had similar health challenges before migration.

This data could suggest that for most of these individuals, their health challenges may have begun post-migration. However, further research would be needed to confirm this and explore the potential factors involved. It's also important to consider the health care access and diagnostic facilities available to these individuals' pre-migration, as this could influence their awareness and reporting of health challenges.

Q. What has been the impact of migration on the existing health challenge?

The impact of migration on existing health challenges appears to be as follows:

• Worsened: Migration has led to a deterioration in health challenges.
• Improved: In some cases, migration has had a positive impact on health challenges.
• Unchanged: For certain health issues, migration hasn't significantly altered the situation.
It's essential to recognize that the impact of migration on health challenges can vary widely depending on specific circumstances, demographics, and available resources.
Q. How often do you experience symptoms such as coughing, wheezing, or shortness of breath?
 Based on the responses regarding the symptoms like coughing, wheezing, or shortness of breath are as follows:

• Worsened: Migration has led to a deterioration in health challenges.
• Improved: In some cases, migration has had a positive impact on health challenges.
• Unchanged: For certain health issues, migration hasn't significantly altered the situation.
It's essential to recognize that the impact of migration on health challenges can vary widely depending on specific circumstances, demographics, and available resources.
Q. How often do you experience symptoms such as coughing, wheezing, or shortness of breath?
 Based on the responses regarding the symptoms like coughing, wheezing, or shortness of breath are as follows:

RESEARCH COMPENDIUM

- **Frequently**: Some individuals experience these symptoms often.
- **Sometimes**: For others, these symptoms occur occasionally.
- **Rarely**: A few people rarely encounter such symptoms.

Q. Based on the responses to the question "Have you noticed any skin irritation or allergies aggravated by air pollution/weather conditions?",
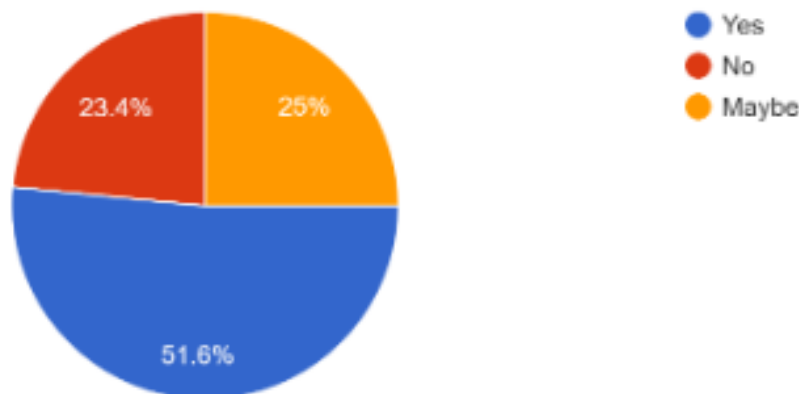
- **Yes**: The majority of respondents have noticed skin irritation or allergies aggravated by air pollution or weather conditions. This indicates a significant impact of environmental factors on skin health among the respondents.
- **Maybe**: A considerable number of respondents are unsure about the impact of air pollution or weather conditions on their skin health. This could be due to a lack of awareness or the presence of other factors causing skin irritation or allergies.
- **No**: A smaller group of respondents have not noticed any skin irritation or allergies aggravated by air pollution or weather conditions. This could be due to individual differences in skin sensitivity or the effectiveness of preventive measures they might be taking.

This data suggests that air pollution and weather conditions in the area could be a significant concern for skin health. It highlights the need for further investigation and potential interventions to mitigate these environmental impacts. However, individual responses can vary widely, and it's important to consider other potential factors contributing to skin health issues.

Q. The responses to regarding fatigue or lack of energy due to air pollution or weather conditions:

- **Yes**: Many individuals experience fatigue or reduced energy levels due to air pollution or specific weather conditions.
- **Maybe**: Some people feel uncertain or occasionally experience these effects.
- **No**: A few individuals do not feel significantly impacted by air pollution or weather conditions.

Q. The responses to regarding family history of same or similar medical issues:
- No: Most respondents do not have a family history of these medical issues.
- Yes: A few individuals have a family history of such conditions.
- Maybe: Some people are uncertain about their family medical history.

Q. The precautions individuals take to protect themselves from adverse impacts related to air pollution and weather conditions:

- a) Use of pollution masks
- b) Limit outdoor activities on high pollution days
- c) Regular exercise to improve lung health
- d) All of the above
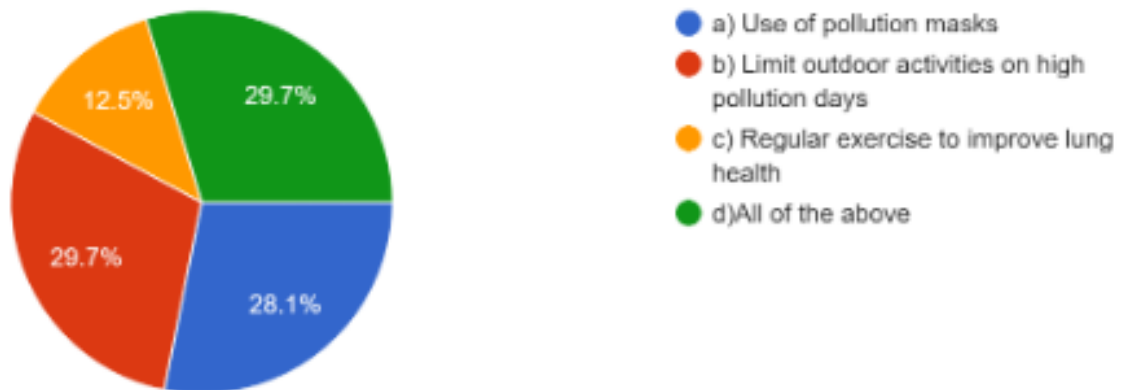
- Use of Pollution Masks: Many people wear pollution masks to filter out harmful particles from the air.
- Limiting Outdoor Activities on High Pollution Days: Some individuals reduce their time spent outdoors when pollution levels are elevated.
- Regular Exercise to Improve Lung Health: Engaging in physical activity can help maintain healthy lungs.
- Q. The steps individuals have taken to overcome health challenges related to air pollution and other factors:
- Professional Treatment: Some people seek professional medical help to address their health issues.
- Self-Treatment: Others take matters into their own hands and manage their health independently.
- Over-the-Counter (OTC) Medicines: A few individuals rely on over-the-counter medications for relief.
- Limiting Outdoor Activities on High Pollution Days: Many people choose to reduce outdoor exposure during times of high pollution.

RESEARCH COMPENDIUM

Q. The monthly expenditure incurred on medical care after migrating to Delhi based on the provided responses:
- Below 500: Several individuals spend less than 500 rupees on medical care.
- 500-2000: Many people allocate a budget between 500 and 2000 rupees for medical expenses.
- Above 2000: Some individuals have higher medical costs, exceeding 2000 rupees.

Also, healthcare expenses can vary significantly based on individual needs, health conditions, and access to medical services. It's essential to prioritize health and allocate resources accordingly.

Q. The impact of health issues related to air pollution and weather conditions on academic activities:
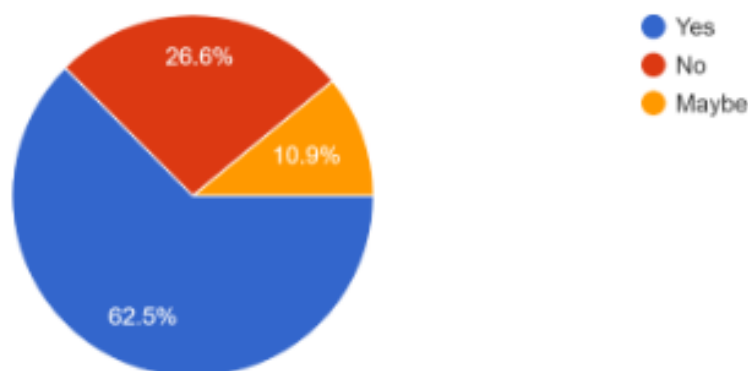
- Yes: Many individuals have missed classes or academic activities due to health issues linked to air pollution or weather conditions.
- No: Some people have not faced such disruptions.
- Maybe: A few individuals are uncertain or occasionally experience these challenges.

Balancing health and academics can be challenging, especially in environments with pollution. It's essential to prioritize well-being and seek support when needed.

Q. The impact of physical health challenges related to pollution and weather on mental well-being varies among individuals. Here are some observations based on the responses:
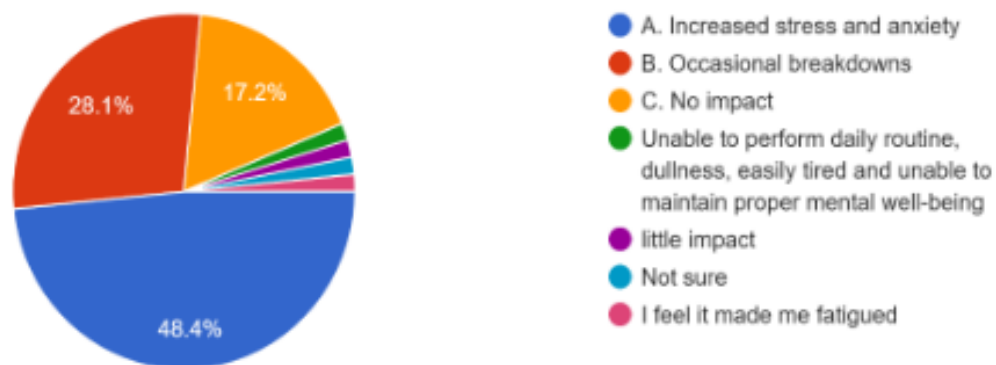
- Increased Stress and Anxiety: Many people experience heightened stress and anxiety due to these health challenges.
- Occasional Breakdowns: Some individuals occasionally face emotional breakdowns.
- No Impact: Others report that their mental well-being remains unaffected.
- Fatigue: A few respondents feel fatigued, which can also impact mental health.

INTERVIEW

Interviewee 1 - **KHUSHBOO:**

The respondent comes from Saharsa, Bihar and has noticed a markable difference in the air quality of home as compared to Delhi. Her pre-existent sinus problem has increased post-migration, especially during morning hours and seasons like Diwali. No other specific physical challenge pertaining to health has been encountered. Summers are adjustable due to the use of AC and rickshaws for commuting to and from college. The respondent consumes lukewarm water, lime water, wears face masks, maintains personal hygiene to combat pollution and weather challenges. Winters have been more problematic as compared to Patna due to increased frequency of cold, cough and headache. There's no family history of sinus problems. Use of OTC meds and self-treatment. Expenses on meds is below 500 on a monthly basis. Health issues like cold and cough as well as poor AQI and extreme heat also deterred academic engagement due to absence from classes. This also impacts the mental wellbeing of the respondent resulting in stress and guilt feeling due to missing tests and classes.

Interviewee 2 - AKSHAYA:

Pollution at home is less as compared to Delhi. There's a lot of smoke, smog in air, especially during Diwali season in Delhi. Coughing, wheezing and burning sensation is felt in eyes during Diwali. Stay at PG or go home during Diwali.

- Increased Stress and Anxiety: Many people experience heightened stress and anxiety due to these health challenges.
- Occasional Breakdowns: Some individuals occasionally face emotional breakdowns.
- No Impact: Others report that their mental well-being remains unaffected.
- Fatigue: A few respondents feel fatigued, which can also impact mental health.

INTERVIEWS

Interviewee 1 - KHUSHBOO**:**

The respondent comes from Saharsa, Bihar and has noticed a markable difference in the air quality of home as compared to Delhi. Her pre-existent sinus problem has increased post-migration, especially during morning hours and seasons like Diwali. No other specific physical challenge pertaining to health has been encountered. Summers are adjustable due to the use of AC and rickshaws for commuting to and from college. The respondent consumes lukewarm water, lime water, wears face masks, maintains personal hygiene to combat pollution and weather challenges. Winters have been more problematic as compared to Patna due to increased frequency of cold, cough and headache. There's no family history of sinus problems. Use of OTC meds and self-treatment. Expenses on meds is below 500 on a monthly basis. Health issues like cold and cough as well as poor AQI and extreme heat also deterred academic engagement due to absence from classes. This also impacts the mental wellbeing of the respondent resulting in stress and guilt feeling due to missing tests and classes.

Interviewee 2 - AKSHAYA:

Pollution at home is less as compared to Delhi. There's a lot of smoke, smog in air, especially during Diwali season in Delhi. Coughing, wheezing and burning sensation is felt in eyes during Diwali. Stay at PG or go home during Diwali. Stay at PG or go home during Diwali. The overall weather is similar at home and therefore the cold conditions don't feel new and challenging. Skipped college sometimes in winter, not much. It's bearable and so the respondent avoids the use of heater. More boredom during Summers, restricted to room. For extreme summer, AC helps. Its not possible to walk to PG due to loo, uses rickshaw. Mask, hand washing, hydrate yourself, hygiene issues. Skin allergies and dry patches appear in summer. Allergies were visible at home as well but less frequently. During changing seasons, it appears differently on body.

Father also has sensitive skin. Consulted doctor for skin. Started skincare regime in Delhi. Spending around 1000 on skin.

<div align="center">**RESEARCH COMPENDIUM**</div>

Interviewee 3- URVI:
Very different air quality in general from Dehradun, but lived in forested area in Delhi so didn't feel the pollution, only during Diwali it escalates. Season change: increased sneezing, wheezing. Gets sick during winters, cold, cough, eye and skin allergies. Shortness of breath during winter due to pollution. Makes fatigued and tiring. All these issues started here in Delhi. No family history of similar health problems. The respondent doesn't take much precautions because, "How are we even helping ourselves?" Unfortunately, all efforts seem futile. The respondent takes OTC meds for cough, cold which don't cost her much due to her father's military affiliation. Cost: Below 500.
Academic impact due to viral fever only. Seasonal depression experienced because of lack of sunlight during winters which makes it hard to carry out the daily chores.

Interviewee 4- YUKTI:
More extreme summer in Nagpur, less pollution, greenery around. More impacted during summer, loo, etc., less impact in winter. The use of AC helps in summer. Headache due to heat regularly. Fatigue during summer, ORS required, mask when pollution increases. No other physical issues. Takes OTC medicines. Cost ranges from 500-1000 when sick. Academic impact during summers due to low energy. Pollution an added factor for mental stress along with academic burden.

Interviewee 5 - SRAVANA:
Awesome air in Kerala, very suffocating in Delhi. Skin Peeling and bleeding during winter. Fever, breathing difficulties, skin dryness all caused due to pollution. Only 2 months of dryness in weather in Kerala. Issues of nasal congestion developed in Delhi, generation of phelgam always. Feel fatigued and tired. Body has still not adjusted, don't sweat here much unlike Kerela, so body doesn't cool faster, has caught loo during summer. Use of mask and skincare products for protection. Contacts home doctor for on call consultation, doesn't visit medico here. Cost: Under 500. Missed classes a lot due to feeling of fatigue, low productivity and the unsuitable climatic conditions and tiredness create a sense of sadness for no specific reason (mental impact).

Interviewee 6 -RAGHAVI:
Worst air pollution in Delhi, as compared to Nagpur. Has led to eye irritation, hair quality deterioration, which were not experienced before coming to Delhi. Throat congestion was not so frequent in Nagpur as felt here. Coughing, sneezing has doubled. No family history of such repeated illnesses. Use of mask, exercise, breathing exercises are the precautions. Seeks professional treatment when need

be as well as consumes OTC meds. Cost:500-1000. The respondent has missed classes frequently due to extreme temperatures, pollution and low productivity. It creates an impact on mental health as there is no care giver away from home as well as poor food quality further deteriorates the health.

Interviewee 7 -ANISHA:

Anisha is from Murshidabad living in Delhi for 9months. She feels suffocating due to the air quality and the heart. In summers the air becomes too dry and due to which she caught the loo which caused loose motion. The sudden weather change causes fever. She has heat urticaria so this weather causes her problem. She has problems like eye gets swollen, body rashes. She has no family history of this health issues. She intakes curd, glucon d, fruit juices and electrolyte to prevent summer. Her period also got delayed and her monthly cost goes around 1000. Her academics was affected due to Diwali smog which made her irritated and had an adverse effect on her mind.

Interviewee 8 -AVANTIKA:

Avantika is from Stephen's staying in Delhi for 2.5years. as Chennai has no winter, the weather change has made her have skin breakouts and hair fall. But she managed building her immunity after sometime. She has anaemia and it enhanced due to the pollution. She feels exhausted due to the heart. There is a mental toll as there is lack o motivation to study. Mask used to wear earlier but now no as such benefit. She consults her home doctor for anaemia and hair fall. She does self-treatment. 500-100. Gloomy winter makes her demotivated.

Interviewee 9 -ARPITA:

Arpita has been living in Delhi for 2years. She is from Orissa and the aq is worse here as there is no pollution in Orissa. She has pp like skin issues, rashes, hair loss, congestion because of pollution. All the problems enhanced in Delhi. She feels often low on energy and no motivation to work. As precaution she travels back home, takes rickshaws and has coconut water. She consults her family doctor. It's above 2000! The monthly cost. Weather effects her academic part. mental health is affected due to no class and staying back in the room mentally weakens her.

Interviewee 10 – SAPARYA:

Saparya is from Kerala and living in Delhi for 2years. AQ not comparable to Delhi. Problems like breathing problems, skin issues like pimples due to bad quality water. She feels sleepy and tired all day long. Consults a home doc and above 500 monthly. She takes precautions like mask, sunscreen. Missed lot of classes in summer and feels when health is effected mental health is also affected.

Interviewee 11 - SHYAMBHAVI:
Shyambhavi is from Lucknow living in Delhi for 2years. In Lucknow it's at least breathable. She has problems like hair loss, Weight loss, period cycle is affected and everything enhanced here in Delhi. Cough cold have become frequent. She used air purifier, mask and allergy medicines. Consults a family doctor and cost is below 500. Feels low on energy, rarely misses classes. The full winters impacts her mood as there is no sun.

Interviewee 12 – KOYEL:
Koyel is from Kota Rajasthan, living here since 9months. Less pollution there as she feels Delhi is more industrialised. There is hair fall, whitening of hair. There is breathing issue during the winters. She only uses mask and there is hardly any extra effort by her. There is problem in giving exams during winters, she feels pollution is high, Oxygen levels becomes less so stress gets higher

Interviewee 13 – JHEELINA:
Jheelina is from Imphal, she has been residing in Delhi for the past two years. Unfortunately, she has been experiencing significant discomfort due to the harsh weather conditions prevalent in the region. The extreme climate has led to persistent skin irritation, prompting her to seek assistance from a dermatologist. Her annual expenses on medication to manage these health issues amount to approximately 3000 rupees. Moreover, she has encountered water-related skin allergies and respiratory difficulties, including coughing due to air and dust pollution. These health concerns have not only affected her physical well-being but have also had a noticeable impact on her academic pursuits. Jheelina has been compelled to miss classes, which has, in turn, hindered her academic progress.

Interviewee 14 – JASNOOR:
Jasnoor, a resident of Punjab who has been residing in Kirori Mal hostel for the past two years. He has been experiencing significant health issues lately, particularly related to food poisoning symptoms. These symptoms have been persistent, necessitating regular visits to the clinic for medical assistance. Additionally, he has encountered skin-related irritation and major rashes, especially during weather changes.

Interviewee 15 – SNEHA:
Sneha, a student at Miranda House, originally from Aligarh, Uttar Pradesh, has been residing in Delhi for the past eight months. Her experience highlights the profound impact of air pollution and extreme weather conditions on her health and well-being. She frequently experiences fatigue and a lack of energy, directly

attributed to the adverse air quality and harsh climate of Delhi. Headaches have become more frequent for her compared to her hometown, a consequence of the city's polluted air. Sneha has adapted her behaviour to cope with these conditions, prioritizing hydration and using heating appliances to mitigate the effects of extreme weather. Living conditions in her PG accommodation exacerbate these challenges. While amenities like fans and air conditioners provide relief during the scorching summers, the absence of heaters during chilly winters leads to coughing and shortness of breath.

Sneha has noticed the impact of water quality in Delhi on her skin and hair, further adding to her health concerns. These issues have not only affected her physical well-being but have also had a noticeable impact on her academic pursuits. She has had to miss several classes and academic activities due to health-related reasons, emphasizing her prioritization of health and well-being above all else, even if it means temporarily stepping back from her academic commitments.

Interviewee 16 – PRIYA:

Priya is from Bhiwani, Haryana, has resided in the Undergraduate Hostel for Girls in Delhi for the past 2.5 years. However, her health has been significantly impacted by Delhi's harsh weather conditions and dietary changes, leading to severe stomach issues. Despite ongoing treatment for the past 10 months, she continues to suffer from skin irritation caused by dust and polluted water. Priya has lost 6-7 kgs and struggles to maintain her daily college routine. As summer approaches, the worsening weather conditions are causing her to skip classes due to discomfort.

ANALYSIS

The research aimed to study the impact of Delhi's extreme weather conditions and air pollution on the physical health of the migrant students in Delhi University's North Campus.

The challenges faced by migrants in different seasons and post migration conditions are multifaceted, like during summers, the lack of energy, high traveling expenses due to harsh weather conditions, and the absence of air conditioning facilities in hostels usually impacts student's comfort and wellbeing. Similarly, winters bring their own set of issues, including harsh weather conditions leading to major skin problems such as dry patches. Also, during Diwali, students often experience major throat congestion due to the worst Air Quality Index, leading them to wear face masks throughout the days.

Post migration, student migrants face adaptation issues while adjusting or shifting in new regions. They also face differences in AQI compared to their hometowns and have fewer assistance facilities or policies from the State for migrants.

Water related issues, like dirty water impacts the health of migrants. Accessibility to public health centres is limited, and students often prefer Home Consultation or Private Hospitals or health centres, leading to extra expenditure on health checkups, which is difficult for students to manage. Common symptoms faced by student migrants during weather changes, especially post migration, like coughing, breathing difficulties, wheezing, and throat congestion.

These health issues not only affect their physical wellbeing but also impact their academic performance and mental wellbeing. Due to reduced concentration and energy levels, students find it challenging to attend classes and prepare for semester final exams, which are often scheduled during harsh winter or summer months like Dec or May and June. This creates additional stress and difficulty for students in managing their academics.

LIMITATIONS

However, the project has some limitations which are as follows:
1) majority of the respondents for the research are women students due to limited accessibility to respondents of other genders. Therefore, the analysis of the research might be possibly biased towards women's health challenges.
2) Convenience sampling has been used for the research due to geographical proximity, time constraints and willingness of the respondents to participate. Thus, an under coverage of various other significant aspects of health challenges faced by migrants remain unaddressed.
3) Since the researchers were themselves the victims of post-migration health challenges in Delhi, it creates a potential pre-judgement about the topic of research. The respondents approached for interview were based on a priori knowledge of their health challenges.

CONCLUSION

The research 'Impact of Delhi's extreme Climate and air pollution on the health of migrant students' attempted to study the ill effects of the constantly rising AQI and the severity of their climatic experience in Delhi. The choice of the topic lied in its relevance in the everyday lives of the students who battle these environmental barriers in their pursuit of academic excellence that the

metropolis offers. This creates an added sense of stress, anxiety and unproductivity, disturbing mental peace and wellbeing. There has been a marked increase in the frequency of health issues that the students have encountered post migration, specially pertaining to skin allergies, respiratory complications and hair problems. The limited purse for expenditure is strained by the added costs of medical consultation, medicines, skincare and haircare products, etc. Though most of the students pay hiked rent amounts to live in close proximity to their colleges, the extreme climate conditions compel them to use public conveyance like rickshaws to commute to college, further adding to their expenses. The graveness and recurrence of the issues that students face has negatively impacted their personal and professional development and wellbeing. The state, being an important stakeholder in the fostering the intellectual and financial development of the youth of its land should take better policy initiatives to help them mitigate these challenges and exploit the underlying potential that the demographic dividend offers.

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The PCOS and PCOD Puzzle:
Beyond Diagnosis

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LITERATURE REVIEW

The present research investigates the impact of cultural variables on women diagnosed with Polycystic ovary syndrome (PCOS) and Polycystic Ovary Disorder (PCOD), their health-seeking behaviours, and the course of treatment. Additionally, it looks at the underlying socio-cultural factors that contribute to these conditions. Although PCOS is sometimes referred to as a "lifestyle disease," its prevalence is rising and shows no indications of abating, which is concerning doctors and women alike.

India is home to a wide variety of languages, civilizations, ethnic groups, and religions. Although this is a source of strength and richness in many ways, addressing commonly presenting illnesses can also be complicated by cultural factors. When it comes to general practice, doctors expect to consider psychological, social, and environmental issues that may be the cause of some of the problems that patients present with. This is especially true when mental health is a concern. However, some illnesses might be challenging to treat when physical symptoms appear to be the result of ingrained effects related to socio-cultural norms and expectations. In our opinion, in order to facilitate the implementation of best practices and enhance patient outcomes, the relationships between sociocultural variables and health need to be more fully recognised and investigated.

Moral principles and belief systems are fundamental to human existence, and for a large number of individuals, cultural and religious factors have a significant beneficial impact on their lives. However, culturally and religiously imposed norms can also have a detrimental effect on people's mental and physical health. In primary care in India and Asian cultures generally, culture-bound illnesses are not rare; cases often present with psychiatric and related physical symptoms.

Through our research we can say that one's understanding of PCOS and PCOD, as well as how quickly they seek treatment, might be influenced by their socioeconomic level. The shocking lack of knowledge about PCOS is concerning. Due to increased internet availability, women in urban areas are more likely to have prior information about PCOS. Women who have access to the internet can understand that postponing treatment could have long-term repercussions. As a result, they will inevitably arrive earlier than ladies who are unaware of this information. Due to their capacity to research their symptoms online, women from higher socioeconomic backgrounds are more likely to have prior information. However, it's not same for all the cases as there are still a large number of women with good socio-economic background who are unaware of PCOS and PCOD.

In may cases we saw that women are more likely to visit beauty parlours for treatment when they encounter the outward signs of PCOS, like hirsutism and acne, and to see a doctor if it does not resolve the issue. Typically, these symptoms require the assistance of a gynaecologist for treatment because they are caused by an underlying hormone imbalance. The stylist will then recommend that the woman see a doctor to have her hormones evaluated if the treatment she had at the beauty parlour was ineffective. This is the time that the patient will first visit for a consultation.

Women are afraid to seek therapy for irregular menstruation because they are taught that it may indicate infertility. In Indian culture, having children is highly valued, hence the family frequently worries that the daughter is infertile. In the family, it has a significant impact on the identities of many Indian women as in India women are seen as child bearers only they are not considered to have their own identity in many societies . That is my mothers will occasionally advise their teenage daughters to postpone seeking medical attention as after consulting the doctor most of the neighbourhood will know about the irregular menstrual cycle of the girl and she'll be considered as infertile. The most vulnerable are these women and girls. In India, children often find it difficult to talk to their moms about reproductive matters, and even when they do, they often feel awkward doing so.

Leela Dube also metaphorically refers women as earth meaning the one who nurtures and gives birth to a child. And if the women cannot give birth to a child she'll be considered as barren and this is the label that no woman wants to have. The condition of women suffer from PCOD and PCOS has worsened with time of the changing, hectic and stressful lifestyle but the awareness of the same is not increasing with the same pace.

Most the women we interviewed said that the mental health associated with this lifestyle disorder is less talked about. There is a constant anxiousness present inside your body and it affects social life in various ways. Constant low energy, excessive unwanted facial hair growth as well as painful periods has limited their social life. One of the stigmatisation we came across was that most of the people considered PCOS and PCOD as a very common disease because of the woman they know has been diagnosed with the same. However, it should not be assumed as something easy to be suffering from just because it's common.

METHODOLOGY

In our study, "Silent Sufferers: Understanding PCOS & PCOD Sociologically" we chose a mixed method approach combining qualitative and quantitative methods because it offered a robust framework for exploring the sociological aspects of PCOS (Polycystic Ovary Syndrome) and PCOD (Polycystic Ovary Disease). These conditions not only have physiological manifestations but also deeply affect individuals' social experiences, relationships, and access to healthcare. They are complex conditions with multifaceted impacts on individuals' lives.

We used Qualitative methods, such as interviews or ethnographic studies, allowing us to delve into the lived experiences of those affected. By capturing narratives, emotions, and social dynamics, qualitative data revealed insights into how these conditions influence self-perception, relationships, and societal interactions. During our study we find that some females are overweight or underweight which makes them insecure about their looks affecting their self perception.

Sociological research emphasizes the importance of understanding context. Qualitative methods enable us to explore the cultural, familial, and societal contexts in which PCOS and PCOD are situated. This included investigating cultural beliefs, gender norms, and socioeconomic factors that shape individuals' experiences and access to resources. In respect to this, collected data demonstrate that not every suffering female had resources to consult a good gynecologist due to financial backgrounds.

PCOS and PCOD are often accompanied by stigma and misconceptions, which can exacerbate the psychosocial impact of these conditions. Qualitative methods are well-suited for uncovering stigma-related experiences, coping mechanisms, and support networks. Understanding how individuals navigate social perceptions and stigma can inform interventions and support services.

While qualitative data offer depth and richness, quantitative methods provide

statistical rigor and allow for generalization of findings to larger populations. Surveys and quantitative analysis helped in quantifying the prevalence of PCOS and PCOD, assess variations across demographic groups, and identify patterns in healthcare access and utilization. This quantitative data complemented qualitative findings by providing broader insights and facilitating comparisons across different groups or regions.

Triangulation

The integration of qualitative and quantitative data allowed for triangulation, where findings from different methods were compared and synthesized. Triangulation enhanced the validity and reliability of research findings by corroborating evidence from multiple sources. For instance, qualitative insights into social support networks validated by quantitative data on healthcare utilization patterns.

In summary, a mixed methods approach offered us a nuanced understanding of the sociological aspects of PCOS and PCOD by combining the depth of qualitative inquiry with the breadth of quantitative analysis.

SAMPLING STRATEGY

Sampling strategy plays a pivotal role in sociological research, particularly when investigating complex phenomena like Polycystic Ovary Syndrome (PCOS) and Polycystic Ovary Disease (PCOD). Below we delve into the sampling strategy employed by us to explore the sociological dimensions of PCOS and PCOD, focusing specifically on menstruating females aged between 15 to 50 suffering from these conditions.

We opted for purposeful sampling to ensure that the selected participants represent the target population effectively. By exclusively focusing on menstruating females suffering from PCOS and PCOD, aged between 15 to 50, the sampling strategy aimed to capture the unique perspectives and experiences of individuals directly affected by these conditions.

The inclusion criteria were carefully defined to ensure relevance and representativeness within our study context. By including only menstruating females, we acknowledged the menstrual health implications associated with PCOS and PCOD. Furthermore, specifying the age range of 15 to 50 ensured diversity while maintaining a focus on reproductive age groups.

Sampling Methodologies:

a. Interviews: For qualitative insights, we as researchers employed purposive sampling to select participants for in-depth interviews. This approach allowed us to explore the subjective experiences, coping mechanisms, and sociocultural

influences shaping individuals' perspectives on PCOS and PCOD. Through open-ended questioning, we could capture rich narratives and nuances in participants' lived experiences.

b. Surveys: Quantitative data collection involved the use of surveys targeted at the defined population of menstruating females with PCOS and PCOD aged between 15 to 50. Survey sampling techniques aimed to achieve adequate representation across different demographic factors such as age, socioeconomic status, and geographical location. By employing random sampling within this defined population, the we could gather quantitative data on prevalence, healthcare access, and sociodemographic correlates.

Ethical considerations were paramount throughout the sampling process. Informed consent was obtained from all participants, emphasizing voluntary participation and confidentiality. Additionally, measures were implemented to safeguard participants' privacy and minimize potential distress arising from discussing sensitive topics related to PCOS and PCOD.

While the sampling strategy aimed to capture diverse perspectives within the target population, certain limitations must be acknowledged. The exclusion of non-menstruating individuals with PCOS and PCOD may overlook important insights into the experiences of postmenopausal women or individuals with amenorrhea. Furthermore, the focus on a specific age range may limit the generalizability of findings to older or younger cohorts. But despite certain limitations, the sampling strategy represents a crucial step in conducting rigorous and ethically sound sociological research on PCOS and PCOD.

FINDINGS AND DISCUSSIONS

As per the findings of the research conducted, we can see that it's high time that people should be made aware of the problems concerning the same.Based on the survey, we can see that the primary source of information for the respondents is through doctors and health care professionals , followed by the internet and social media. This also throws a light on how even in the 21st century , talking about menstruation and related problems is still a topic to be discussed in hushed voices behind closed doors. The unawareness is then again due to the lack of discussions on such topics at an appropriate age.

Given the fact that pcod and pcos also affects the social life of the sufferers, as per the data obtained, its necessary for young girls to be aware of this so that they can carve out a path for themselves accordingly. The physical changes due to hormonal imbalances like weight gain, or excess facial hairs create a sense of

insecurity among the sufferers which leads to degraded mental health and depression. The fact that during the start of these symptoms people can't relate it with the actual problem but instead try to take the help of home remedies and not actual professionals worsen the condition .

If people get aware of this and also try to normalise the conditions of the one suffering from pcos and pcod then fortunately for them, they would not have to deal with the mental health conditions on top of the existing condition. It is very important for people to realise that a healthy talk among mothers and daughters about this is an essential start. The men should also be educated about it so that they can help out and take care of the suffering women.

One of the things from the findings that should be brought in the limelight and is worth mentioning is that women still find it difficult to talk about the said conditions. This also amounted up to one of the problems we faced during the research. Women were not very comfortable in talking about this issue, specially as the age went higher, the older ones were getting more hesitant. The ones who were ready to talk about it were not comfortable with sharing their names and wanted it to be anonymous. This just becomes a crude reality check for us that shows how things still have not changed and how menstruation as real and as scientific it is, is still talked about as a crime or even worse than crime , something that should not be named and talked about freely.

On a larger scale, when we get out of the homes and look in the larger society, it should also be on the part of the government to take upon itself, the task of awareness. At lower levels in the villages where people are still wounded up in the chronicles of superstitions and taboos , the government should make efforts and send healthcare professionals to provide them actual scientific knowledge. It should penetrate at lower levels and try to make people understand the graveness of these conditions and also provide the medicines and facilities at a lower rate for them so that they can avail the knowledge. As concerned about the city conditions where people well enough to get treatments but not aware or educated enough to actually take the step, the government along with the media and healthcare professionals should try to normalise this topic among them too.

On a concluding remark, we can easily point out that there is still a long way to go before India as a society reaches at a stage where these things are not considered problems to be shut behind closed drawers and closed doors but are counted among the mundanities of life so that the average girl population lives a life where she does not have to go through the additionals problems of this conditions and get proper treatments.

RESEARCH COMPENDIUM

APPENDICES

Questionnaire

"Silent Sufferers: Understanding PCOS & PCOD Sociologically"
Hello people,

Personal Information

Full Name
Age:
State of origin
State of residence
Qualification

Knowledge and Awareness

Have you heard of PCOS/PCOD before participating in this study?
Yes
No

How would you rate your knowledge about PCOS/PCOD?
Very poor
Poor
Average

Social impact

How has PCOS/PCOD affected your social life?

Have you experienced any stigmatization or discrimination due to PCOS/PCOD?

Do you feel comfortable discussing PCOS/PCOD with friends, family, or colleagues?

Psychological Impact

How has PCOS/PCOD affected your mental health and well-being?

Have you experienced anxiety or depression related to PCOS/PCOD?
Yes
No
Maybe

● Yes
● No
● Maybe

28.6%   23.8%   47.6%
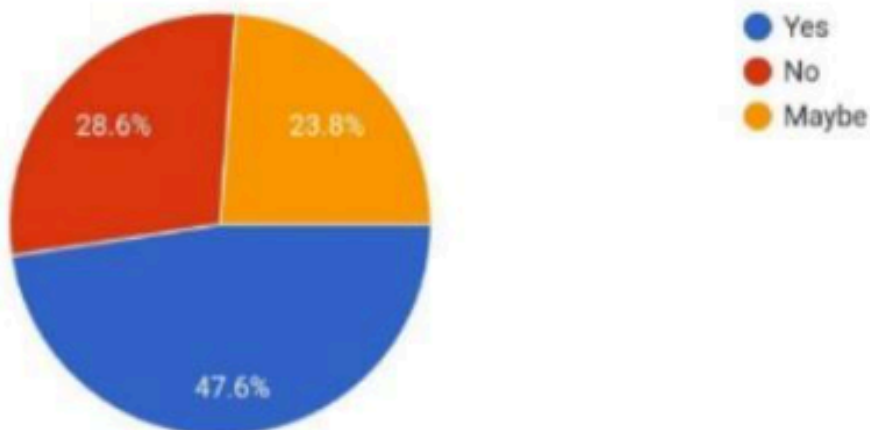
Do you feel supported by healthcare professionals in managing the psychological aspects of PCOS/PCOD?
Yes
No

Maybe
Sometimes
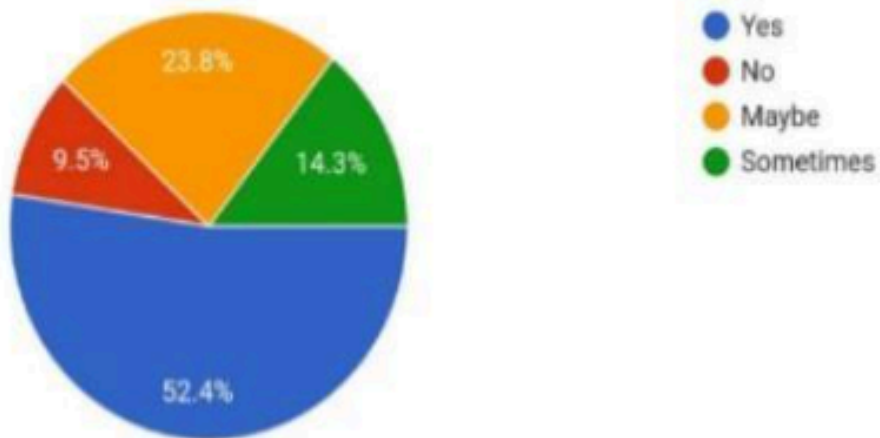
Treatment and Support

Have you sought medical treatment for PCOS/PCOD?
Yes
No
Once
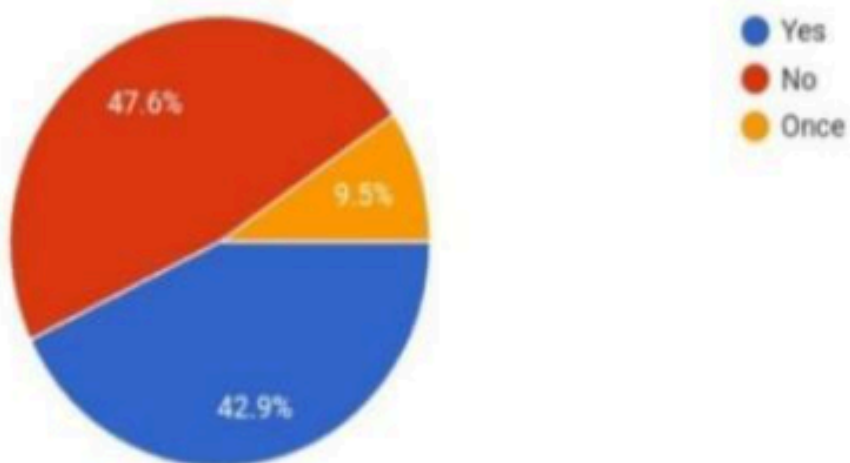
How satisfied are you with the treatment options available for PCOS/PCOD?
1

RESEARCH COMPENDIUM

2
3
4
5

Bar chart values: 1 (5.6%), 3 (16.7%), 8 (44.4%), 3 (16.7%), 3 (16.7%)
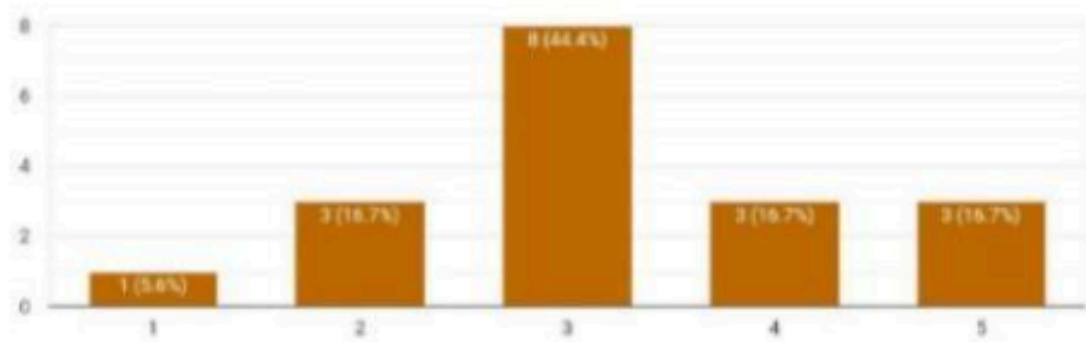
Do you feel adequately supported by healthcare professionals in managing PCOS/PCOD symptoms?
Yes
No
Sometimes

- Yes
- No
- Sometimes

Pie chart values: 42.9%, 9.5%, 47.6%
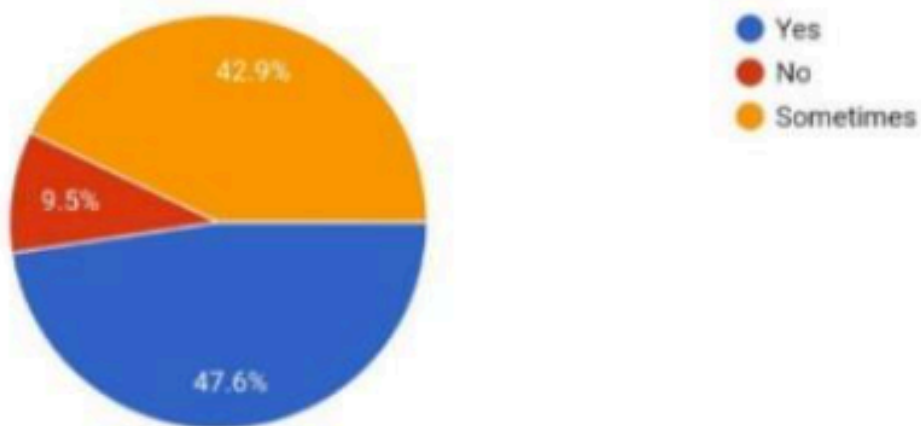
Societal Perception

Do you think there is enough awareness about PCOS/PCOD in society?

Yes
No
Maybe
Only in urban areas
Not sure
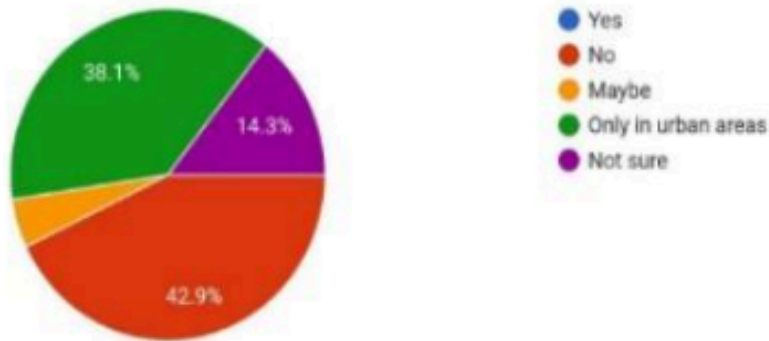
How do you perceive society's attitude towards individuals with PCOS/PCOD?

Have you encountered any misconceptions or myths about PCOS/PCOD? Please elaborate.

Coping Mechanisms

How do you cope with the challenges posed by PCOS/PCOD in your daily life?

Have you found any support groups or communities for individuals with PCOS/PCOD helpful?
Yes
No
Maybe

Good
Excellent

RESEARCH COMPENDIUM
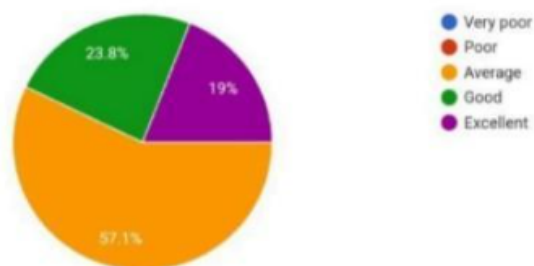
What sources do you use to gather information about PCOS/PCOD?
Healthcare professionals
Internet/websites
Friends/Family
Social media
Books/ Articles
Others
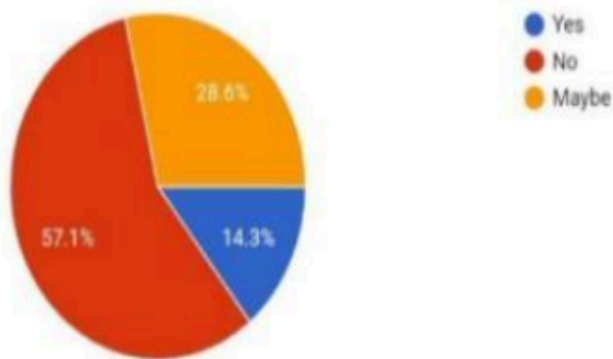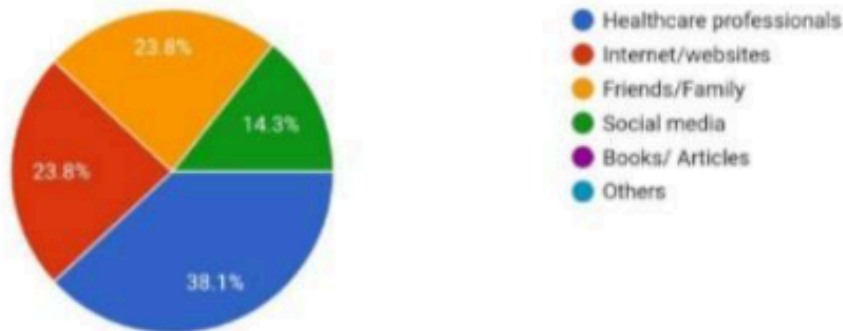
What suggestions do you have to improve support and resources for individuals with PCOS/PCOD in society?

Is there anything else you would like to share about your experiences with PCOS/PCOD?

RESEARCH COMPENDIUM

Unveiling Gender Dynamics:
Exploring Female Patients' Preferences for Gynaecologists

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ABSTRACT

Background: In urban Delhi, gender plays a crucial role in women's healthcare decisions, particularly regarding the choice of gynecologist. Male gynecologists encounter distinct challenges due to patient preferences shaped by societal norms. This study investigates the evolving landscape of gynecological care in urban Delhi, focusing on gender dynamics and the experiences of both female patients and male practitioners.

Methodology: The study utilized structured interviews with both male gynecologists and female patients to explore perceptions and preferences regarding gynecological care. Four male gynecologists from different parts of the country working in public hospitals were interviewed, offering diverse perspectives. Additionally, ten female patients, including college students and a young mother, were interviewed to understand their preferences in choosing a doctor. The interviews aimed to uncover reasons behind patient preferences for female gynecologists and the influence of gender dynamics and social norms on patient comfort during examinations.

Results: Out of the ten female patients interviewed, 8 respondents preferred female gynecologists. The reasons behind the preference ranged from societal norms to apprehensions regarding sexual assault.

Conclusions: The rise of female gynecologists challenges the conventional belief that patient preference for female doctors solely stems from their availability. Societal norms, limited opportunities for male practitioners, and career prospects in gynecology contribute to this preference. Achieving gender equality in medicine requires addressing these factors and promoting inclusivity in all medical specialties.

Keywords: Gender Bias, Male Gynecologists, Female Preference, Discrimination, Patient Comfort

Introduction

In India, discussions surrounding women's sexual and reproductive health often tread delicate ground, ensnared by deep-rooted taboos and societal norms. Within this complex landscape, the choice of a healthcare provider becomes not merely a matter of medical expertise but also a reflection of social norms and expectations. One such nuanced aspect is the gender of the gynaecologist while making the decision. The cultural fabric of India weaves intricate patterns around gender roles and expectations, often dictating societal norms and behaviours. In urban Delhi, where modernity coexists with tradition, the gender of the gynaecologist emerges as a pivotal factor in patient preferences, shaping healthcare-seeking behaviours in profound way.

The field of medical psychology places significant emphasis on the quality of the doctor-patient relationship, recognizing the impact that the gender of both physician and patient can have on their interaction. Within this context, the dynamic between gynaecologists and their clients is particularly noteworthy for its unique characteristics. Male gynaecologists in India encounter unique

challenges and reservations from female patients, reflecting broader social attitudes towards gender and healthcare. Over the past ten years, there has been a noticeable shift in patient preferences regarding the gender of their gynaecologists. While some patients believe that both male and female obstetricians/gynaecologists possess comparable skills in emotional support, professionalism, and interpersonal interactions, others exhibit a preference for female practitioners (Riaz et al., 2021).

These challenges manifest in both public and private healthcare settings, where male gynaecologists navigate intricate dynamics shaped by cultural norms, patient preferences, and professional ethics. In the pages that follow, we embark on a journey to explore the narratives, challenges, and opportunities shaping the landscape of gynaecological care in urban Delhi, with a focus on gender dynamics and the experiences of both female patients and male gynaecologists. In a study aimed at exploring the challenges faced by male obstetrics and gynaecology specialists within the healthcare system and propose potential solutions, considering its impact on healthcare delivery. It was found that female respondents showed a significantly higher inclination (69%) towards choosing body as a specialty compared to male respondents (4%). Women cited comfort in the field as their primary motivation, while men expressed concerns about limited opportunities and patient availability. The underrepresentation of male specialists in ObsGyn doesn't stem from a lack of interest among male students and residents but rather from concerns regarding employment and field scope. Achieving gender balance could enhance reproductive and women's health outcomes, necessitating awareness and education. (Kaliberdenko et al., 2020).

RATIONALE

Michel Foucault's work on bio power illuminated how societal institutions like prisons, hospitals, and asylums exert control over human bodies, often through discipline and punishment. This has been largely studied by scholars and applied further to locate the power of the physician over the patient in the healthcare system. However, Marcia Inhorn in her work Defining Women's Health, highlights how Foucault's analysis overlooked the gendered nuances of this control, prompting feminist scholars to delve into how women experience and resist societal norms regarding their bodies (1996). This becomes further complex in the Indian context, where the identification of women with their physical bodies is the root cause of their oppression. The woman's body becomes a space where culturally sanctioned codes and norms can be inscribed to (Mathur, 2008).

Inhorn further demonstrates how in Antonio Gramsci's concept of hegemony, dominance is often maintained not solely through force but also through the consent of the subjugated.

When applied to the realm of women's health and the influence of biomedical practices, it becomes evident that physicians typically haven't imposed their role on women as their primary healthcare providers through coercion. Instead, women themselves have actively participated in the process of medicalization, often expressing their preference for and embracing cutting-edge biomedical technologies.

However, it's essential to acknowledge that women's consent to biomedical hegemony isn't a straightforward matter of compliance. It's a nuanced interplay of societal expectations, cultural norms, and individual autonomy. Women's active involvement in medical decision-making reflects not only their agency but also the complex web of influences that inform their choices. In essence, Gramsci's notion of hegemony helps elucidate the power dynamics at play in women's healthcare, emphasizing the role of consent and agency in shaping healthcare practices and preferences.

In a study exploring the perceptions of male relatives accompanying the patients only a minority—just 22%—of patients attending the OB GYN outpatient department were accompanied by male relatives, predominantly husbands making up 90% of that fraction. It's worth noting that some men felt compelled to accompany their partners rather than doing so voluntarily, hinting at societal pressures. In India, women seek gynaecological care in public hospitals alongside female relatives, such as mothers, mothers-in-law, sisters, or sisters-in-law. It was seen that men tend to shy away from involvement in such matters, despite harbouring genuine concerns for the health of their female family members. However, with shifting social norms, particularly in urban areas, there's a growing recognition of the potential necessity for male relatives to accompany their female counterparts to these appointments. Among the reasons cited for men abstaining from accompanying their partners to OB GYN visits were the belief that it's primarily the responsibility of female relatives and a sense of embarrassment or discomfort. These reasons reflect the enduring influence of cultural norms within our society (Bhatt, 2017).

In healthcare, patient preferences for doctor gender have been extensively researched in primary care but less so in OB/GYN settings. Our study aimed to bridge this gap by exploring female patients' perspectives on their OB/GYN healthcare providers' gender.

RESEARCH COMPENDIUM

We sought to uncover any biases against male obstetricians/gynaecologists, shedding light on power dynamics within healthcare interactions. This research delves into how power dynamics play out in medical settings, especially concerning gender. By examining patient experiences, we hope to contribute to a more nuanced understanding of how control is exerted over bodies in healthcare and advocate for gender-inclusive practices within the field of OB/GYN.

STATEMENT OF PROBLEM

This paper seeks to delve into the perceptions of female patients in urban Delhi regarding consultations with male gynaecologists, shedding light on the multifaceted factors influencing their choices. In the realm of gynaecological care, it explores how the gender of the doctor, typically presumed to align with social gender norms and can significantly impact a patient's comfort and trust during consultations. Furthermore, it aims to explore the difficulties encountered by male gynaecologists in providing care, navigating societal expectations, and fostering trust in both public and private healthcare settings.

By unravelling the intricacies of gender dynamics in gynaecological care, this study endeavours to contribute to a deeper understanding of the intersection between healthcare, gender, and culture in the Indian context. Despite advancements towards gender equality, the persistent preference for female gynaecologists among many female residents in urban Delhi underscores the need for a revaluation of societal attitudes and healthcare practices. By exploring the experiences of both patients and healthcare providers, we seek to illuminate the complexities of patient-doctor dynamics and advocate for a healthcare system that prioritizes patient autonomy and inclusivity. Through empirical insights and qualitative analysis, it aims to inform policy interventions and professional practices that promote inclusivity, patient-centred care, and gender-sensitive health care delivery.

METHODOLOGY

The research method used is a structured interview. We had a set of prepared questions and conducted interviews. The interviewees were included from diverse cultural backgrounds. We interviewed 4 doctors (male gynaecologists) and tried to know about their experience working as a male gynecologist in a female dominated occupation. Dr JB Sharma, who is a practicing gynecologist in AIIMS Delhi has completed his studies from Rohtak. Our second participant, Dr Tanmay Deka has studied from Assam and is practicing in Assam Medical College. The other two interviewees, Dr Gaurisankar and Dr. Pragnesh are practicing in Hindu Rao, Delhi. All these hospitals are public sector hospitals.

Their diverse perspective helped us to understand the various reasons behind the patients' preference of female gynaecologist over male and also the cultural and social causes working in the background.

We also interviewed 10 patients who visited gynaecologists at some point or other and tried to know about their preferences in choosing a doctor. Uma (21) is a mother and is married. Aakansha (20), Sadgi (20), Prachi (20), Manisha (21), Tvisha (20), Jeeya (20) and Deepti (20), including the other two who wanted to be anonymous were college students. They came from different parts of the country and had experienced different cultures and norms. The physical discomfort faced by patients while being examined by a male gynecologist is influenced by gender dynamics and social norms. These are specifically seen in private settings where in a private hospital, patients have a choice for choosing a female doctor and hence we rarely see any male gynecologist there. While in a public hospital, due to unavailability of choice, patients have to deal with male gynaecologists sometimes.

Limitations

Every research method has its own limitations and a good research is the one which acknowledges its limitations. While interviewing, we faced problems such as doctors indulging in self-praise. One doctor, for example, recounted a personal anecdote about donating blood to a patient, which could have influenced the patient's perception of the doctor. Further, participants not directly answering the questions, and sharing their own problems was another limitation. Due to time, money and geographical constraints, restricting our sample to college students as patients and doctors and limiting our access to a broader range of doctors. All the doctors were interviewed through a video call and lack of personal interaction could be a reason for not getting hold of the nuances. We were not able to include the views of doctors practicing in rural areas as our study was focused on Delhi. Therefore, any generalizations can't be drawn about the gender dynamics in preference of choosing gynaecologists on the basis of this research as this is limited to the urban landscape of Delhi.

Literature Review

Studies have explored the doctor-patient relationship in obstetrics and gynaecology, particularly focusing on how provider gender and behavior influence patient evaluations and satisfaction. However, while research has been conducted in countries like the United States, there is a notable gap in studies examining these dynamics in the context of India. "Physician Gender Preference Amongst Females Attending Obstetrics/Gynaecology Clinics" by Riaz et al., aims

to investigate how female patients in OB/GYN outpatient departments perceive the gender of their healthcare provider. We aimed to identify any preferences regarding provider gender and to highlight potential discrimination against male obstetricians/gynaecologists. Nevertheless, it's essential to acknowledge that this study was carried out specifically in Lahore, Pakistan. Therefore, its findings may not be universally applicable due to the presence of unique contextual nuances.

The study titled "Determinants of women's choice of their obstetrician and gynaecologist provider in the UAE" conducted by Diaa E. E. Rizk et al. aimed to assess women's preferences and factors influencing their choice of obstetrician and gynaecologist in a non-Western cultural context. Results revealed that 400 out of 508 participants preferred female doctors, citing reasons such as comfort during private consultations, religious beliefs, and cultural practices. Female preference was significantly associated with factors like education, occupation, religious beliefs, and perception of the doctor's professional role. On the other hand, male preference was linked to previous experiences, perception of the doctor as a skilled communicator, and health educator. Key determinants influencing choice included doctor's attitude, professional profile, gender, and religious faith. The study concluded that women's choice of obstetricians and gynaecologists is influenced by various factors including cultural, religious, and personal beliefs, with most women preferring female providers due to cultural norms and perceived comfort during intimate examinations.

Maria C. Inhorn's work "Defining Women's Health" explores how women's health research has predominantly been shaped by Western biomedicine and public health, advocating for a broader perspective that considers women's own experiences and subjectivities. Through the analysis of 150 ethnographies, Inhorn highlights the importance of anthropology in understanding women's health from a global perspective, emphasizing the need to recognize the political and social dynamics surrounding women's health and reproduction.

Katherine S. Buck and Heather L. Littleton (2014) investigates the gender composition of obstetricians and gynaecologists (OB-GYNs) in the United States has seen a noticeable shift towards more female practitioners in recent years. However, despite this trend, male representation in the field has declined. Research suggests that this decline may stem from various factors, including discouragement or discrimination faced by male medical students interested in pursuing OB-GYN as a specialty.

RESEARCH COMPENDIUM

Kanchan Mathur's paper "Body as Space, Body as site: Bodily Integrity and Women's Empowerment in India" delves into the ways in which women's physical bodies are constrained and marginalized in patriarchal societies like India. Mathur discusses how women's bodies are often denied autonomy and freedom, highlighting the struggles and negotiations Indian women undertake to assert their bodily integrity and claim their rights in society.

In the context of India's case, where societal norms and cultural factors play a significant role in healthcare decision-making, understanding women's perspectives regarding male gynaecologists is essential. Factors influencing women's preferences for female practitioners over male practitioners in reproductive or sexual health care settings may include patriarchal family dynamics and individual concerns about potential discomforts.

Despite the lack of specific research in the Indian context, the societal perception of the interlinkage between women's reproductive health and male medical practitioners responsible for their care remains a critical area for exploration. Future studies should aim to address these gaps in research to provide a comprehensive understanding of the factors influencing women's preferences for healthcare providers in obstetrics and gynecology, in countries like India with diverse cultural contexts.

Findings

The research findings on gender dynamics and patient preferences in gynaecology underscore a notable inclination among female patients towards consulting and undergoing physical examinations with female gynaecologists. Among the ten interviews conducted with female patients, eight of them have expressed a distinct preference for female practitioners. Among the female respondents, there was unanimous acknowledgment of frequent visits to gynaecologists, primarily motivated by conditions such as Polycystic Ovarian Disease (PCOD), menstrual health along with one case of child birth. A prevailing preference for female gynaecologists emerged, with comfort and relatability cited as key factors. This preference was also influenced by societal norms, discomfort in discussing reproductive health with men, apprehensions regarding sexual assault as well as prevailing gender stereotypes within the medical profession.

Additionally, a prevailing belief was observed that female practitioners possess a deeper understanding of female health issues, potentially shaping patient preferences. However, this belief was challenged by the argument that gynaecologists, irrespective of gender, undergo comprehensive training in female

anatomy, as highlighted by Dr. Gourisankar. Dr. Gourisanker's narrative underscores the enduring influence of gender preference within healthcare. Despite notable advancements regarding the acceptance of male gynaecologists, a substantial portion of patients persist in declining physical examinations conducted by male gynaecologists, highlighting the persistent nature of this phenomenon. Within this context, family dynamics, particularly the influence exerted by husbands and in-laws, emerge as ignificant contributors to patient preference for gynaecologists. Family-centric ideologies shape this preference, with a prevalent perception favouring female practitioners as being more reliable and capable of providing comfort to both patients and their families.

Apart from preferences driven by familial ideologies and individual reasons, the socioeconomic and cultural background also influenced the preference. This is evident from the instance of the difference in the government and the private hospitals. In government hospitals, which commonly serve individuals from lower socioeconomic backgrounds, bias against male gynaecologists tends to be less pronounced. This phenomenon primarily arises from the limited options available to patients in such settings, where access to healthcare providers is often constrained. In contrast, private healthcare facilities afford patients greater autonomy and choice in selecting their healthcare provider. Consequently, the prevalence of female gynaecologists remains notably higher in private healthcare settings, reflecting the impact of patient-driven demand as emphasized by Dr. Pragnesh Gajera.

The limitations imposed by choice within government hospitals are exemplified by the experience of a respondent, Uma aged 21 who noted "since I went to a government hospital I had to undergo my delivery with the help of doctors who were present. Even though it was overseen by a female gynaecologist, the attendants, residents, and interns who took rounds and checked dilations were all male". Concerns regarding patient safety were raised in this context, highlighting the potential risks associated with gender dynamics in medical practice, including the possibility of assault disguised as medical procedures. However, it is noteworthy that even in instances where patients have not personally experienced discomfort during consultations with male gynaecologists, a predilection towards female practitioners is maintained. This is evident from an instance faced by a respondent, Akansha aged 20. Despite maintaining a neutral stance on gender preference, the respondent recounted an uncomfortable encounter with a female gynaecologist, likely influenced by the stigma surrounding reproductive health in Indian culture. However, this negative

experience did not result in bias against female practitioners for the respondent, who continued to perceive them as reliable professionals.

In this scenario, the male gynaecologist is compelled to augment his gender-related deficit by demonstrating heightened levels of authenticity, and openness towards his patients. The doctors all collectively emphasized that to address gender dynamics in consultations, male practitioners are advised to approach interactions with sensitivity and empathy, maintaining the importance of obtaining proper and mandatory consent, often to a greater extent than their female counterparts. The presence of a female attendant or family member is recommended to mitigate potential discomfort for both patients and doctors. The interviewed gynaecologists unanimously advocate for evaluating practitioners based on professional competence rather than gender. Dr. Pragnesh emphasized that while gender ideally should not influence the doctor-patient relationship, societal norms in India frequently prioritize the gender of gynaecologists, thereby posing challenges to achieving gender-neutral healthcare delivery.

Societal norms tend to prioritize the gender of gynaecologists, which can create obstacles to implementing gender-neutral healthcare practices. Interestingly, despite potential reluctance towards male gynaecologists for examinations, they are often preferred for surgical procedures, highlighting a nuanced perception of gender within various medical specialties.

CONCLUSION

The conventional belief that women prefer female gynaecologists primarily due to the availability of female doctors over male doctors can be challenged. Instead, the significant rise in female practitioners in gynaecology compared to other medical fields in cities like Delhi can be attributed to various factors, including male doctors' concerns about limited opportunities, patient preferences, and career prospects in the field. The lack of India-specific research on this topic, despite studies from other countries, highlights the need for measures to promote gender equality in medicine. It's crucial to recognize that female patients' preference for female doctors may stem largely from societal norms, viewing the exploration of women's bodies by male doctors as a patriarchal taboo rather than solely a matter of personal comfort. Moreover, there's still a considerable gap in data regarding the gender distribution within the healthcare system, particularly across different medical specialties. In the broader context of gender disparity in workplaces, the increase in female practitioners ingynaecology alone presents an intriguing aspect that should be

encouraged across all fields. Our research aims to address this gendered preference among women regarding reproductive and sexual health, aiming to assess where society stands in terms of achieving a balanced understanding of women's health.

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Appendix-A

The following are the set of questions that were asked to the gynaecologists.
1. Can you share your experiences as a male gynaecologist?
2. Have you encountered any challenges or reservations from patients due to your gender?
3. How do you perceive the preferences of female patients for male versus female
gynaecologists in your practice?
4. In your opinion, what factors contribute to these preferences among female patients?
5. How do you navigate gender dynamics and societal norms when providing care to female
patients?
6. Have you observed any changes or trends over time regarding the acceptance of male

gynaecologists in the healthcare landscape?

3. What factors influence your decision to prefer a female gynaecologist over a male
gynaecologist for your reproductive health needs? (Can be asked the other way around in
case of preference for male)
4. Have you ever encountered any challenges or discomfort when consulting with a male
gynaecologist? If so, could you please describe your experience?
5. Are there any specific instances or experiences that have shaped your preference for a
female gynaecologist?
6. Have you ever felt pressure from family members or societal expectations to choose a
particular gender of gynaecologist? If yes, how did that influence your decision-making
process?
7. Have you ever experienced any discomfort when it comes to undressing or undergoing a
physical examination by a gynaecologist during your visit? If so, why? (Is it fear? Shame?
Etc.)

THE SKINCARE SPECTRUM:
UNDERSTANDING CONSUMER MOTIVATIONS AND BEHAVIORS IN SKINCARE

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ABSTRACT

This essay explores the current dynamics of skincare and the promising nature of providing not just flawless skin but also self-confidence. Specifically, focusing on female interviewees who comprise the majority of the consumer base in this market, understanding consumer behavior influenced by factors like ingredient awareness and brand reputation is crucial for companies to succeed. Meandering through technological development, societal norms, and social media influence on consumers, and its ever-changing nature of advertisement, the research aims to delve into these dynamics.

Keywords: skincare, consumers, consumer behavior, marketing, brand awareness, advertisement

INTRODUCTION

The skincare industry has experienced a remarkable transformation in recent times, propelled by rapid technological growth and the consequent acceleration of information services. This has led to a globalized marketplace where every new skincare product launch resonates across borders, effecting a burgeoning demand driven by societal norms, cultural influences, and the pervasive impact of Western ideals portrayed through media, fashion, and advertising channels. The diverse range of skincare products, including sunscreen, hand creams, serums, and lotions, has flourished in response to this escalating demand. Consumers are not just seeking functional benefits but also emotional connections and self-expression through their skincare choices. The influence of societal stereotypes and the quest for an idealized self-image further fuel this growth, as consumers aspire to meet these perceived standards.

Central to this growth narrative is the intricate interplay between consumer motivations and behaviors. Consumer behavior in skin care encompasses a spectrum of activities, from product research and purchase decisions to usage patterns and brand loyalty. This behavior is shaped by various factors, including ingredient awareness, product efficacy, packaging aesthetics, pricing strategies, and brand reputation. This study explores consumer behavior in the skincare industry, focusing on strategic market segmentation and targeting. It investigates why consumers buy certain skincare products and the psychological and social factors that influence their purchasing decisions. The research aims to understand the key influences on consumer decision-making, which marketers can use to develop and market products more effectively. Today, skincare regimens are crucial for health and wellness, with consumers becoming more knowledgeable about the variety of products available and their skin type. With rising disposable income and life expectancy, premium skincare products with anti-aging and skin rejuvenating qualities are being purchased. The study also highlights the importance of associative evaluation in the purchasing process, as different types of consumers purchase a wide variety of skincare products. Understanding consumer behavior is pivotal for companies aiming for sustained success in the skincare industry. It involves studying the decision-making processes and physical activities individuals engage in when evaluating, acquiring, using, or disposing of skincare products. This understanding allows marketing departments to predict future trends, tailor marketing strategies, and enhance product offerings to align with consumer preferences and

needs. Moreover, enhanced education initiatives by skincare companies regarding product ingredients and benefits have empowered consumers to make more informed choices about their skincare regimen. This heightened awareness underscores the evolving landscape of consumer behavior and the growing importance of aligning skincare products with consumers' values and references. In this research, we aim to delve deeper into the nuances of consumer motivations and behaviors in the skincare industry, examining how societal influences, cultural dynamics, and individual self-concepts shape consumer choices.

RATIONALE

The skincare industry is a dynamic and rapidly evolving field driven by a diverse range of consumer motivations and behaviors. Understanding these motivations and behaviors across the skincare spectrum is essential for brands and marketers to effectively connect with their target audience and develop successful products and marketing strategies. With the rise of social media influencers, beauty bloggers, and online communities dedicated to skincare, consumers are more informed and engaged than ever before. This heightened awareness has led to increased demand for skincare products that address specific concerns and cater to individual preferences, consumer behavior in skincare is influenced by a multitude of factors, including cultural norms, societal pressures, personal beliefs, and lifestyle choices, understanding consumer motivations and behaviors in skincare is rooted in the need to meet the evolving needs and preferences of consumers, drive innovation within the industry, and ultimately, foster long-term brand loyalty and success.

STATEMENT OF THE PROBLEM

Market consumerism has significantly altered the landscape of the skincare industry and exerted a profound influence on individual attitudes and behaviors towards skin care practices. In a globalized world that has offered new skincare products to uniformly spread across borders, fueled by increasing demand influenced by societal norms, cultural factors, and health and wellness trends, marketing and advertising have emerged as fast-paced means to popularize newer products. In light of these challenges, it becomes indispensable to delve deeper into the nuances of consumer motivations and behaviors in the skincare industry. Thus, this study aims to highlight the impact of such factors on individual lifestyles.

RESEARCH METHODOLOGY

The research methodology involves the systematic use of Google Forms for conducting questionnaires to gather data on consumer motivations and behaviors in the skincare industry, with a specific focus on female university students. The target demographic includes individuals aged between 20 to 22 years, chosen strategically to capture a cohort deeply engaged in skincare practices and highly influenced by various factors shaping their skincare product preferences.

The questionnaire design incorporates a blend of closed-ended and open-ended questions. Closed-ended questions are structured to yield quantitative data, offering numerical insights into factors such as ingredient awareness, brand reputation, adherence to societal norms, and the impact of media and advertising on consumer choices. In contrast, open-ended questions are designed to elicit qualitative responses, enabling a more nuanced exploration of participants' experiences, attitudes, and underlying motivations related to skincare. Ethical considerations are paramount throughout the research process. Participants' confidentiality is strictly maintained, and measures are in place to protect their privacy and data security. Informed consent is obtained from each participant, ensuring they are fully aware of the research's purpose, procedures, and potential outcomes before participating. These ethical standards uphold the integrity and validity of the study while prioritizing participant welfare. By employing a comprehensive approach that integrates quantitative and qualitative data collection methods, our research aims to provide a holistic understanding of consumer behavior in the skincare industry among female university students. This methodological rigor not only enhances the reliability of the findings but also underscores a commitment to ethical research practices and the well-being of research participants.

LITERATURE REVIEW

Michael R. Solomon (1983) conducted an empirical study on product symbolism, which has often overlooked how consumers use products in their daily social lives. This study argues that consumers' subjective experiences with many products significantly influence their perception of social reality, self-concept, and behavior. Additionally, consumers rely on the social meanings embedded in products to guide their performance of social roles, especially in new or unfamiliar situations. While traditional marketing theory sees products as responses to underlying needs, this approach emphasizes how products can

actually stimulate behaviors by serving as stimuli and mediating self-definition and role performance, drawing from concepts in symbolic interactionism. For instance, using specific skincare brands or products can represent self-care, beauty standards, or even social status. These symbolic associations influence how consumers perceive themselves and how they want to be perceived by others.

Aaker and Joachimsthaler (2000) further elaborate on the significance of brand awareness, particularly in low-involvement products, where familiarity plays a crucial role. Their insights tie into Solomon's work on product symbolism, showcasing how brands become symbolic representations that guide consumer choices and behaviors. Media and advertising, as emphasized by Aaker and Joachimsthaler, serve as essential tools for creating and reinforcing brand awareness. In understanding the impact of advertising, Fill (2002) presents contrasting theories. The strong theory posits that advertising influences knowledge, attitudes, beliefs, and behavior, driving consumers to try new products. This complements Solomon's view on product symbolism, where advertising plays a role in shaping symbolic meanings attached to products. On the other hand, the weak theory suggests that habits heavily influence purchasing decisions, with advertising reinforcing existing preferences.

This understanding aligns with Gilaninia et al.'s (2013), points about consumer behavior which consists of seven fundamental points:

1. Consumer behavior is stimulated: Consumers are motivated to achieve a specified goal. The purpose is to satisfy people's needs.
2. Consumer behavior encompasses a wide range of behaviors, including looking for, acquiring, using, reviewing, and disposing of products and services.
3. Consumer behavior is a process. The process of selecting, acquiring, utilizing, and withdrawing goods or services demonstrates consumer behavior. The consumption process consists of three steps: pre-purchase activities, purchasing activities, and post-purchase activities.
4. Consumer behavior involves a variety of roles: In any given situation, a consumer may play many roles. In addition, for every given purchase, more than one person may be participating in one or more functions.
5. Consumer behavior varies in terms of time and complexity: "The number of activities increases the complexity." The combination of time and complexity results in more difficult and time-consuming decisions.
6. External influences influence consumer behavior. Culture, socioeconomic

status, family, reference groups, and other external influences all have an impact on consumer behavior.

7. Different persons exhibit different behaviors: Marketers use market segmentation based on the varied behaviors of various people.

Overall, these perspectives interconnect by highlighting how product symbolism, consumer behavior, brand awareness, and advertising effectiveness are intertwined elements that collectively shape consumer choices and behaviors in the market.

MARKETERS' INFLUENCE ON CONSUMERS' SELF-ESTEEM

Marketers have the potential to significantly influence how consumers perceive themselves, as outlined by Solomon (2014). Self-esteem refers to an individual's sense of personal worth, with those having low self-esteem often lacking confidence and striving to avoid negative experiences like embarrassment or rejection. On the other hand, individuals with high self-esteem are more self-assured, willing to take risks, and comfortable with attracting attention. Certain marketing strategies may target consumers with low self-esteem, using messaging that promises to enhance their self-worth. These tactics aim to boost brand visibility and sales. However, continuous exposure to advertisements featuring idealized images can lead to social comparison, impacting a consumer's self-esteem directly.

Marketers target consumers with low self-esteem to boost sales and enhance the company's financial position. For example, Dove launched the "Dove Self-Esteem Project," encouraging consumers to share their definitions of 'real beauty.' While Dove aims to support body positivity and self-esteem through this initiative, it also promotes its products as solutions for achieving happiness and beauty. This marketing approach raises concerns about consumers who don't buy Dove

products, potentially making them feel inadequate or lacking. Dove claims that purchasing its products increases consumers' self-esteem, which may imply a decrease in self-esteem for those who don't buy them.

Marketers aim to boost consumer self-esteem, but there's concern about messages suggesting only certain products can deliver desired results and enhance beauty, confidence, and happiness.

It's argued that marketers have a moral duty to stress that true beauty comes from within, not from external products, and it's misleading to imply otherwise. Dove's self-esteem project is praised for its platform for self-expression, yet it's important to acknowledge that beauty is subjective. Some criticize Dove for a narrow beauty definition, overlooking the fact that many women feel underrepresented in the media. The hope is for marketers to create relatable, inspiring content without pressuring consumers into purchases.

FACTORS INFLUENCING CONSUMER BEHAVIOUR IN SKINCARE

Consumer behavior in skincare is influenced by various factors. Here are some key factors that can affect how consumers make decisions regarding skincare products:

● Ingredient Awareness: Consumers are increasingly conscious of the ingredients used in skincare products. They look for natural, organic, or specific ingredients known for their benefits, such as hyaluronic acid for hydration or retinoids for anti-aging.

● Brand Reputation: Established brands with a reputation for quality, effectiveness, and safety tend to attract consumers. Positive reviews, celebrity endorsements, and word-of-mouth recommendations also play a role in shaping perceptions of brands.

● Societal Norms and Trends: Cultural perceptions of beauty and skincare standards influence consumer behavior. Trends like clean beauty, sustainability, and inclusivity impact product choices.

● Media and Advertising: Advertisements, influencer marketing, and social media campaigns heavily influence consumer perceptions and purchasing decisions. Images, testimonials, and product claims in ads shape consumer beliefs about product efficacy.

● Price and Value Perception: Pricing strategies, discounts, and perceived value relative to competitors affect consumer choices. Some consumers associate higher prices with better quality, while others prioritize affordability.

● Product Packaging and Presentation: Appealing packaging, user-friendly

- designs, andinnovative delivery systems can attract consumers' attention. Packaging oftencommunicates product benefits and reinforces brand identity, contributing to purchasedecisions.
- Personalized Recommendations: Skincare brands offering personalized recommendations based on individual skin types, concerns, and goals can influence purchase decisions positively. Customized products or personalized skincare routines are gaining popularity among consumers.
- Reviews and Testimonials: Consumer reviews, ratings, and testimonials on platforms like social media, beauty forums, and e-commerce sites significantly impact purchasing decisions. Positive reviews build trust and credibility for products, encouraging consumerconfidence.

Understanding these key factors enables skincare brands to tailor their marketing strategies, product development, and communication to effectively meet consumer needs and preferences in the dynamic skincare market.

FINDINGS

Through an online questionnaire conducted by the researchers, certain common findings were traced as the following:-

a) Common Products: Facewash and moisturizer are the most commonly used products. Some individuals follow a comprehensive routine, including double cleansing, using homemade oil-based cleanser, followed by a commercial cleanser, emolene moisturizer, Bioderma Atoderm Crème, and sunscreen.

b) Age Group Preferences: Most respondents fall within the 20-22 age group concerned with smoother skin and a few in their early thirties were more concerned about aging.

c) Sunscreen Usage: SPF 50 sunscreen is the preferred choice among respondents.

d) Perception of Natural Products: There's a prevailing belief among respondents that natural skincare products are superior to synthetic ones due to concerns about harmful chemicals in synthetic products. However, the costliness of natural products is acknowledged as a drawback.

e) Information Sources: Social media is the primary source of updated skincare information.

f) Belief in Skincare Efficacy: While some respondents are satisfied with their skincare outines, others believe that home remedies yield better results.

g) Side Effects: Acne and pimples are the most commonly reported side effects.

h) Reliance on Home Remedies: A significant portion of respondents incorporates homeremedies into their skincare routines.

<div align="center">**RESEARCH COMPENDIUM**</div>

By structuring the findings in this manner, it provides a clearer overview of the key insights gleaned from the data.

ANALYSIS

The skincare landscape among respondents reflects a diversity of concerns, routines, and beliefs. Younger individuals, primarily in their early twenties, often prioritize achieving smooth, Korean glass skin and combating acne and pimples. Their skincare routines range from multi-step regimens featuring various products to simpler approaches focused on essential steps like cleansing, moisturizing, and sun protection. Sunscreen usage varies, with some applying it occasionally and others daily, often with high SPF levels. However, concerns have been raised about certain sunscreen ingredients, such as oxybenzone, potentially acting as hormone disruptors.

Interestingly, despite reliance on skincare routines and sunscreen, many respondents still incorporate natural remedies alongside their products. Opinions on natural versus synthetic skincare products vary, with some favoring organic options for overall skin health, while others see "organic" as a marketing trend. While some prefer natural products for their gentleness, others appreciate the consistency of synthetic ones for instant results.

Respondents stay updated on skincare through various channels, including social media and recommendations from friends and family. They measure product effectiveness by observing its impact on skin texture, hydration, and acne, with consistency in results being crucial. However, negative reactions to skincare products are not uncommon, ranging from burns and breakouts to skin irritation and dryness.

Overall satisfaction with skin varies, with some experiencing fluctuations due to factors like pollution, while others feel neutral or satisfied. Efforts are made to integrate diet and lifestyle factors into skincare routines, although challenges such as economic considerations and conflicting information from advertisements and natural products persist.

Generational differences in skincare product usage are evident, with younger generations prioritizing quality and brand awareness over quantity and cost, often opting for market-based products. However, accessibility, technological advancements, and environmental concerns contribute to this shift.

CONCLUSION

In conclusion, the skincare landscape is intricate and diverse, with individuals navigating factors such as product efficacy, natural versus synthetic choices, and generational preferences. Amid these complexities, there is a shared aspiration:

the pursuit of healthy, radiant skin. This common goal united consumers across demographics, driving them to explore a range of skincare products aligned with their values and personal needs. Cosmetics play a significant role in enhancing self-image, as even small external changes can have a profound internal impact, strengthening self-perception. Marketers should craft advertisements that resonate with target consumers, tapping into their inner world of self-image and values. Additionally, product managers should tailor products and communication strategies to benefit women consumers, contributing to meaningful changes in their personalities and well-being.

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APPENDIX

Questionnaire:

Q1. What is your current skincare routine like? Please describe the products you use and the steps you follow.

Q2. What are your main skincare concern or goals? (e.g., acne, anti-aging, hydration)

Q3. How often do you use sunscreen, and what SPF level do you prefer?

Q4. What are your thoughts on the use of natural or organic skincare products compared to synthetic ones?

Q5. How do you stay updated about new skincare products or industry news?

Q6. Do you believe that diet and lifestyle factors impact skin health? If yes, how do you incorporate this belief into your skincare routine?

Q7. How do you measure the effectiveness of a skincare product? (e.g., improvement in skin texture, reduction in acne)

Q8. Have you ever experienced any negative reactions or side effects from skincare products? If yes, please describe.

Q9.How would you describe your overall satisfaction with your skin? (for this question we can analyze that despite using a fair amount of skincare products there are people that still aren't satisfied).

Q10. do you see any change in the usage of products between your generation and your parent's generation (basically to discuss about the consumerist fetishism)

Sleep Deprivation Among Students:
Exploring Patterns, Causes and Health Impacts

Authors: Aditi Burman, Nikita Singh, Kalpana Godara, Pushpanjali Kumari, Srishti Singh

Introduction

Sleep deprivation is a condition where an individual fails to get an adequate amount of sleep on a daily basis necessary for optimal functioning of the body. Oftentimes, it takes place because of an individual failing to fulfill the necessary hours of sleep on a regular basis, either due to less hours of sleep or poor sleep quality. On average, both men and women require a minimum of 7-8 hours of sleep each night to function efficiently. However, various lifestyle factors or circumstances may hinder individuals from obtaining this necessary amount, resulting in sleep deprivation.

Sleep deprivation can affect individuals of any age or gender, but it's notably present among the younger generation, particularly college students. Despite the recognized importance of adequate sleep, most of the time college students struggle to maintain a healthy sleep cycle because of multiple factors. Most of the time sleep becomes a casualty, which is often sacrificed for academic pursuits, deadlines, extra curricular activities, social engagements, etc.

The importance of sleep cannot be overlooked, an adequate amount of sleep is necessary for optimal and proper functioning, emotional regulation, and physical well-being . The consequences of sleep deprivation just not lead to mere fatigue but have serious physiological, psychological repercussions that can hinder an individual's overall well being as well as academic or any other performance as well. Inadequate amounts of sleep has been linked to heightened levels of stress, anxiety and depression, which are some of the most common mental health challenges faced by college students. The importance of sleep for academic performance cannot be overlooked. Sleep plays a crucial role in cognitive

processes such as attention and memory, which are essential for effective learning and good academic performance. In addition to academic performance, lack of proper sleep has also been linked with negative impact on cognitive performance, resulting in decreased attention span, reduced problem solving abilities as well as overall physical health, weakening the immune system, disrupting metabolic processes resulting in increased risk of chronic health conditions such as obesity, diabetes and cardiovascular problems.

This research paper examines the complex interplay between insufficient sleep and various aspects of student life, focusing on physical health, mental well-being and academic performance. The paper draws insights from multiple case studies to offer a comprehensive understanding of different challenges and experiences of college students. By exploring various perspectives and scenarios this research paper aims to shed light on various aspects and factors leading to sleep deprivation and its mpact on academic performance and student life.

Keywords: Sleep deprivation, College students, Academic impact, Lifestyle, Sleep quality, Physical and mental well being

RATIONALE

The consequences of sleep deprivation extend beyond academic performance, impacting students' physical health, mental well-being, and overall quality of life. Chronic sleep deprivation among college students is associated with a myriad of negative outcomes, including decreased cognitive function, impaired memory consolidation, heightened stress levels, and increased risk of mental health disorders such as depression and anxiety.

Furthermore, sleep deprivation undermines students' ability to effectively manage their academic responsibilities, leading to reduced productivity, lower grades, and academic underachievement. Additionally, the impact of sleep deprivation extends beyond the individual student, affecting campus communities through decreased engagement, impaired social interactions, and heightened risk of accidents and injuries.

Addressing sleep deprivation among college students requires a comprehensive and multifaceted approach, encompassing educational initiatives, institutional support services, and individualized interventions. By recognizing the significance of sleep deprivation and implementing evidence-based strategies to promote healthy sleep habits and prioritize self-care, colleges and universities can support students' academic success, enhance their overall well-being, and foster a culture of student flourishing and resilience.

Addressing sleep deprivation among college students requires a comprehensive and multifaceted approach, encompassing educational initiatives, institutional support services, and individualized interventions. By recognizing the significance of sleep deprivation and implementing evidence-based strategies to promote healthy sleep habits and prioritize self-care, colleges and universities can support students' academic success, enhance their overall well-being, and foster a culture of student flourishing and resilience.

PROBLEM STATEMENT

Sleep deprivation among college students poses a significant challenge to their academic success, personal well-being, and overall quality of life. The experiences of the subjects of the case studies exemplify the detrimental effects of inadequate sleep on students' physical health, cognitive function, and emotional resilience. Despite their dedication and ambition, the subjects struggled with exhaustion, reduced academic performance, and compromised mental health due to chronic sleep deprivation. These cases highlight the urgent need to address sleep deprivation as a prevalent and serious issue affecting college students.

METHODOLOGY

Selection of Participants: participants were deliberately chosen from the 18-24 age group, focusing on college students due to their shared experiences of academic stress and lifestyle changes that often contribute to sleep deprivation. The selection criteria also aimed for diversity in demographics and occupations to capture a broad range of perspectives. Referrals were primarily used for recruitment, fostering trust between researchers and participants.

Data Collection:To gather rich and detailed insights into participants' experiences with sleep deprivation, a qualitative approach was employed. Participants were asked to personally document their experiences, allowing them to articulate their thoughts, feelings, and behaviors in their own words. This method enabled researchers to capture nuanced aspects of sleep deprivation that may not be easily quantifiable or observable through standardized measures. Additionally, by providing the freedom to include important details and contextual information, the data collection process aimed to uncover the multifaceted nature of sleep deprivation experiences among college students.

Ethical Considerations: Ethical guidelines were strictly followed to protect participants' rights and well-being. This included obtaining informed consent, ensuring confidentiality, and allowing participants the freedom to withdraw from

the study at any time. Efforts were made to minimize risks and discomfort, and support services were offered to participants experiencing distress.

Limitations:

Despite efforts to ensure rigor, the study has limitations. Reliance on self-reported data introduces the possibility of bias, and the small sample size may limit the generalizability of findings. Additionally, the qualitative nature of the study restricts the ability to draw quantitative conclusions or establish causal relationships. However, qualitative research provides valuable insights into participants' lived experience.

Literature Review

Sleep deprivation among college students is a pressing concern with significant implications for academic performance and overall well-being. Zhang et al. (2020) highlighted the importance of longer rest days and catch-up sleep in aiding adults in recovering from moderate sleep loss on workdays. For students, maintaining a consistent sleep schedule on workdays may facilitate adequate rest, allowing for more relaxation on rest days. However, ensuring a minimum of 7 hours of sleep, both on weekdays and rest days, remains crucial for optimal functioning.

Stress and persistent thoughts before bedtime can significantly impact sleep quality, as noted by Almojali et al. (2017). Their findings suggest that students experiencing lower stress levels are less likely to encounter sleep problems. Conversely, Benham (2021) observed that students tend to stay up late and wake up late, potentially compromising their sleep duration despite the appearance of adequacy.

The significance of regular sleep-wake cycles in academic performance is highlighted by Curcio, Ferrara & De Gennaro (2006), who found that students with more consistent sleep patterns report higher GPAs. However, sleep deprivation can have detrimental effects on various cognitive functions and emotional well-being. Besoro (2018) noted that sleep-deprived students often experience lower attention levels, reduced working memory, heightened emotional reactivity, and depression. Moreover, insufficient sleep impairs decision-making abilities and increases irritability and stress levels.

Hershner & Chervin (2014) underscored the negative impact of sleep deprivation on academic performance, highlighting a decline in students' ability to recognize assumptions and deductions necessary for success. Total sleep deprivation can significantly impair cognitive functions critical for learning and problem-solving, ultimately hindering academic achievement.

In conclusion, sleep deprivation poses significant challenges for college students, affecting not only their academic performance but also their cognitive functioning and emotional well-being. Addressing sleep-related issues through interventions aimed at promoting healthy sleep habits and managing stress levels is crucial for enhancing student well-being and academic success.

CASE STUDIES

CASE STUDY 1
Name: Vidhi
Age: 21 years
Pronouns : She/They
Occupation: Student
My name is Vidhi (she/they), and I am a 21-year-old senior pursuing an honors degree in sociology. With aspirations for post-graduate studies, my schedule is packed with early morning classes, internship commitments, and rigorous exam preparations. Despite my ambition, I find myself caught in a relentless cycle of sleep deprivation.
I struggle with a myriad of symptoms associated with sleep deprivation. Severe exhaustion hits me particularly hard during early morning lectures, often resulting in drowsiness and a reduced attention span. To compensate, I sacrifice sleep at night to catch up with my syllabus, complete assignments, and prepare for upcoming exams. However, this pattern only worsens my fatigue, leading to diminished cognitive function and heightened stress levels.
This sleep deprivation not only affects my academic life, as I struggle to maintain focus and productivity, but also has a huge impact on my social life. Moreover, my physical health has deteriorated; I experience frequent headaches, gastrointestinal issues, and weakened immunity.

CASE STUDY 2
Name: Kaavya
Age: 20 years
Pronouns : She/They
Occupation: Student
My name is Kaavya (she/they), a 20-year-old university student majoring in computer science. Juggling a heavy course load, part-time job, and extracurricular activities, I sacrificed sleep to meet deadlines. As a result, I

experienced fatigue, irritability, poor memory, decreased performance, and physical health issues. Despite my best efforts, my academic performance suffered. Recognizing the seriousness of the situation, I sought help from my university's counseling center. Through counseling and adjustments to my schedule, I began prioritizing sleep and self-care. Establishing a regular sleep schedule and practicing relaxation techniques improved my sleep quality, leading to increased energy levels, stabilized mood, and improved academic performance.

An intriguing detail in my case was my reliance on a unique "study fortress" - a makeshift fort of blankets and pillows in my hostel room. This fortress, while initially a cozy retreat for late-night study sessions, became symbolic of my struggle to balance academic demands with self-care.

My journey underscores the profound impact of sleep deprivation on academic success and well-being. By acknowledging the problem, seeking support, and making lifestyle changes, I overcame sleep deprivation and regained control of my academic and personal life. This case highlights the importance of prioritizing sleep and practicing self-care in high-stress environments like university.

CASE STUDY 3
Name: Pramanik
Age: 22 years
Pronouns : He/Him
Occupation: Student

My name is Pramanik, a 22-year-old studying computer science. I'm under a lot of pressure to secure a good job while managing tough projects, assignments, and a long-distance relationship. All this leaves me feeling really stressed and tired, with hardly any time for myself. I stay up late studying and coding, which makes me even more anxious.

I find it hard to balance my studies with taking care of myself. I often wonder if there's any time left for me amidst all this pressure. My situation is something many engineering students face nowadays. To feel better, I need to learn to take care of myself first. Getting help from mentors, managing my time well, and taking breaks to relax could make my university life more enjoyable and less stressful.

Because of all this pressure and lack of sleep, I'm getting constant headaches, feeling totally exhausted, and having trouble with my diet, which is making me gain weight. The stress, long hours of studying, and not enough sleep are really

taking a toll on my body and mind. The headaches make it hard for me to focus and do well in my studies. Feeling so tired all the time makes it tough for me to stay motivated to eat healthily or exercise. My health is getting worse, and I'm showing signs of both poor nutrition and obesity. It's clear that the mix of not enough sleep and too much academic pressure is hurting not just my studies but also my overall well-being. It's really important for me to reach out for help and start taking better care of myself to do well in the future.

CASE STUDY 4
Name: Pranav Chhabra
Age: 20
Sex:Male
Pronouns:He/him
Occupation: Student
I am Pranav Chhabra, a 20-year-old student pursuing a bachelor's degree in chemistry at the University of Delhi. I have migrated to New Delhi to continue my education and currently reside in a rented room. Being away from home, I have several responsibilities in addition to my academic duties, which sometimes seem overwhelming and occasionally affect my sleeping habits.
My day usually begins at 7 A.M. since my classes start at 8:45 A.M. After attending my lectures, I return home by 4 P.M. and then cook my lunch. In the evening, I often take a two-hour nap and then complete my coursework until 11 P.M. Sometimes, instead of napping, I go out to meet friends. After finishing my studies, I still have to attend to other responsibilities like laundry, cleaning, and washing dishes. My bedtime usually doesn't go beyond 1 A.M. on most days.
I understand the importance of a good sleep schedule and try to get at least six hours of sleep.
However, during exams, my sleep schedule is adversely affected. The stress of exams and assignments often keeps me up all night, leaving me with no more than four hours of sleep. Even when I'm not burdened by exams, the endless deadlines and lab work make it extremely difficult to maintain a healthy sleep schedule.
Lack of sleep has left me with dark circles under my eyes and frequent fatigue. I also experience irritation in my eyes and frequent headaches. I feel that I am in a better mood when I sleep well and can focus much better. Sleep deprivation makes me much more irritable.Sleep deprivation has significantly affected my ability to concentrate and has made me participate less in class. This ongoing

struggle with maintaining a healthy sleep schedule is taking a toll on both my academic performance and overall well-being.

CASE STUDY 5

Name: Priyanka

Age: 21

Occupation: Student

Sex: Female

I believe that the sleep deprivation I faced was because of a failed relationship or a bad breakup. It did traumatize me inside out. My partner and I were from different castes and our parents would never have accepted our relationship. Things got complicated because of family, caste etc.; and we ended up breaking up. Due to the increased stress, sleeplessness started occurring. I was only able to sleep for 2-3 hours a day. My mental health was badly affected and I started taking therapies.

My performance in my studies had degraded. I did lose weight, had dark circles, became addicted to alcohol. It's been three months of the bad phase and now I have started taking care of myself by exercising regularly, meditating and keeping myself occupied with work to channelize my energy. I do take 6-8 hours of sleep to keep up with the pace; and hitting the gym daily is helping me out to improve my sleep quality.

ANALYSIS

Sleep Deprivation is one of the most common problems that a lot of people are facing today. This research paper focuses on the students of Delhi University mainly and elaborates upon the reasons and the problems that's highlighting this concern. With the help of the 5 case studies delving into different areas of society, this complex dynamicity of the relationship between sleep deprivation and the juggling problems are looked at.

In the first case study of Vidhi, the sleep deprivation has been caused due to the rigorous academic pressure that she has been facing. In the race of multi-tasking and competing in the hum-drums affairs of the city life, she has been pressurized all in all by the social structures, thereby clearly highlighting the point that sleep deprivation is not an individual phenomena and shouldn't be studied in isolation. It's deeply rooted in the society's way of organising and functioning.

The second case study on Kaavya also puts forth a similar point that it is the multitasking and the pressure to excel in the academic sphere which hampers the

mental stability and the productivity of an individual. Therefore, the analysis clearly shows that the social settings define the productivity of an individual. It also aligns with the theory of functionalism that how society is more than the sum of its parts and society has its way of imposing coerciveness upon all individuals.

The third case study of Pranav highlights the reasons for sleep deprivation caused primarily due to migration. In contemporary times, temporary or permanent migration has been a frequent phenomena which can increase anxiety, sleeplessness in a new life. Alongside, handling the academic base often becomes challenging. Migration not just is an imposed phenomenon by the society to meet the needs and wants of the individual but also a way to align the dominance of the social environment on the individual. Thus, migration was one of the reasons which causes sleep deprivation among the individuals as well. Pranav has been facing the consequences of migration throughout.

The fourth case study focuses on Pramanik's hunt for unemployment as a reason for sleep deprivation. Unemployment, which is a pathology prevalent in society, is responsible for sleep deprivation among youths. It's a deviance and any deviance occured in society does have a subtle impact on the schedule and habitat of the individual. It's social and the psychological environment does get impacted.

The fifth case study of Priyanka narrates that sleep deprivation can also be due to heartbreaks or a failed relationship. Such relationships usually have a reason that their mutual interests are not in sync with the social arrangements or social settings. It can be due to caste, class or any differences. Thus, sleep deprivation shares an intricate link with society and is not an isolating phenomenon.

Analyzing sleep deprivation and its impact on an individual did have similar consequences. It leads to frequent headaches, gastrointestinal issues, weakened immunity, fatigue, irritability, poor memory, decreased performance, productivity, poor nutrition and obesity. Besides that, it also hampers the overall psychological capacity of an individual to think, to work, to focus. However, certain techniques like 'study fortress' as in case of Vidhi, meditation, exercising etc. did help a lot.

Therefore, sleep deprivation is more inclined towards an analysis from a sociological perspective rather than immersing in a biological lens.

RESEARCH COMPENDIUM

CONCLUSION

Sleep deprivation is a sociological problem rather than a biological one. It has originated within the society owing to the social patterns, social arrangements or social deviances. Sleep deprivation in an individual cannot be dealt with in isolation. Owing to multiple reasons like migration, unemployment, social structures like caste system, class differences, race, ethnicity etc.; sleeplessness has become a common problem among many people. It is not just limited to personal trouble; rather , it has become a public issue. Certain special techniques like 'Study Fortress' etc. are some of the ways which reduce sleep deprivation. Thus, it can be concluded that sleep deprivation can be considered not just as a biological pathology but also a social one.

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Social Media Affects our Mental Health

Authors: Rashi, Prachi Panwar, Azme Zehra, Deepali Meena, Susmita Das

Introduction

The reason we struggle with insecurity is that we compare our behind-the-scenes with everyone else's highlight reel." – Steven Furtick.

The rise of social media platforms in recent years has completely changed how people interact, share information, and see themselves and others. While social media has many advantages like connecting people and exposing them to different viewpoints, its effect on mental health is causing a lot of concern.

One major way social media affects mental health is by creating unrealistic standards and comparisons. Platforms such as Instagram and Facebook often show only the best parts of people's lives, leaving out the struggles and imperfections. Seeing these perfect images all the time can make individuals feel like their own lives are not good enough, leading to feelings of insecurity and low self-low self-esteem.

Also, the constant stream of notifications and updates on social media can make people feel stressed and anxious. The fear of missing out (FOMO) drives many people to keep checking their feeds, which can disrupt their sleep and make them even more anxious. Moreover, there is pressure to maintain a certain image online, which can make people feel socially isolated and disconnected from their real-life experiences.

Social media has also been linked to an increase in cyberbullying and online harassment, which can have severe effects on mental well-being.

Rationale

The objective of the project was to highlight how social media affects our mental health among the age group (15-25). As we live in a modern world where the use of technology like social media is very common. As these groups of people are prone to social media. The research investigated how teenagers on social media spend much of their time observing the lives and images of their peers. This leads to constant comparisons, which can damage self-esteem and body image, exacerbating depression and anxiety among adolescents; the impact of social media on youth can be significantly detrimental to mental health. The study also addressed the challenges that people face due to social media like Social media use exposes teens to cyberbullying, body image issues, and tech addiction, and results in less time spent doing healthy, real-world activities. Moreover, the addictive qualities of social media can prime the brain for addiction to substances.

Body image is one primary area in which teen social comparison leads to negative emotions—not only for teen girls, but for all genders. When teens compare themselves to curated and filtered photographs of their peers and of celebrities, they often feel inferior. This can lead to lower self-esteem and negative body image. In addition, social media use has also been linked to a higher risk of eating disorders and disordered eating behaviors in both girls and boys. The study also addressed the psychological effects of Social media on youth like:Inadequate sleep—teens stayed up late to continue scrolling through their social media feeds Exposure to cyberbullying—having harmful, false, or private content about them posted on social media.

Lack of physical activity—scrolling social media on their phones or other devices meant that teens sat for longer periods of time and had less time for exercise. As a result, they missed out on the beneficial impact of exercise on mental health.

STATEMENT OF THE PROBLEM

The increasing popularity of social media has sparked worries regarding its effects on mental well-being. Despite providing avenues for connection and self-expression, these platforms foster environments where comparison and feelings of inadequacy thrive. This investigation intends to delve into how social media usage relates to mental health outcomes. By analyzing how people present themselves and compare on these platforms, this study aims to uncover potential mechanisms by which social media impacts mental wellness."

RESEARCH COMPENDIUM

For example- Particularly among children and adolescents, these platforms offer opportunities for connection and self-expression, they also create environments conducive to comparison and feelings of inadequacy. For example, children often feel pressure to showcase curated versions of their lives, emphasizing achievements, appearance, and experiences, which can exacerbate feelings of inadequacy when comparing themselves to their peers.

METHODOLOGY

The methods we used in our research includes Surveys and questionnaires, it constitutes a vital tool in our research arsenal, facilitating the systematic gathering, analysis, and interpretation of data from a wide spectrum of individuals. These instruments enabled the collection of quantitative data pertaining to individuals' behaviors, impact and perceptions concerning their mental health caused by increased usage of Social Media. By crafting a Google Form encompassing diverse inquiries regarding the effects of Social media in our lives we disseminated the survey among participants, yielding approximately 40 diverse responses. This methodology furnished us with statistical insights, enabling the derivation of findings that could be generalized to broader populations.

Research Question
Do you feel pressured to present a perfect image of yourself on social media?
Have you ever compared your life to others on social media?
Do you think social media affects your self esteem?

LITERATURE REVIEW

The use of social media significantly impacts mental health. It can enhance connection, increase self-esteem, and improve a sense of belonging. But it can also lead to tremendous stress, pressure to compare oneself to others, and increased sadness and isolation. Mindful use is essential to social media consumption.

Social media has become integral to our daily routines: we interact with family members and friends, accept invitations to public events, and join online communities to meet people who share similar preferences using these platforms. Social media has opened a new avenue for social experiences since the early 2000s, extending the possibilities for communication.

RESEARCH COMPENDIUM

In today's world, many of us rely on social media platforms such as Facebook, Twitter, Snapchat, YouTube, and Instagram to find and connect with each other. While each has its benefits, it's important to remember that social media can never be a replacement for real-world human connection. It requires in-person contact with others to trigger the hormones that alleviate stress and make you feel happier, healthier, and more positive. Ironically for a technology that's designed to bring people closer together, spending too much time engaging with social media can actually make you feel more lonely and isolated—and exacerbate mental health problems such as anxiety and depression.

The earlier teens start using social media, the greater impact the platforms have on mental health. This is especially true for females.While teen males tend to express aggression physically, females do so relationally by excluding others and sharing hurtful comments. Social media increases the opportunity for such harmful interactions.

In the past, teens read magazines that contained altered photos of models. Now, these images are one thumb-scroll away at any given time. Apps that provide the user with airbrushing, teeth whitening, and more filters are easy to find and easier to use. It's not only celebrities who look perfect—it's everyone.

Social media is more and more addictive among teenagers. Excessive use of it has been referred to as behavioral addiction, which is defined as one's inability to avoid being online to the point where it impacts on other areas of his or her, including relationships, emotions, social life, school, and so on . It is also recognized that there are different forms of addiction based on the type of Internet activity, for example, downloading, forming, online relationship, compulsive shopping, accessing gaming. Psychologists have confirmed that playing violent video games is linked to aggressive and callous behavior. In fact, there have been institutions that have created a psychological scale to measure that addiction. Symptoms, like people assessing sites like Facebook and Twitter to forget about their personal problems, are spending a lot of time thinking about how to use social media. It indicates that there is an issue.

A study showed that children who go on social networking sites like Facebook, Twitter and Instagram for more than three hours a day or more are likely to have mental health problems. Such as children risk their emotional and social development being delayed as they spend so much time in the virtual world. The pressure of "always to be perfect and" the overwhelming urge to respond immediately to the text and posts results in anxiety and a sense of missing out. The worst thing about this is teenagers

need more sleep than adults, do so night time social media use could be determined to their health. Online bullying, slut shaming etc. which are by products of excess use of the Internet are hampering physical and emotional health of young people and our century.

One study looked at how we make comparisons to other posts in upward or downward direction, that is feeling that we are either better or worse off than our friends. It turned out that both types of comparison made people feel worse, which is surprising, as in real life only upward comparison (feeling another person has it better than you) makes people feel bad. But in the social media network world, it seems that any kind of comparison is linked to depressive symptoms.

FINDINGS/ DATA ANALYSIS

The total number of responses that we got are 49 within the age bracket of 15-25 years. On analyzing the responses of our questionnaire, we observed that social media does affect mental health.

A substantial percentage of people(61.2%) at some point of their life delete their posts due to the fear of criticism or judgment. Majority of the respondents feel that social media usage interferes with their abilities to focus on tasks or responsibilities. Only 28.6 respondents feel that using social media doesn't make them feel anxious. Rest of the respondents feel that social media in some way or the other causes anxiety among them. This anxiety may be due to the decline in their abilities to focus on tasks or responsibilities. Other forms in which anxiety on social media can come in are- from fear of missing out (FOMO) to comparison with others, cyberbullying, or even the pressure to present a perfect image online.

This may impact their ability to socialize with others and fulfill their tasks, which ultimately may cause mental stress and lack of self-confidence .

Moreover, a significant number of people compare themselves to others on social media which may lead to self doubt.

Also, out of 49 respondents, 34 respondents use social media before going to bed which really disturbs their sleep cycle and daily activities. This ruins their mental health as well. Even after a long duration of a busy schedule during the whole day, they feel the necessity to use social media due to the fear-of-missing-out (FOMO) or they find social media a way of escapism from the stressful life. Actually, it further ruins their mental health.

None of the respondents are in complete denial of the impact of social media on mental health.

RESEARCH COMPENDIUM

CONCLUSION

Thus we can conclude that while some participants may not alter their social media content out of fear of criticism, the broader impact of social media on mental health and well-being is substantial. The data indicates that excessive social media use can disrupt sleep patterns and impede daily tasks, suggesting a negative influence on overall productivity. Additionally, feelings of anxiety, stress, and occasional self-esteem issues are common among users, implying that social media can worsen mental health challenges for certain individuals.

Moreover, while opinions differ on how social media affects academic performance and productivity, there is a general consensus among respondents regarding its predominantly negative impact on mental health. This agreement underscores the necessity for interventions and strategies to mitigate the adverse effects of social media on well-being.

In conclusion, these findings underscore the intricate and diverse nature of the link between social media usage and mental health. Further investigation is needed to explore additional contributing factors and to devise targeted interventions aimed at promoting positive mental health outcomes within the realm of social media usage.

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Youth in Smoke:
Unveiling the effects of smoking in young adults

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INTRODUCTION

Smoking, which refers to the act of inhaling and exhaling the fumes of a burning plant material, may consist of hashish, marijuana or tobacco which is smoked via a cigarette, pipe or cigar. This can lead to an addictive effect which is both tranquillising and psychostimulating in nature. Despite the prevalence of many socio, religious and medical arguments against the same cause, there has been a prevalence of smoking behaviour throughout the society. Earlier, in the day, there had been arguments which fostered for the use of tobacco as it led to mood enhancements, helped through boredom and improved concentration as well. However, by the 21rst century, due to the increase in the deaths related to cigarette consumption, the earlier arguments started to stand in stark contrast as the new vision built up the fact pertaining to how tobacco is not only highly addictive but also a negative and devastating cause of death and disease. The primary constituents of tobacco holds to be:

A. NICOTINE
B. TAR
C. CARBON DIOXIDE
D. CARBON MONOXIDE

The harmful effects which are emitted from the inhaling of the smoke are not only limited to the person but rather are also emitted under the environment which they are smoked in leading to the contamination of the surroundings as same as it embarks the entity of "Passive Smoking" or "Second hand Smoke". In accordance to the NATIONAL CENTER For HEALTH STATISTICS, a few of the keywords in order to classify the Types of Smokers exist as the following:

1. CURRENT SMOKER: it refers to the individual who has smoked 100 cigarettes in their lifetime and who continues to smoke. They were earlier also called the Everyday smoker.
2. FORMER SMOKER: refers to the individual who has smoked 100 cigarettes in their lifetime but they had quit smoking at the time of their interview.
3. NEVER SMOKER: it refers to the individual who has smoked less than 100 cigarettes in their lifetime or has never smoked any.
4. SOMEDAY SMOKER: it refers to the individual who has smoked less than 100 cigarettes who even smokes now but does not smoke everyday.
The smokers as such, could be further classified into:
1. CASUAL SMOKERS: they are those who only smoke when socialising with their friends or in the social settings, they do not consider themselves to be smokers because they only smoke casually. They are also referred to as the social smoker, they believe that they cannot get addicted to smoking because of their ability to control
their need to smoke.
2. MODERATE SMOKERS: they consume on an average 1-2 cigarettes everyday and smoke mainly because of their stressful conditions. It has been argued that in comparison to the casual smokers, the moderate smokers stand a better chance to quit smoking because of their ability to admit that they are under the influence of smoking.
3. CHAIN SMOKERS: these are those individuals who continue to smoke one cigarette after the other. They find it very hard to quit smoking mainly because they have been smoking for a very long time now.
 The adolescent development is in itself marked by the peer pressure that may arise from various spheres. This can also lead to the persistence of the risk taking behaviour in terms of substance abuse which is marked in those who start smoking before the age of 18. This phase becomes more extraneous for the high school and university students where the atmosphere for them is in itself marked by high stress. Peer pressure thereby becomes widely recognized by Early Experimentation with Tobacco and their willingness to continue smoking. Factors which further contribute to continued use of tobacco includes being a male who drinks alcohol or having friends who drinks alcohol or having friends who are older in age and who continue smoking. According to the European Respiratory Journal 88.2% of adolescents have tried smoking in the presence of their friends. Thereby, there seems to be a strong correlation between the smoking attitude of their adolescents and their friends.

RESEARCH COMPENDIUM

People interpret health effects into two distinct categories: effects on quality of life and effects on mortality risk. These impacts function differently and over varying time periods to affect the person's well-being. The short-term, quality-of-life consequences (such as coughing and decreased cardiovascular fitness) combine with smoking and other consumption in its instantaneous utility function to directly impact the person's current well-being. People find it more difficult to understand the higher mortality risks linked to their smoking habit than the effects on their quality of life. While an individual's observable health status undoubtedly tells us something about the possibility of future health outcomes, other factors, like smoking history, may also influence an individual's chance of developing lung cancer. A common characteristic of many cancer kinds is that they do not show symptoms that would indicate a patient needs to visit a physician until the illness has progressed past the point at which treatment is straightforward.

Centre for Disease Control and Prevention notes that compared to nonsmokers, smokers have a higher risk of lung cancer, heart disease, and stroke. It also has specific biological impacts on the two sexes

Smoking may hinder a woman's ability to conceive. Additionally, it may have an impact on the health of her unborn child. Smoking raises the possibility of:

● Low birth weight
● Preterm (early) delivery
● Stillbirth (baby dies before birth)
● Ectopic pregnancy
● Orofacial clefts in infants
● Sudden infant death syndrome (SIDS).

Smoking can also affect men's sperm, which can reduce fertility and increase risks for birth defects and miscarriage. Smoking can harm one's bones. Smoking women who are past childbearing age have weaker bones than non-smoking women. They also run a higher chance of suffering a broken bone.

Both society and the smoker themselves can be impacted by how others view smokers. Perceptions of smokers may be a significant factor in shaping public opinion towards smoking at the societal level, which in turn influences smoking rates. For instance, Kim and Shanahan (2003) discovered that the smoking rate was lower in states where the majority of people had strong anti-smoking sentiments (including social rejection of smokers). Impressions of specific smokers may have an impact on people's general impressions of smokers, which may have an impact on smoking behaviour and willingness to smoke.Therefore, smokers are generally seen as having undesirable social and personality traits, and others tend to report having fewer favourable contacts with them but it is also subject to demographic and the age group being taken into account as a certain age group might find it cool to smoke while others might have different opinions.

RESEARCH COMPENDIUM

RATIONALE

The rationale for conducting a sociological research paper on the effects of smoking consumption stems from the profound impact that tobacco use has on individuals, communities, and society as a whole. Despite widespread knowledge of the detrimental health consequences associated with smoking, many individuals continue to consume tobacco products at alarming rates. This persistent behaviour not only strains healthcare systems but also perpetuates a cycle of illness and suffering. One of the primary motivations for investigating the effects of smoking from a sociological perspective is the recognition that smoking is not solely a personal choice but is deeply influenced by social, cultural, and economic factors. Sociological research aims to uncover the underlying mechanisms driving smoking behaviour, including social norms, peer influence, marketing tactics, and socioeconomic disparities. By understanding these factors, researchers can develop targeted interventions and policies to reduce smoking prevalence and mitigate its negative consequences.

Furthermore, the health impacts of smoking extend far beyond respiratory tract infections and breathing difficulties. Numerous studies have established a clear link between smoking and a wide range of physical diseases, including cardiovascular disease, cancer, and respiratory disorders. Moreover, smoking has been shown to have detrimental effects on mental health, contributing to increased rates of depression, anxiety, and substance abuse disorders. By examining the multifaceted health implications of smoking, sociological research can provide a comprehensive understanding of the challenges posed by tobacco use. Importantly, a sociological approach to studying smoking goes beyond individual health outcomes to consider broader societal implications. Smoking-related illnesses impose a significant burden on healthcare systems, leading to increased healthcare costs, decreased productivity, and diminished quality of life for affected individuals and their families. Additionally, smoking exacerbates health inequalities, disproportionately affecting marginalized communities and exacerbating existing social disparities.

In conclusion, the rationale for undertaking a sociological research paper on the effects of smoking consumption lies in the need to deepen our understanding of the complex social dynamics surrounding tobacco use and its profound impacts on health and society. By conducting in-depth qualitative investigations, researchers can shed light on the underlying causes of smoking behaviour and develop evidence-based strategies to promote smoking cessation and improve public health outcomes.

RESEARCH COMPENDIUM

STATEMENT OF THE PROBLEM

Smoking continues to be a major global public health issue with far-reaching effects on both people and society at large. Even though a lot of research has shown how bad smoking is for your health, there is still a need for a complete integrated study that looks at all the different aspects of smoking's negative consequences. First and foremost, research on the physiological impacts of smoking on the human body is desperately needed. Even while it is commonly known that smoking is a major risk factor for avoidable illnesses like heart disease, lung cancer, and chronic obstructive pulmonary disease (COPD), there is still much to learn about the exact mechanisms by which smoking causes these conditions. For the purpose of creating efficient preventative and therapeutic plans, it is essential to comprehend the complex interactions between smoking and physiological functions.

Moreover, a deeper investigation of the psychological components of smoking addiction is necessary. Nicotine addiction is a complicated condition that is impacted by behavioural, environmental, and hereditary variables. Investigating the psychological processes that underlie the beginning, maintenance, and cessation of smoking can yield important insights
for creating therapies that are specifically suited to assist smokers in quitting and avoiding relapse.

Men and women smoke in different ways for biological reasons. These biological distinctions could be attributed to variations in nicotine metabolism, hormonal impacts, and neurological reactions to smoking. Gender-specific smoking patterns are also greatly influenced by psychological variables as stress, coping strategies, and social norms. Besides, it is impossible to ignore the effects smoking has on society and the economy. Smoking has a substantial negative influence on healthcare systems, economics, and human health across the globe. Moreover, differences in the incidence of smoking and its effects among various demographic groups highlight the necessity for a thorough comprehension of the social factors that influence smoking habits.

The socioeconomic level, education, cultural norms, and marketing tactics are some of the key factors that influence smoking patterns and effects. A sophisticated strategy that considers the many relationships between societal, interpersonal, and individual factors is needed to address these inequities. Lastly, there are new potential and challenges in the fight against smoking-related harm due to the introduction of novel tobacco products including e-cigarettes and heated tobacco products. To assess these substitute products' impact on health and whether they can help people quit smoking or act as gateway medications for traditional tobacco use, more research is required. It takes an integrated approach that takes into account physiological, psychological, social, and economic viewpoints to fully

comprehend smoking and its repercussions.

METHODOLOGY

In Social Science research, methodology is the essential part of research to attain the objectives.The methodology describes the step to step procedure, i.e., the objectives of the study , universe of the study, data collection method for the study, analysing technique of the research. Study was conducted amongst the youth adults of Delhi, to make the present study scientific, unbiased and logical following methodology was adopted. In order to focus on the important aspects, the scope and the field of study will be limited respondents and constrained the study. Questionnaire method was used. A total of 20 respondents were taken. Questionnaire was given to those who are smokers on a daily basis.

Survey research is a methodology commonly used in social science research to gather information from a sample of individuals about their opinions, behaviours, attitudes, beliefs, or other relevant characteristics. It involves designing a set of questions, administering them to a selected group of respondents, and then analysing the responses to draw conclusions or make inferences about the broader population. Here the sample size is of 20 respondents taken from the age group 18-25, who are daily smokers. The data Collection Method used here is Survey where we have used an online questionnaire method through google forms. For the questionnaire design, we have included both a mix of Close ended and open ended questions so that the research is unbiased, clear and remains relevant. Open-ended questions are questions that do not have a specific set of predefined answers. Instead, they allow respondents to freely express their thoughts, feelings, and experiences in their own words. Such kinds of questions have been used in our research to help achieve extra knowledge on the reasons behind some effects. Closed-ended questions are questions that provide respondents with a set of predetermined answer options to choose from. We have used these questions to get specific information and to measure attitudes, behaviours or preferences.

Once the Data is collected we have done data analysis to show the effects of smoking on individuals.

 Quantitative data in the methodology of social science research refers to numerical information that can be measured and analysed statistically.Quantitative data typically includes variables such as age,gender, education level, numerical ratings, counts, and percentages. This type of data allows researchers to quantify relationships between variables,test hypotheses, and make predictions, for us to achieve the statistics, we have opted for questions that include numerics, and those which can help us achieve a percentage through the responses.

To also achieve Qualitative data and get an in-depth understanding of the study we

opted for an interview method where we collected data through group discussions and general questions which are not pre decided/ pre framed questions, this method is called Unstructured interviews. This helped us gain insights into participants' thoughts, feelings, and experiences. For us to achieve complete objectivity was difficult due to the complexity of human behaviour and societal phenomena yet achievable. To minimise subjectivity we used rigorous methods such as using standardised questionnaires, statistical analysis, peer review,etc.

While undertaking a mixed analysis, Mixed methods analysis in research methodology involves integrating quantitative and qualitative data to gain complementary insights into a research topic. This approach combines statistical analysis of quantitative data with in-depth understanding from qualitative data, employing triangulation to validate findings. It can be implemented through sequential or concurrent designs, with data transformation techniques used to facilitate integration. Widely applied in social sciences, education, and healthcare,mixed methods analysis offers a flexible and powerful approach to conducting comprehensive investigations, leveraging the strengths of both quantitative and qualitative research methods.

However, we might agree that some degree of subjectivity may still exist. By incorporating Reflexivity such as keeping reflective journals, conducting member checks with participants to validate interpretations, seeking diverse perspectives, and engaging in peer debriefing or critical discussions with colleagues to challenge assumptions and interpretations we were able to enhance the credibility, validity, and reliability of our findings while contributing to a deeper understanding of the complexities and nuances within this research topic. Lastly we ensure to keep a check of all ethical considerations important while conducting a research,
like informed consent, privacy and confidentiality, no conflict of interests, etc, thereby respecting the rights and well being of our respondents..

LITERATURE REVIEW

Harmful health effects of cigarette smoking by Salil K. Das
This research by Salil K. Das provides us with a comprehensive review of the harmful health effects of cigarette smoking. Tobacco smoking is an epidemic that reduces life expectancy and increases medical costs. It is linked to various neurological disorders like depression,stroke, Parkinson's and Alzheimer's disease. Smoking causes cardiovascular diseases such as myocardial infarction, coronary heart disease, type 2 diabetes, and hypertension. It adversely affects pulmonary function leading to chronic obstructive pulmonary diseases like chronic bronchitis and emphysema. Smoking increases asthma prevalence and exacerbates symptoms, especially in children exposed to environmental tobacco smoke. Cigarette smoke contains carcinogens that increase lung cancer risk. Smoking triggers biochemical defence

mechanisms against toxic compounds and reactive oxygen species. However, it impairs these defences over time, contributing to lung cancer development. Passive smoking also increases lung cancer risk. Overall, smoking is a major preventable cause of morbidity and mortality worldwide that requires stringent tobacco control measures.

Smoking: what does culture have to do with it?" by Nichter
This paper delves into the intricate relationship between smoking behaviour and cultural influences. It emphasizes the importance of considering culture not only in terms of ethnic differences but also in the context of social and economic factors. The document highlights the dynamic nature of ethnic identity, which can be assumed or distanced based on social and political affiliations. It stresses the neefor researchers to explore the interaction between culture, social contexts, and tobacco use.

Furthermore, it discusses how smoking behaviours are intertwined with cultural norms,gender roles, and aesthetics. It underscores the role of popular culture and the advertising industry in shaping smoking practices, particularly among youth. Consumption events,including smoking, are portrayed as ways individuals express social relations and define their identities within consumer society.

It also touches upon the political-economic dimensions of tobacco use, emphasizing how nicotine delivery devices and tobacco agriculture contribute to addiction. It calls for a more sophisticated approach to studying the meaning of smoking in popular culture, highlighting the symbolic nature of smoking and the role it plays in social performances.

Overall, this work underscores the complex interplay between culture and smoking behaviour, urging researchers to consider multiple dimensions of culture when studying tobacco use.

What happens to the body when you stop smoking by Dr. Vivek Singh
Here Dr. Sigh mentions the importance of quitting smoking. And says that it is one of the most significant health decisions one can make. The body undergoes a series of remarkable changes when a smoker decides to kick the habit. From the moment one stubs out that last cigarette, their body begins a process of healing and repair that can lead to profound improvements in overall health and well-being. Dr. Singh talks about the healing process of the body in 5 different parts, he first talks about what happens to the body within hours of quitting, oxygen increases, blood circulation improves. the strain on the cardiovascular system reduces. Within Days, smokers notice significant improvements in their sense of taste and smell. Even though cravings and irritability peak, they start to subside gradually. Within Weeks,Lung function improves. we see better skin complexion and reduced risk of peripheral

artery disease. Within Months, Cilia, tiny hair-like structures in the airways, start to regrow,improving the ability to clear mucus and bacteria from the lungs & enhances the body's natural defence mechanisms.Within years, the risk of developing serious health conditions continues to decline. The chances of heart disease, stroke and lung cancer decrease significantly compared to those who continue to smoke. Increased energy levels, improved mental clarity, and better mood and emotional well-being. Moreover, quitting smoking can lead to substantial financial savings and a positive impact on personal relationships and social interactions. Some tips to keep one motivated and successful in their quitting journey can be to take help when needed. Keep a sign of motivation, stay active by exercising, avoiding triggers, Lastly one should always stay Positive.

FINDINGS AND DATA ANALYSIS

In order to collect data and proceed with the data analysis, attempts were made to gather data via a google form by undertaking a survey research. This process was a part of the quantitative data collection which included both close ended and open ended questions as previously mentioned under the methodology. Under the case section of data analysis, the close-ended questions would be analysed, in order to reflect upon the sociological stance of the effects, awareness, knowledge and information possessed by the respondents upon various categories.

1. The Age Demographic of the respondents varied from 18 to 26 years of age with the maximum number of respondents under the category of 20-22 years of age followed by 20-24 years and so on.

Age
22 responses

18-20
20-22
22-24
24 and above

18.2%
63.6%
13.6%
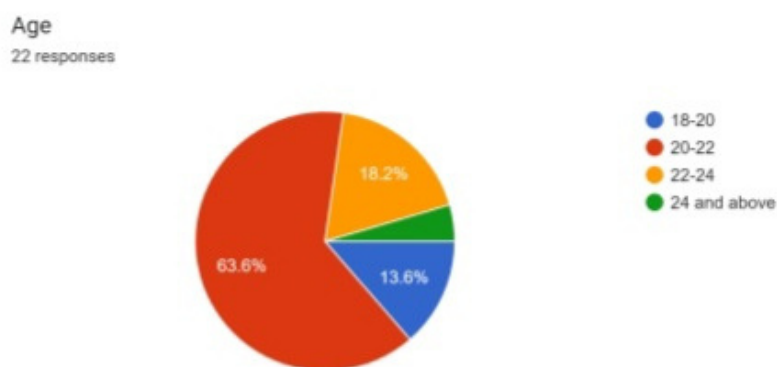
2. The Gender Demographic represents its restrictions towards the binary gender of Male and Female with the higher representation of men in terms of inclination towards smoking behaviour which is represented as follows.

Gender
22 responses
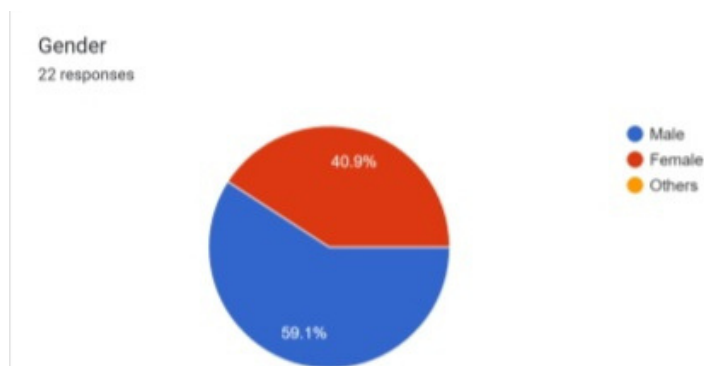
3. The time-line pattern of the smoking behaviour of the respondents in terms of how long have they been under the influence of smoking shows how majority of the respondents 36.4% have been smoking for more than 2-3 years with other variations in between with the other end of the participant, the lesser of the chunk 18.2% smoking for the past 1-2 years.

How long have you been smoking?
22 responses
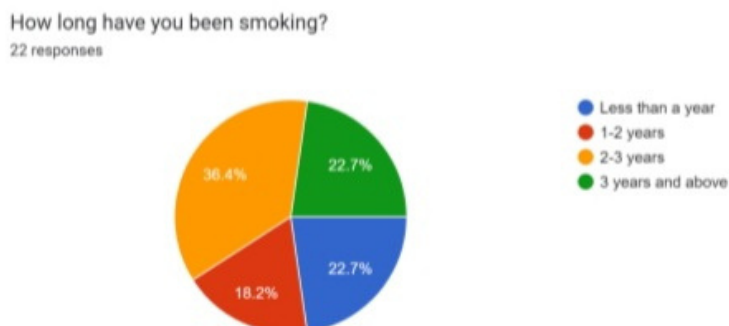
4. While analysing the main reasons for why the respondents smoke it was evident that 72.7% of the respondents smoked for the purpose of "enjoyment" followed by 59.1% who smoked for the purpose of "stress relief".

What are the main reasons of why you smoke?
22 responses

RESEARCH COMPENDIUM
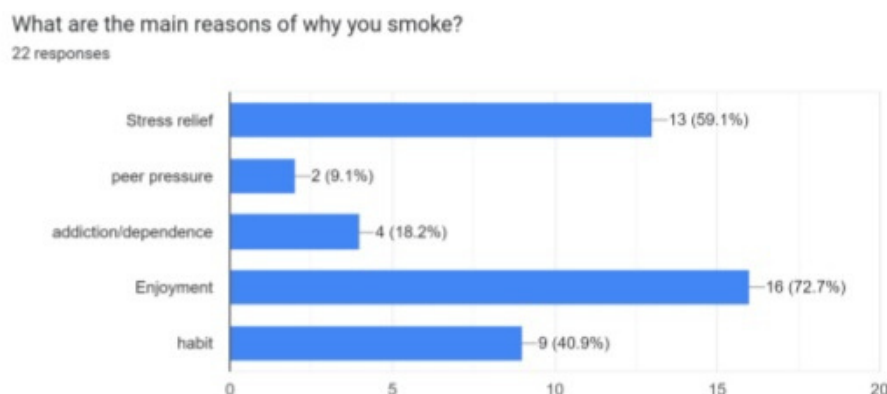
5. The examination of the number of cigarettes smoked per day in order to classify the smokers as causal, moderate or chain smokers as per the classification listed in the introductory phases could be seen as.

How many cigarettes do you usually smoke per day?
22 responses

- 1-2
- 2-4
- 4-6
- 6 and above

59.1% 13.6% 13.6% 13.6% 13.6%
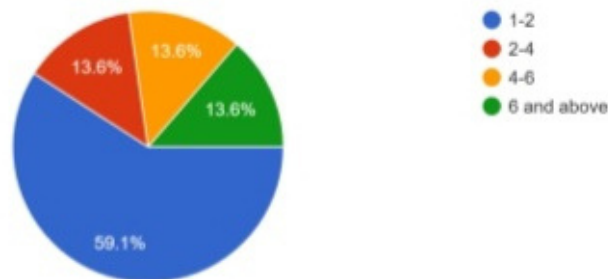
6. The analysis of the question if the respondents could get through the day without smoking 86.4% agreed to the answer of yes whereas the rest towards no.

Can you get through the day without smoking?
22 responses

- Yes
- No

86.4% 13.6%
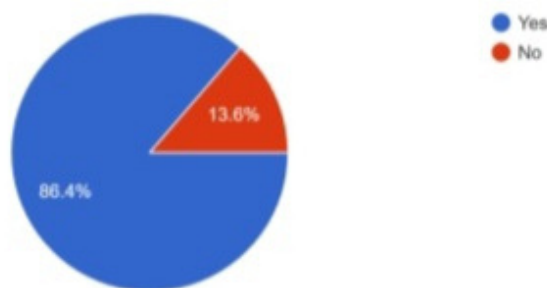
7. If the respondent could refrain themselves from smoking whenever they want to, in terms of analysis if they have the power to control their urges and wills in order to restrain themselves from smoking. 86.4% agreed that yes, they could refrain whenever they want to whereas the rest denied that they couldn't.

Are you able to refrain from smoking whenever you wish to?
22 responses

- Yes
- No

86.4% 13.6%

RESEARCH COMPENDIUM
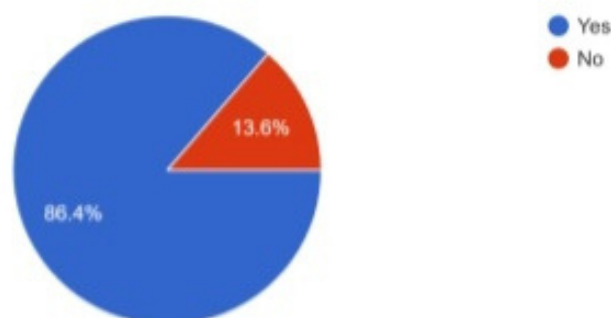
8. Since smoking and its effects is not just merely restricted towards the individual who undertakes the activity, it is for a proven fact that the effects of passive smoking seems to be rather contagious. The respondents were asked if they thought that passive smoking had an effect upon the body, 95.5% agreed to it whereas the latter 4.5% believed not to be the case scenario.

Do you think passive smoking has an effect on the body?
22 responses
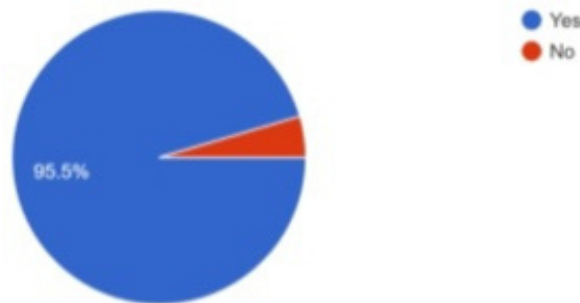
9. With the growing trends and prevalence of vapes and e-cigarettes as a part of the substitution management for smoking, the analysis if both of the following were really considered to be a part of healthy alternative towards cigarettes, 72.7% answered no whereas 27.3% agreed that, yes, it could be considered a healthy alternative.

Do you consider vape or e-cigarettes to be a healthy alternative to smoking?
22 responses
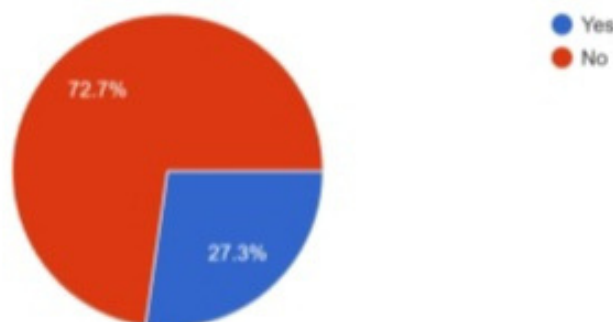
10. Since the man is a social being and is conditioned not only by himself alone but rather also by his surroundings, it became quite essential analyse if even after becoming aware about the effects of smoking and possessing the knowledge about the stereotypes that the society held towards the smoking behaviour and pattern towards the smoker, did that really influence their ways and pattern of smoking? The majority Of the respondents i.e. 54.5% claimed that no, it did not whereas the rest which is 45.5% claimed that it affected their pattern of smoking.

Does the societal attitudes towards smoking effect your patterns of consumption for the
22 responses
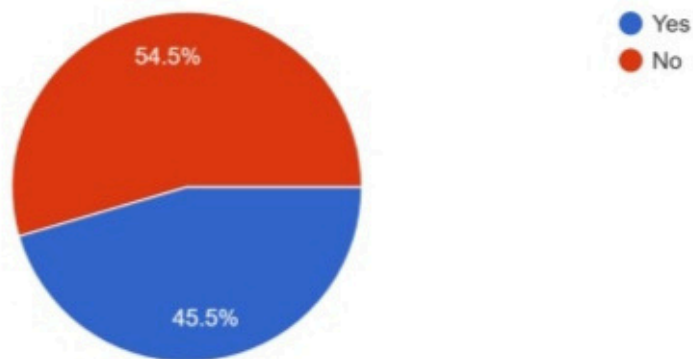
11. The persistence of stereotypes throughout the society regarding the issue of smoking led to the prompt of the question if the society in itself have taken any measures to control the widespread behaviour of smoking. It led to the question if the respondents have noticed any policy being implemented on smoking by the state or the welfare organisation. The response was split between two ways where one half i.e. 50%

Have you noticed any policies being implemented on smoking?
22 responses

RESEARCH COMPENDIUM
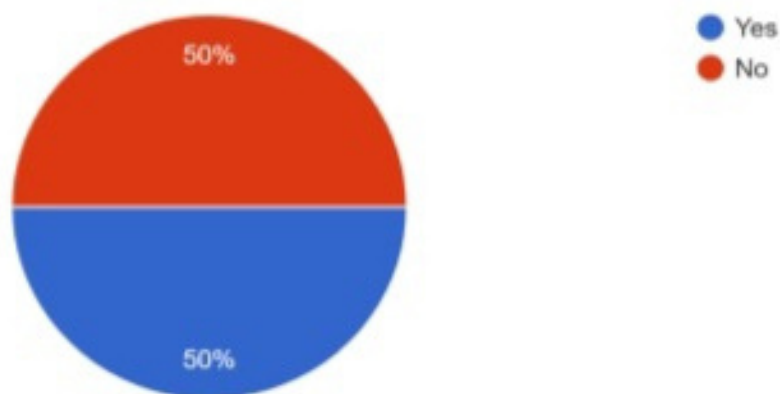
12. Moving forwards to the subjective interpretations which stand to vary limitless among the 22 respondents which engaged under the study, three pertinent issues that were directly related towards the study of smoking which were lifted. Under the same, it became rather quintessential to enquire about the negative effects of smoking that the respondents themselves have witnessed on their bodies. On one hand, 8 respondents did not witness any profound effect of smoking on their body, the rest 14 found effects that varied vividly. The most common effect that the respondents found on their body was their decreased lung capacity in terms of persistent respiratory issues,trouble breathing and suffering from shortness of breath almost every time. Others also pointed to the effects witnessed in their sleep cycles, increased hair fall, decrease in stamina and dark lips as a resultant of smoking.

13. With the proven studies of the effects of smoking on body by many scholars and doctors, it became rather more important to investigate the withdrawal symptoms if witnessed any by the respondents, due to the long term exposure of smoking and cigarettes upon the individual it was meant to leave effects upon the body in the grey area where there was an attempt to quit the same. In the study conducted, where 10 respondents did not suffer from any withdrawal symptoms many others did. They recognized these symptoms to be occurring under various dimensions that followed as: anger issues, uneasiness, discomfort, difficulty in sleeping, bodily sensations and headaches.

14. The aspect of gender, which seems to be cross-cutting in almost every dimension which follows in the society, there had to be a distinction made under the course of smoking patterns and behaviours of men and women. It focused upon how it varied, if they did. Although, the elements of these questions were limited to a basic level where the respondents were merely inquired if they noticed any difference between the smoking behaviours of men and women. Those who agreed to the statement that they had seen visible differences in the pattern of smoking for both men and women, accredited this to the factors of more pressure being bestowed upon men.

CONCLUSION

Through the help of this study, it thereby became evident that there was a keen interest painted towards the continuation in terms of the practice of smoking despite knowing its ill effects not only on the body of those who smoke but also upon those who inhale the same passively. With the help of the research findings that was conducted on young adults, it cameto light that the inhalation of smoke had various effects on their body that varied tremendously from moderate to severe. During the time period where the world is working forward for the implementation of the

towards smoking cessation like the country of New Zealand, there seems to be many cases where the individual is prone to exhibit smoking behaviour not limiting itself to the usage of tobacco but also to marijuana, weed etc. from a

very young age, no matter what the reason behind it could be placed. Factors such as stress,family behaviour and peer pressure contribute to the major chunk of reasons. Living in a social age where not only the world comes across to be a part of the integrated sector, where the boundaries are ever cross cutting, intersecting with each other, there has been limitless research upon the intersecting dimensions of the effects of smoking in itself. This kind of research is not just limited to one arena of the body but continues to cut across the physical,biological, mental and also immune arenas. The main cause of argument which was undertaken under the first place is that this activity of smoking is not an individual activity but rather is also influenced by societal factors. The recognition of the fact that inhaling tobacco in small amounts leads to the production of pleasant feeling and produces distraction

from the day to day stress has led to the consumption of tobacco in high copious amounts. To cope with the same, reliance is bestowed to nicotine patches and its uses which in turn also leads to the creation of addiction accompanied with its withdrawal effects making it to be a vicious cycle .

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APPENDIX
https://drive.google.com/file/d/187mRPRqGrs0vRN4z6p-yChvTB_AW1duL/view?usp=drivesdk

Vaping as a culture and its impact on health.

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ABSTRACT

The rise in vaping, particularly among younger individuals, has led to significant changes in the tobacco industry. Vaping, or electronic cigarettes, is often perceived as a safer alternative to traditional smoking, resulting in a unique culture with customs and behaviors. This study examines the usage and societal significance of e-cigarettes among young individuals, focusing on how vaping has transformed into a communal pursuit, shaping identities and nurturing communities. It explores the impact of marketing tactics, social media influence, and peer pressure on promoting e-cigarette usage. The study challenges the prevailing belief that vaping is a safer option compared to traditional tobacco products, revealing potential health risks to users, including respiratory and cardiovascular issues, as well as the risk of nicotine addiction.
The proliferation of vaping culture has prompted significant inquiries about its impact on public health.

KEYWORDS:

Electronic cigarette(EC), Vaping, Vapers, College students, digital socializing, Marketing,
Media, Flavors, Culture, Cardiovascular symptoms, Respiratory issues, nervous system

RESEARCH COMPENDIUM

METHODOLOGY:
The primary aim of this research was to investigate vaping as a cultural phenomenon and its impact on the health of college students. The study targeted college students and aimed to recruit more than 20 respondents.

A cross-sectional study design was employed, utilizing convenience sampling to gather data. An online questionnaire was created using Google Forms and distributed to college students. This approach aimed to minimize interviewer error and ensure efficiency in data collection. The questionnaire included a consent form at the beginning, and only students who provided consent and completed the questionnaire were included in the analysis.

Participants were categorized based on their responses to the question "Do you use electronic cigarettes?" Those who answered "No" or "I used it previously" were classified as "non-users,"while those who answered "Yes, daily," "Yes, every other day," or "Yes, sometimes" were classified as "users." This classification allowed for the comparison of responses between users and non-users in the analysis of the study's findings.

In this study, self-reported cardiovascular disease symptoms such as shortness of breath, chest pain, and palpitations were the clinical outcomes assessed. These symptoms were obtained by asking students if they experienced specific cardiovascular symptoms, allowing them to select more than one symptom if applicable.The online questionnaire used in the study also included questions about demographic factors, lifestyle behaviors, and health characteristics. Demographic factors assessed included sex, age and college attended, with questions asking students to provide this information.

Additionally, students were asked about their use of regular cigarettes, with responses categorized into "Smokers" for those who reported using cigarettes daily, every other day, or sometimes, and "Non-smokers" for those who reported no current use or previous use of cigarettes. This classification allowed for the comparison of cardiovascular symptoms and other
health characteristics between smokers and non-smokers in the analysis of the study's findings.

By gathering information on these health characteristics, the study aimed to explore the relationship between vaping as a cultural phenomenon and its potential impact on the health of college students. These data points provided insight into the overall health status of participants and allowed for the examination of potential associations between vaping behavior and various health outcomes.

RESEARCH COMPENDIUM

LIMITATIONS:

Due to the novelty of vaping culture, there is a lack of comprehensive secondary information available for reference. Additionally, the interviews conducted may not be representative of the broader population of vapers, as the sample size and selection process were not based on probability or cluster sampling methods.

Furthermore, the absence of proper geographical mapping means that respondents were spread across various locations, making it challenging to specify a single location for the study. As a result, all findings relied solely on primary sources of information collected through peer interviews.

In our study, while we discussed various health issues associated with vaping, such as respiratory and cardiovascular problems, it was noted that some of these health issues were not reported by our respondents. Instead, the information regarding these health impacts was obtained through studies on the health effects of vaping, which provided insights into potential risks and concerns associated with e-cigarette use.Issues identified in secondary research, it is essential to consider the broader body of evidence available on the topic. By incorporating findings from secondary research, we were able to not all of these issues being directly reported by our study participant.

LITERATURE REVIEW:
The Culture of Vaping and Meaning of E-cigarettes: A study unpacking experiences and patterns in Norway published in 2021 by Rikke Tokle is intriguing. The book dives into exploring the cultural aspects and patterns of use around e-cigarettes and sheds light on how this technology is integrated into daily life and what it means to different groups of people.In this dissertation, Rikke Tokle investigates the evolving landscape of nicotine and tobacco use due to the widespread adoption of e-cigarettes, which are battery-operated devices that convert heated liquid into inhalable aerosol. Initially marketed as a smoking cessation tool, vaping has grown beyond its intended purpose and is now associated with diverse user motives and appeals, including its attractiveness to young people. Vaping has evolved from a smoking cessation aid to a broader cultural phenomenon with diverse user demographics. Tokle spreads out motivations behind vaping, beyond smoking cessation, and understanding why it appeals to different segments of the population, including young people and analyzes the cultural factors that influence the adoption and perception of e-cigarettes, including social norms, peer influences and marketing strategies.Youths associate Social Meaning with their actions and attach symbolic meaning such as notions of freedom, rebellion, or health.Consciousness subculture theory and concepts of identity and stigma are associated among adult vapers and the emergence of distinct subcultures within the broader vaping community, which characterizes two ideal types consisting of Cloud Chaser which represents a subculture within the vaping community characterized by dedicated enthusiasts. These individuals view vaping as a hobby rather than solely a smoking cessation too. Cloud chasers prioritize self-expression through vaping and may advocate for vaping rights and culture meanwhile The substitute type embodies a more mainstream segment of vapers. These individuals are typically ex-smokers who have transitioned to vaping as a pragmatic substitute for combustible cigarettes. Unlike cloud chasers, substitutes are less likely to engage deeply in vaping culture as a hobby or social identity.
 In terms of risk, e-cigarettes were perceived as a harm reduction tool in relation to conventional cigarettes , e-cigarettes have been approached on the one hand based on their potential of health gain in smokers who replace combustible cigarettes with e-cigarettes On the other, based on the fear of renormalization of smoking, a potential increase in nicotine addiction and health loss from vaping in groups of non-smokers . Hence, a split approach on e-cigarettes and vaping occurred early in the research community and subsequently in governmental regulations. Many advocated for vaping to be distinct and have its own rights.the book provides and insightful viewpoint of how vaping accumulates a major portion role in the health, growth and development of adolescents and how it impacts the surroundings. The discussion of the social stigma surrounding vaping and e cigarettes is elaborately presented in thus book by Tokle successfully.

RESEARCH COMPENDIUM

BACKGROUND

E-cigarettes are a relatively new trend, and we're still unraveling their cultural meanings and social practices. While research on vaping behavior has grown, especially in the USA and UK, there's a lack of sociological studies delving into the cultural aspects of vaping. These battery-powered devices turn liquid into inhalable aerosol, typically containing nicotine, flavorings, and various additives, with differing levels of contaminants. Nicotine, the addictive component found in traditional cigarettes and products like snus, drives user dependence. Despite shared features, there's a wide array of e-cigarette devices and liquids available, indicating significant evolution since their introduction. Scholars like Pepper & Brewer and Unger & Unger have documented this evolution, highlighting the dynamic nature of vaping technology and its impact on society.

The first category, 'cig-a-likes,' closely resemble traditional cigarettes and are disposable—they typically glow when inhaled and are discarded once the e-liquid is used up. The second category consists of slightly larger and reusable vape pens. Moving on, the third category, known as mods, are reusable open system devices that offer customization options and come in various sizes and shapes. Finally, there are the latest pod versions, which are discreet and compact, resembling USB sticks in appearance.

RESEARCH COMPENDIUM

The concept of electronic cigarettes dates back to as early as 1930, with Joseph Robinson filing a patent for an "electronic vaporizer." However, it wasn't until Herbert Gilbert's invention in the 1960s that the idea gained traction. Gilbert's device aimed to offer a safer way to consume nicotine by heating a liquid instead of burning tobacco. Despite his efforts, Gilbert struggled to find a manufacturer, and his patent eventually expired.

Fast forward to the early 2000s, when the first commercially successful e-cigarette was developed in China. Originally marketed as a safer alternative to smoking, e-cigarettes gained popularity among adult smokers looking to quit. However, their appeal soon expanded to include youth and non-smokers, raising concerns among health officials about the potential impact on public health. .Today, e-cigarettes are the most commonly used tobacco product among American youth, prompting increased attention and regulation to address this growing public health issue.

Prior to the EVALI outbreak and the surge in youth vaping, e-cigarettes were already a topic of debate in some countries. Concerns existed regarding their safety, addictiveness, and potential to serve as a gateway to traditional smoking for non-smokers, particularly among young people.

Additionally, there were discussions about the lack of long-term research on the health effects of vaping and the regulation of e-cigarette marketing, flavors, and accessibility, especially to minors.

The EVALI outbreak further intensified these debates, highlighting the risks associated with vaping, particularly when it involves unregulated substances like THC oil. The outbreak prompted significant investigation into the safety of vaping products and raised questions about the need for stricter regulations to protect public health, especially among vulnerable populations like youth. As a result, e-cigarettes faced increased scrutiny and skepticism from both health authorities and the public.

Research has shown that e-cigarettes are not emission-free, with ultrafine particles formed from propylene glycol detectable in the lungs. Nicotine presence in e-cigarettes has been linked to increased levels of exhaled nitric oxide and significant airway inflammation. However,no differences in exhaled carbon monoxide levels were observed before and after e-cigarette use. A recent study found higher levels of hazardous compound metabolites in the urine of adolescent a dual users (e-cigarettes and conventional tobacco) compared to e-cigarette-only users.

Additionally, e-cigarette-only users exhibited elevated levels of detrimental metabolites compared to non-smokers, suggesting potential health risks. Dysregulation of lung homeostasis has also been documented in non-smokers exposed to e-cigarette aerosols. These findings underscore the importance of further research into the health effects of e-cigarette use.

Research suggests that vaping, both in non-smokers and traditional smokers, can lead to short-term effects on platelet function, increasing platelet activation and aggregation. While traditional cigarette consumption has more pronounced effects, e-cigarettes also contribute to platelet activation, albeit to a lesser extent. Additionally, exposure to e-cigarette aerosol can activate neutrophils, as evidenced by increased expression of CD11b and CD66b, markers of neutrophil activation.

RESEARCH COMPENDIUM

Furthermore, individuals who vape and undergo X-rays may exhibit abnormal lung appearances.Normally, healthy lungs appear black on X-rays due to air being radiolucent and not visible.However, in cases of vape-induced lung injury, X-rays may reveal white areas on both sides of the lungs, similar to pneumonia. This discoloration indicates the presence of inflammatory cells.In the small air sacs, suggesting potential lung damage associated with vaping.The study conducted by Moon Shong-Tang at NYU School of Medicine involved exposing mice.To vaping for over a year, resulting in the development of lung cancer and precancerous changes.In bladder tissue. It was observed that nicotine in e-cigarettes induced DNA damage,contributing to these adverse health effects. Additionally, vaping was found to have detrimental effects on the lungs, heart, and bladder of the mice.
These findings highlight significant concerns regarding the safety of vaping, suggesting that it poses serious health risks, including the development of cancerous and precancerous conditions.While further research is needed to fully understand the long-term effects of vaping in humans,Studies like this underscore the importance of caution and regulation in the use of e-cigarettes.The debate over whether e-cigarettes can effectively aid in smoking cessation remains contentious. While manufacturers argue that e-cigarettes, with their varied chemical compositions, are safer alternatives to conventional cigarettes and may not lead to lung diseases like cancer or cardiovascular disorders, the World Health Organization disputes this claim due to insufficient evidence.Studies examining the effectiveness of e-cigarettes as smoking cessation tools have yielded conflicting results. Some trials suggest higher rates of abstinence among e-cigarette users compared to those using nicotine replacement therapy, albeit with higher rates of throat and mouth irritation. However, concerns persist regarding the addictive nature of nicotine in e-cigarettes, potentially leading users to switch back to conventional smoking.For individuals with Chronic Obstructive Pulmonary Disease (COPD), quitting smoking is critical, given the condition's association with tobacco use. Switching to e-cigarettes has shown promise in reducing exacerbations and improving physical activity among COPD smokers.However, longer-term studies are needed to determine whether these individuals ultimately quit both conventional smoking and vaping, as the ultimate goal is to eliminate all tobacco habits to improve health outcomes.

Factors Contributing:

Several factors contribute to the success of e-cigarette use as a smoking cessation tool,as Indicated by current literature. Firstly, certain e-cigarette flavours have been shown to positively impact smoking cessation outcomes, potentially making the transition away from traditional cigarettes more appealing for some individuals. Secondly, e-cigarettes may be more effective in aiding smoking cessation among highly-dependent smokers compared to those who smoke conventional cigarettes. This suggests that the level of nicotine dependence plays a significant role in determining the effectiveness of e-cigarettes as a cessation aid.Thirdly, there is a general perception that e-cigarettes are less harmful to health compared to traditional combustible tobacco. This belief may motivate smokers to switch to e-cigarettes as a safer alternative, potentially facilitating successful cessation.Lastly, exposure to point-of-sale marketing of e-cigarettes has been identified as a factor influencing smoking cessation success. Marketing strategies that promote e-cigarettes as cessation aids may encourage smokers to try them as a means of quitting traditional smoking habits.Overall, these factors collectively contribute to the potential effectiveness of e-cigarettes as a smoking cessation tool, although further research is needed to fully understand their role and impact.

THE CULTURE OF VAPING:

Cigarettes and other tobacco products have historically carried diverse meanings, ranging from stigma and addiction to associations with coolness and pleasure, creating conflicting perceptions.Both tobacco cigarettes and snus are seen as tools for expressing identity. However, e-cigarettes have garnered unprecedented attention from consumer advocates compared to traditional tobacco products. Shortly after their introduction, e-cigarettes were embraced by early adopters, primarily former smokers seeking a substitute for tobacco cigarettes. This transition marked a significant shift in smoking habits and sparked widespread interest in e-cigarette advocacy. Due to the early adopters' exceptional enthusiasm for promoting e-cigarettes, the initial spread of vaping is widely perceived as being primarily fueled by consumers themselves. Through this paper, we also seek to explore the social meaning of vaping in youth culture. We explore the practices and perceptions of e-cigarettes. Virtual platforms like Facebook , YouTube,Instagram, Twitter play a crucial role in fostering vaping communities, enabling vapers to connect, share experiences, and offer support globally. The emergence of vaping culture can be traced back to online forums and chat rooms, where enthusiasts gathered to discuss and exchange Information .

Consumer-centric online spaces dedicated to e-cigarettes, coupled with advancements in commercial technology, vaping shops, events, competitions, and conferences, have all contributed to the development of a distinct vaping culture. Engaging in this aspect of vaping culture provides vapers with a sense of social identity and belonging.Most of the participants in our study described using or having used e-cigarettes occasionally.Vaping among young people emerged as a notable social activity, often associated with experimentation and playful interaction. A respondent shared that her initiation into vaping was influenced by her friends, highlighting the significant role of peer pressure in adopting vaping habits. This underscores how social networks can strongly shape individuals' decisions regarding e-cigarette use. Buying or selling used e-cigarettes between peers was described as a form of social interaction in itself. Young individuals commonly engaged in social vaping practices, often vaping with friends and sharing or borrowing e-cigarette devices among each other. This behaviour underscores the social nature of vaping among youth, where the act of vaping becomes a shared experience and a means of bonding within peer groups. Sharing and borrowing devices further solidify the communal aspect of vaping culture among young people, fostering camaraderie and social connections. The social aspect of young people's vaping was emphasized by the specific social environments linked to the activity, such as gatherings with friends or parties. This highlights how vaping serves as a social lubricant in these settings, where individuals come together to socialize and enjoy each other's company. Many of our respondents described vaping as "fun". Within the social context where vaping is perceived as enjoyable, young individuals often view e-cigarettes as a novelty or a recreational device to engage with. This portrayal reflects how vaping is not only seen as a means to satisfy nicotine cravings but also as a source of amusement and entertainment. The notion of e-cigarettes as a toy or gadget to play with highlights the light-hearted and playful attitude that young people associate with vaping, contributing to its popularity as a leisure activity among this demographic. Compared to smoking, vaping was viewed as more socially acceptable and less detrimental to health. Innovations in vaping products, such as flavour additives and nicotine-free liquids, contributed to the perception of reduced harm. Additionally, creative features in device design encouraged novel and enjoyable vaping experiences. These factors combined to make vaping a popular choice among young users, fostering a culture of exploration and social interaction within vaping communities. Vape enthusiasts frequently initiate conversations centered around capes and their diverse flavours. The most common course of action with which superiority and social interactions are made is through a trick termed "The Dragon". They exchange experiences regarding the sensations of vaping and offer tips on where to find high-quality vape products, recommending specific brands and flavours to one another. Additionally, the playful aspect of vaping, including tricks like blowing rings, adds an entertaining dimension to the activity,enhancing the social interaction rituals associated with e-cigarette use.

The social aspect was evident in how they engaged in playful imitation of each other's vaping tricks. One of our Respondents stated:
"When someone else demonstrated a trick, you would then attempt to replicate it, which is how it all began."
"You feel a sense of achievement when a particular style and a trick has been perfected that you want to show it off to claim your position in the game."

Interactions like this contribute to making vaping more enjoyable and engaging. Digital socializing is an important new dimension in contemporary youth culture. Here we refer to digital socializing as the interaction and communication among individuals through digital platforms and technologies. In contemporary youth culture, this aspect has become increasingly significant as young people utilize various online platforms such as social media, messaging apps, forums, and virtual communities to connect with peers, share experiences, and cultivate relationship.

MARKETING AND MEDIA

At the core of achieving large, dense clouds of vaper lies the use of extremely potent vape mods, Specialized gadgets engineered to boost vaper output and provide an unmatched vaping sensation.

What was once a casual pastime has transformed into a competitive sport, with cloud chasing competitions attracting enthusiasts from around the globe. Supported by sponsors and fueled by a passion for innovation, pushing the boundaries of what is technologically and artistically achievable in the world of vaping, this convergence of technology, artistry, and community, vaping transcends its utilitarian origins to become a platform for self-expression and camaraderie. As enthusiasts continue to push the boundaries of what is possible with vaping, the artistry and creativity on display serve as a testament to the enduring human drive to innovate,explore, and push the limits of what is possible. Emerging engineers dedicate their time to intricately wrapping coils, calculating resistances, and innovating new ways to integrate raw components into increasingly powerful circuitry. Simultaneously, artists find inspiration in vaping culture, creating vibrant paintings that celebrate both the artistry of vaping devices and rhe experience of vaping itself. This fusion of technology and art extends beyond traditional mediums, spilling into the realm of merchandise such as decals, T-shirt designs, and other promotional materials, effectively bolstering the vaping industry's visual presence.

 In the realm of marketing, the launch of any new product necessitates a strategic blend of traditional and digital advertising. E-cigarettes and vaping products are no exception, with a particular focus on capturing the attention of young consumers. Studies reveal staggering figures

regarding youth exposure to e-cigarette advertising, millions of youths encounter advertisements in magazines or newspapers, television or movies, the internet, and at retail stores.

The allure of e-cigarettes and vaping is especially potent among millennials, males, individuals prone to anger, those lacking a strong sense of identity, artists, thrill-seekers, and individuals who enjoy making an impression. Marketing campaigns often leverage themes of sex, independence, and rebellion to captivate this audience.

NOVELTY APPEAL OF FLAVOURS

Manufacturers strategically target young adults aged 18 to 24 with an array of enticing flavours, ranging from coffee and bubblegum to white chocolate, peanut butter cookie, peach ice cream, cinnamon spice, and strawberry pound cake, among countless others. With over 7,000 flavours available, the appeal of e-liquids extends far beyond mere nicotine consumption, offering consumers a sensory experience that transcends traditional tobacco products.
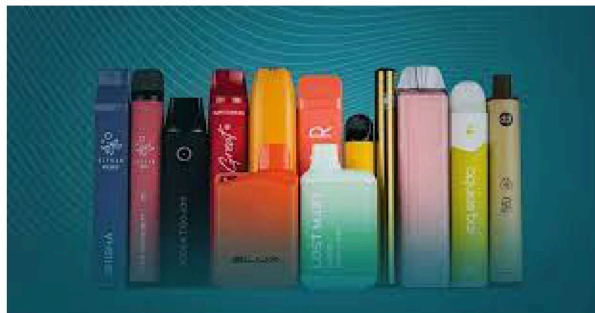
Cigarettes which do equally as much harm as drugs and alcohol are seen as a downgrading activity and consumption of vapes and e cigarettes are seen as much cleaner and much of a more elite behaviour . This is what marketing has been portraying because seldom any lower class individual affords to access vapes . Vapes come in all colours with attractive flavours such as chocolate mint strawberry and fancy names such as ice-burst, indie etc. The marketing tactic :In marketing strategy, vaping appeals to sociological contexts by tapping into cultural trends, social identities, and lifestyle aspirations. Vape brands often position their products as symbols of modernity, freedom, and individuality, resonating with consumers who value autonomy and self-expression. By aligning with certain subcultures or communities, such as alternative lifestyles or tech-savvy enthusiasts, vaping brands create a sense of belonging and identity among their target audience. Overall, vaping marketing strategies leverage sociological insights to position their products as more than just nicotine delivery devices, but as lifestyle choices that refllect personal values and social affiliations.

IN THE DIGITAL LIFE

Across user statuses and country of origin, the digital dimension of young people's everyday life appeared to be of vital importance for their use of e-cigarettes. Digital markets provided easy access, and the young people both consumed and produced vaping-related social media content.

<center>**RESEARCH COMPENDIUM**</center>

AVAILABILITY AND INFLUENCE

There is relatively easy access to devices and liquids, and this related to some extent to how e-cigarettes circulated between friends and availability by how e-cigarette devices and liquid could be bought online through easy access and the knowledge is consumed through use of digital technology and platforms such as Instagram with pages such as @vapingbogan, YouTube channels such as VapePaul, GrimGreen , TikTok accounts such as @TheOfficialVapeChannel etc.

SELF PRESENTATION

Posting such videos and commenting on friends' social media posts was described as a social activity, as something to do together and to talk about both face-to-face and in digital interaction. This is an important part of their social lives, relating to all kinds of topics and interests. The young people also described posting pictures and videos of their own vaping, and some emphasized how this could be a way to communicate or initiate contact with new people if their videos evoked curiosity or interest. Vaping emerged as both a social activity and a ritual of interaction, not only during face-to-face encounters with friends but also within the digital realm of young people's lives. Engaging with vaping-related content on social media was seamlessly integrated into other significant social practices within their daily routines, many of which unfolded online. Social media platforms served as organic spaces for peer interaction and self-expression, where vaping became a focal point for gathering. The narratives of young individuals illustrated how commercial vaping promotions and content shared among peers intertwined seamlessly.

IMPACT OF VAPING ON HEALTH

E-cigarettes do not burn tobacco. Instead, they have cartridges filled with liquid. When heated, this liquid turns to steam that you inhale. Inhaling steam instead of smoke might make vaping sound better than smoking cigarettes. However, the liquid contains harmful substances that have not been fully studied. These can include:

● Chemical flavors
● Nicotine: Nicotine is the primary agent in regular cigarettes and e-cigarettes, and it is highly addictive. It causes you to crave a smoke and suffer withdrawal symptoms if you ignore the craving. Nicotine is a toxic substance. It raises your blood pressure and spikes your adrenaline, which increases your heart rate and the likelihood of having a heart attack.
● Tetrahydrocannabinol (THC), the ingredient that gives marijuana its main psychological effects
● Cannabinoid (CBD) oils; CBD is another compound derived from marijuana
● Other chemicals

The type of toxins, and how much there is, is different for different devices. But all e-cigarettes are harmful. Long-term use of e-cigarettes is linked to problems with brain and heart health.A severe lung disease, called EVALI, is linked to the use of e-cigarettes. An additive called Vitamin E acetate may be the cause, but e-cigarettes contain many other substances that can cause illness. Several potential adverse effects including nausea, vomiting, headache, dizziness,respiratory irritation, coughing, eye irritation, and changes in lung function have been reported.By our respondents. Carcinogenic substances such as formaldehyde and chromium have been detected in EC vapor, along with irritants like propylene glycol and glycerin. Prolonged exposure. To these chemicals may affect the central nervous system and respiratory health. EC vaper can harm lung cells and immune function, challenging the belief that ECs are harmless.

RESEARCH COMPENDIUM

The most commonly observed negative effects of electronic cigarettes (ECs) relate to their impact on the respiratory system. Inhaled chemicals like glycol and glycerol vapers irritate the throat and respiratory passages, often leading to dry coughing. Studies have shown that acute exposure to propylene glycol can lead to a decrease in lung function in healthy individuals. Furthermore, workers exposed to theater fog experienced reduced lung function. While it' s evident that EC vapor causes immediate narrowing of the airways, more research is needed to fully understand its effects.Additionally, EC vapor reduces the production of nitric oxide in the lungs and increases airway resistance. Despite its toxicity and cancer-causing properties, EC vapor also affects cellular. Genetics similarly to tobacco. Animal studies indicate that ECs trigger the release of inflammatory substances and exacerbate allergic reactions, suggesting a potential link to worsen asthma symptoms. Exogenous nicotine, depending on the dose inhaled or ingested, can lead to symptoms like nausea, vomiting, and dizziness. It's also been linked to exacerbating ulcerative Colitis and potentially causing cardiovascular issues such as palpitations, chest pain, atrial fibrillation, and heart attacks in EC users.Nicotine's impact on the nervous system is significant, affecting various brain regions during development and potentially leading to complications like reversible cerebral vasoconstriction syndrome and headaches in EC users. The use of nicotine-containing products, including.e-cigarettes, among youth is considered unsafe. Nicotine has more pronounced and long-lasting detrimental effects on adolescent brains compared to adult brains, particularly impacting the limbic system. Nicotine exposure during adolescence can lead to cognitive impairment and increase the risk of lifelong nicotine addiction. The developing adolescent brain is particularly sensitive to the harmful effects of nicotine, with even short-term exposure during this period resulting in long-term neurobehavioral damage. Risks associated with exposing the developing brain to nicotine include mood disorders and permanent impairment of impulse control. The increasing prevalence of vaping is concerning because the brain areas responsible for cognitive functions, such as the prefrontal cortex, continue to develop into the twenties. Nicotine exposure during brain development can impede the growth of neurons and brain circuits, affecting brain structure, chemistry, and neurobehavioral function.

Nicotine alters the formation of synapses, potentially damaging brain regions responsible for attention and learning. Preclinical research suggests that exposure to nicotine during adolescence disrupts the structural development of the brain, leading to lasting changes in neural circuits.

RESEARCH COMPENDIUM

BATTERIES RELATED MALFUNCTIONS

E-cigarettes can cause battery explosions due to increased internal battery temperature, leading to severe skin burns. Modified devices with increased battery power pose a small risk of explosion. Nicotine poisoning from e-cigarettes can occur through ingestion, inhalation, orSkin/eye absorption. Most e-cigarettes utilize lithium batteries, which can lead to accidents if misused. Defective e-cigarette batteries have been linked to fires and explosions. E-cigarette explosions can cause severe burns and injuries requiring extensive medical treatment, especially when the device detonates in hands, mouths, or pockets.

FINDINGS

● This research emphasized that e-cigarette usage was mainly driven by social and experimental factors. Vaping emerged as a communal activity that facilitated various forms of social interaction.

● The novel features of e-cigarettes and the attractiveness of different flavours encouraged the development of new user behaviours.

● The digital presence of young people creates fresh opportunities for e-cigarette engagement. Spending time on social media has been linked to higher chances of young individuals encountering vaping-related content, both from other users and from the industry, within their feeds.

● This research presents a counterargument to the commonly held belief that vaping poses minimal health risks. Our survey participants have disclosed the adverse effects of vaping on their health, which encompass chest pain, respiratory problems, heightened anxiety and nicotine addiction

CONCLUSION

The high prevalence of e-cigarette use among young adults is concerning due to its association with cardiovascular symptoms like chest pain, shortness of breath, and palpitations. This suggests potential health risks associated with vaping that are not widely understood. Misconceptions about e-cigarettes' safety compared to traditional cigarettes contribute to their increased popularity. To address this issue, a nationwide campaign aimed at increasing public awareness about the health risks of e-cigarettes is crucial. This could help reduce e-cigarette use,leading individuals to reconsider their use and make more informed decisions about their health. Targeted interventions and policies may also be needed to discourage vaping among young adults, promoting better public health outcomes.

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RESEARCH COMPENDIUM

Environmental Sociology

Covid-19 Pandemic effects on the Environment

Authors: Akansha Goma

Introduction

The COVID-19 pandemic, an unprecedented global crisis, has permeated every facet of human existence, reshaping societies, economies, and public health paradigms. While the primary focus has been on mitigating the immediate health threats posed by the novel coronavirus, the pandemic has also triggered profound and multifaceted effects on the environment. The lockdowns, travel restrictions, and shifts in human behavior implemented to curb the spread of the virus have inadvertently ushered in a unique moment for environmental observation and reflection. This research endeavors to delve into the intricate interplay between the COVID-19 pandemic and the environment, seeking to unravel the ecological consequences of the global response to the crisis. From alterations in air quality and waste generation to shifts in biodiversity dynamics and the efficacy of environmental policies, this study aims to provide a comprehensive understanding of the environmental footprint of the pandemic. In exploring these dynamics, we strive to illuminate both the challenges and opportunities that have arisen, ultimately contributing to the development of informed strategies for building a more resilient and sustainable post-pandemic world.

ABSTRACT

The global spread of coronavirus disease 2019(COVID-19) has impacted various facets of human existence, including the natural environment. This research aims to examine the positive and negative environmental effects of the COVID-19 pandemic by analyzing existing scientific literature. The finding suggests that the pandemic has led to notable improvements in air quality in cities worldwide, a decrease in greenhouse gas emissions, lower levels of water pollution and noise, and a relief in the pressure on tourist destinations, potentially aiding in ecological system restoration .However, negative consequences include an increase

in medical waste, improper use, and disposal of disinfectants, masks, and gloves, and the ongoing threat of intreat waste posing environmental hazards. It is anticipated that economic activities will resume post-pandemic, potentially altering the current situation. Consequently, the study proposes strategies for achieving long-term environmental benefits, emphasizing that their proper implementation could contribute to global environmental sustainability .

KEYWORDS
Environmental assessment, Environmental pollution, Environmental management, Environmental sustainability, COVID-19, Public health, Lockdown, GHGs emission, Biomedical waste, Environmental assessment; Environmental pollution; Environmental management; Environmental sustainability; COVID-19; Public health; Lockdown; GHGsemission; Biomedical waste.

RATIONALE
The COVID-19 pandemic has triggered unprecedented changes in various facets of human life, profoundly influencing societal behaviors, economic activities, and public health. While the primary focus has understandably been on the immediate health crisis, it is imperative to explore the secondary and often overlooked consequences of the pandemic. This research aims to investigate the multifaceted impacts of the COVID-19 pandemic on the environment, shedding light on both positive and negative aspects that have emerged during this global crisis.

STATEMENT OF THE PROBLEM
The COVID-19 pandemic, a global health crisis of unprecedented magnitude, has catalyzed widespread societal changes, impacting various aspects of human life and activity. Amidst the urgent focus on public health and economic ramifications, there is a pressing need to comprehensively examine the repercussions of the pandemic on the environment.The disruption caused by lockdowns, changes in human behavior, and shifts in economic activities have the potential to significantly alter environmental dynamics. Therefore, the problem at hand is to elucidate the multifaceted impacts of the COVID-19 pandemic on the environment and understand the short-term and potential long-term consequences on ecosystems, biodiversity, air and water quality, waste generation, and the efficacy of existing environmental policies. Addressing this problem is paramount for informing sustainable practices, shaping future policies, and fostering resilience in the face of global challenges.

METHODOLOGY

The methodology for investigating the impacts of the COVID-19 pandemic on the environment encompasses a multi-faceted approach. Initially, a thorough literature review will be conducted to synthesize existing knowledge on the subject, identifying key themes and findings. The research will leverage diverse sources, including air quality monitoring data, waste generation statistics, and biodiversity assessments. Air quality changes will be analyzed using data from monitoring stations worldwide, focusing on pollutants such as NO_2, PM, and CO_2. Waste generation and management patterns, particularly the disposal of personal protective equipment (PPE), will be scrutinized through collaboration with waste management authorities and relevant agencies. Biodiversity impacts will be assessed through a combination of remote sensing technologies, satellite imagery, and on-the-ground surveys to understand changes in land use and wildlife behavior. Additionally, surveys and interviews will be conducted to gauge individual behaviors and attitudes towards the environment during the pandemic. Data analysis will involve both quantitative and qualitative methods, utilizing statistical tools and thematic coding to identify trends and patterns. Comparative analyses will be employed to discern variations in environmental responses across different regions and countries. The research will also include modeling and projection techniques to anticipate potential long-term environmental consequences based on observed short-term changes. Ethical considerations will be paramount, with measures in place to ensure participant confidentiality and informed consent. Validation of findings will occur through peer review and consultation with experts, fostering a robust and credible research framework. Ultimately, this methodology aims to provide a comprehensive understanding of the environmental impacts of the COVID-19 pandemic, informing future policies and practices for sustainable coexistence.

LITERATURE REVIEW

The outbreak of coronavirus disease-2019 (COVID-19) first emerged at the end of December 2019, from the Hunan seafood market in Wuhan City China, and was declared an international public health emergency in a couple of weeks by the World Health Organization (WHO). It is an infectious disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Genomic analysis revealed that SARS-CoV-2 is phylogenetically associated with SARS viruses, and bats could be the possible primary source. Although the intermediate source of origin and transfer to humans is not clearly known, the rapid human-to-human transmission capability of this virus has been established. The transmission of the virus mainly occurs from person to person-to-person via direct contact or droplets produced by coughing, sneezing, and talking. As of September 06, 2020; the virus has claimed to spread to 216 countries, areas, or territories with the death of 876, 616 humans from

26,763,217 confirmed cases (WHO, 2020a), and the number is increasing rapidly. Typically, symptoms of a COVID-19 infection encompass fever, chills, cough, sore throat, breathing difficulties, myalgia or fatigue, nausea, vomiting and diarrhea. Severe cases may Result in cardiac injury, respiratory failure, acute respiratory distress syndrome, and in extreme situations, death. The elderly, particularly those with underlying medical conditions, face a heightened risk of mortality. To date, there has been no substantial progress in developing an effective medication or vaccine for this disease. Both national and international authorities, as well as experts, advocate for non-pharmaceutical measures such as the use of face masks and gloves, regular handwashing with soap, frequent use of antiseptic solutions, and the practice of maintaining social distancing. To curb the virus's spread and mitigate the mortality rate, many affected countries implemented measures to restrict people's movements. Notably, India imposed one of the largest scale movement restrictions, affecting approximately 1.3 billion individuals, starting from March 24, 2020. As a preventive measure against COVID-19. With the exception of essential services like medical, fire, police, and food supply, all organizations including educational institutions were closed to encourage people to stay at home. Public transport services, including buses, trucks, trains, and airplanes were suspended, except for transporting essential goods and emergency services. Italy implemented some of the most extensive travel restrictions since the Second World War. In London, vibrant places like pubs, bars, and theaters were closed, and residents were advisedto stay home. As of April 7, 2020, the World Economic Forum reported that nearly 3 billion people globally faced some form of lockdown, with governments restricting movement to control COVID-19 infections. Overall, the pandemic has caused significant global socio-economic disruptions, directly or indirectly impacting the environment by leading to improvements in air and water quality, noise reduction, and the restoration of ecology. Furthermore the heightened utilization of personal protection equipment (PPE). Such as face masks, hand gloves, gowns, goggles, and shields, coupled with their improper disposal, pose an environmental challenge. Given this scenario, the aim of this study is to investigate both the positive and negative environmental impacts of the COVID-19 pandemic and put forth potential strategies to serve as future guidelines for promoting environmental sustainability .

Environmental effects of COVID-19

The global disruption caused by COVID-19 has brought about several effects on the environment and climate. Due to movement restrictions and a significant slowdown of social and economic activities, air quality has improved in many cities with a reduction in water pollution in different parts of the world. Besides, the increased use of PPE (e.g., face mask, and gloves, etc.), their haphazard disposal, and the generation of a huge amount of hospital waste has negative impacts on the environment.

POSITIVE EFFECTS

The closure of industries, transportation and businesses due to the COVID-19 pandemic has resulted in a significant decrease in greenhouse gas emissions and air pollution. In New York, air pollution levels have dropped by nearly 50% compared to the same period last year, attributed to measures implemented to control the virus. Shutdowns of heavy industries in China led to an estimated 50% reduction in emissions of nitrous oxide(N_2O) and carbon dioxide(CO). nitrogen dioxide(NO_2), a key indicator of global economic activities primarily from motor vehicle exhaust, has shown signs of reduction in various countries, including the
US, Canada, China, India, Italy, and Brazil due to recent shutdowns.
NO_2 is known to cause acid rain and respiratory diseases in humans. The European environmental agency(EEA) predicted a 30%-60% drop in NO_2 emissions in many European cities, including Barcelona, Madrid, Milan, Rome and Paris during the COVID-19 lockdown. In the US, NO_2 levels from 4.5 ppb to 1 ppb. Sao Paulo, Brazil, observed a notable 54.3% decrease in NO_2. Delhi, the capital of India, reported almost 70% reductions in both NO_2 and PM2.5 levels. India, during the nationwide lockdown, experienced a 46% reduction in PM2.5 and a 50% reduction in PM10. Overall, the pandemic-induced restrictions have led to a substantial improvement in air quality and a reduction in various pollutants worldwide.
It is posited that vehicles and aviation play a significant role in emissions, contributing approximately 72% and 11%, respectively, to the greenhouse gas (GHG) emissions of the transport sector. The global measures implemented to control the virus are also profoundly impacting the aviation industry. Numerous countries have imposed restrictions on international travel, leading to a substantial reduction in air travel. Commercial airlines worldwide are canceling flights due to decreased passenger numbers and travel restrictions. For example, China has cut departing flight capacity by nearly 50–90% and domestic flights by 70%, resulting in a reduction of almost 17% in national CO_2 emissions compared to January 20, 2020. Additionally, there has been a reported 96% decrease in air travel globally compared

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to the same period last year due to the COVID-19 pandemic, with consequential effects on the environment.

In general, the reduced consumption of fossil fuels is leading to a decrease in greenhouse gas (GHG) emissions, contributing to the fight against global climate change. The International Energy Agency (IEA) reports a global drop in oil demand by 435,000 barrels in the first three months of 2020 compared to the same period last year. Similarly, global coal consumption has decreased due to lower energy demand during lockdowns. In India, coal-based power generation saw a 26% reduction, contributing to a 19% decrease in total power generation after the lockdown. China, the world's largest coal consumer, experienced a 36% drop during the same period of the previous year (early February to mid-March).

According to the UK-based climate science and policy website Carbon Brief, the recent COVID-19 crisis resulted in a 25% reduction in CO_2 emissions in China, persisting below normal levels more than two months after the country entered lockdown. Their projections indicate that the pandemic could lead to a reduction of 1,600 metric tons of CO_2, equivalent to over 4% of the global total in 2019. The reduction of water pollution is a notable occurrence, especially in developing countries like India and Bangladesh, where untreated domestic and industrial waste is often discharged into rivers. The lockdown period has led to a significant decrease or complete cessation of major industrial pollution sources, alleviating the pollution burden. Notably, the Ganga and Yamuna rivers in India have experienced a considerable improvement in purity during the lockdown, with water from 27 out of 36 real-time monitoring stations along the Ganga meeting permissible limits. This positive change in water quality at Haridwar and Rishikesh is attributed to a sharp decline in the number of visitors and a 500% reduction in sewage and industrial effluents.

According to real-time water quality monitoring data from the Uttarakhand Pollution Control Board (UPCB) in India, physicochemical parameters such as pH (7.4–7.8), dissolved oxygen (DO) (9.4–10.6 mg/L), biochemical oxygen demand (BOD) (0.6–1.2 mg/L), and total coliform (40–90 MPN/100 mL) in the Ganga River have remained within the surface water quality standards of India. This suggests a positive impact on water quality in response to reduced industrial activities during the lockdown. With the exception of total coliform in certain monitoring stations, all other parameters meet the national drinking water quality standard, indicating that the water can be utilized without conventional treatment but requires disinfection. The concentration levels of pH, electric conductivity (EC), dissolved oxygen (DO), biochemical oxygen demand (BOD), and chemical oxygen demand (COD) have experienced reductions ranging from 1% to 10%, 33% to 66%, 45% to 90%, and 33% to 82%, respectively, across various monitoring stations during the lockdown compared to the prelockdown period.

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Additionally, the imposition of a ban on public gatherings has resulted in a decrease in thenumber of tourists and water activities in many locations. Notably, Italy's Grand Canal became clear, with the reappearance of various aquatic species, as reported during the COVID-19 lockdown. Water pollution has also seen a reduction in beach areas of countries such as Bangladesh, Malaysia, Thailand, Maldives, and Indonesia. The lockdown has contributed to a decrease in food waste in Tunisia, consequently reducing soil and water pollution. Moreover, industrial water consumption, particularly in the global textile sector,has decreased. The substantial generation of solid waste from construction and manufacturing processes, which is a contributor to water and soil pollution, has also diminished. Furthermore, the reduction in global export-import business has led to a decrease in the movement of merchant ships and other vessels, contributing to lower emissions and reduced marine pollution.

Noise pollution, characterized by elevated levels of sound resulting from various human activities such as machinery, vehicles, and construction work, can have detrimental effects on both human and other living organisms. Typically, noise has adverse impacts onphysiological health, contributing to cardiovascular disorders, hypertension, and sleep disturbances in humans. Globally, approximately 360 million people are at risk of hearing loss due to noise pollution. The World Health Organization has estimated that in Europe alone, more than 100 million people are exposed to noise levels surpassing the recommended limits.

Furthermore, anthropogenic noise pollution can negatively impact wildlife by disrupting the balance in predator and prey detection and avoidance. Invertebrates, crucial for environmental processes that maintain ecosystem equilibrium, also suffer from the adverse effects of unwanted noise. The implementation of quarantine and lockdown measures, requiring people to stay at home and reducing economic activities and global communication, has resulted in a significant reduction in noise levels in many cities. For example, Delhi, the capital of India, experienced a drastic reduction of around 40–50% in noise levels during the recent lockdown period. In recent years, the tourism sector has experienced substantial growth, propelled by advancements in technology and transportation networks, making a significant contribution to the global gross domestic product (GDP). It is estimated that the tourism industry is responsible for approximately 8% of global greenhouse gas (GHG) emissions. However, popular natural attractions such as beaches, islands, national parks, mountains, deserts, and mangroves often bear the brunt of tourism, leading to significant environmental impact. The construction of hotels, motels, restaurants, bars, and markets to cater to tourists consumes considerable energy and natural resources. Additionally, visitors contribute to environmental degradation by depositing various types of waste, disturbing natural beauty, and causing ecological imbalances. Theoutbreak of COVID-19, along with local restrictions, has resulted in a reduction in the number of tourists visiting destinations worldwide.

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As an example, Phuket, which is Thailand's most popular tourist destination with an average of 5,452 visitors per day, entered lockdown on April 9, 2020, in response to the surge of Covid-19. Similarly, the local administration implemented a ban on public gatherings and tourist arrivals at Cox's Bazar sea beach, renowned as the longest unbroken natural sand sea beach globally. The imposed restrictions have led to changes in the color of the sea water, which typically remains turbid due to activities such as swimming, bathing, playing, and riding motorized boats. This period of restrictions has afforded nature the opportunity to assimilate without human disturbances, resulting in reported sightings of dolphins returning to the coast of the Bay of Bengal in Bangladesh and in the canals, waterways, and ports of Venice, Italy, after an extended absence of a decade.

Negative effects

The global outbreak of COVID-19 has led to a significant increase in the generation of medical waste, posing a substantial threat to public health and the environment. Hospitals are producing a large volume of infectious and biomedical waste due to activities such as sample collection from suspected COVID-19 patients, diagnosis, treatment of a large number of patients, and disinfection procedures. For example, during the peak of the outbreak,Wuhan in China generated over 240 metric tons of medical waste daily,representing a nearly 190 metric ton increase compared to normal times. Similarly, in Ahmedabad, India, medical waste generation increased from 550-600 kg/day to around 1000 kg/day during the first phase of lockdown. Dhaka, the capital of Bangladesh, generates approximately 206 metric tons of medical waste daily due to COVID-19. Cities like Manila, Kuala Lumpur, Hanoi, and Bangkok have also experienced significant increases, producing 154–280 metric tons more medical waste daily than before the pandemic.

The sudden surge in hazardous waste has presented a major challenge for local waste management authorities, requiring effective management strategies. Recent literature indicates that the SARS-CoV-2 virus can persist for up to a day on cardboard and up to three days on plastics and stainless steel. Therefore, the proper management of hospital-generated waste, including needles, syringes, bandages, masks, gloves, used tissues, and discarded medicines, is crucial to mitigate the risk of further infections and environmental pollution, emerging as a global concern.

To safeguard against viral infections, individuals are currently using face masks, hand gloves, and other safety equipment, leading to a surge in healthcare waste. In the USA, there has been an increase in household waste due to the widespread use of personal protective equipment (PPE). The global production and usage of plastic-based PPE have risen since the onset of the COVID-19 outbreak. For example, China significantly boosted its daily production of medical masks to 14.8 million from February 2020 onwards, surpassing previous levels.

Unfortunately, due to a lack of awareness about the proper management of infectious waste, many people dispose of items like face masks and hand gloves in open areas or alongside household waste.This careless disposal contributes to blockages in waterways and exacerbates environmental pollution. Notably, face masks and other plastic-based protective equipment pose a potential source of microplastic fibers in the environment. The materials used in items like N-95 masks (polypropylene) and protective suits, gloves, and face shields (Tyvek) can persist for extended periods and release dioxins and toxic elements into the environment.

Despite recommendations from experts and responsible authorities advocating for the proper disposal and segregation of household organic waste and plastic-based protective equipment (considered hazardous medical waste), the mixing of these wastes heightens the risk of disease transmission and exposes waste workers to the virus.

The surge in municipal solid waste, comprising both organic and inorganic materials, directly and indirectly impacts the environment by contributing to air, water, and soil pollution. The pandemic-induced quarantine measures in many countries have led to a spike in online shopping for home delivery, subsequently increasing the volume of household waste from shipped package materials. While waste recycling is a crucial measure to prevent pollution, save energy, and preserve natural resources, the pandemic has prompted many countries to postpone recycling activities to mitigate the risk of viral transmission. For example, the USA restricted recycling programs in numerous cities (approximately 46%) due to concerns about the potential spread of COVID-19 in recycling facilities. Similarly, the United Kingdom, Italy, and several other European countries prohibited infected residents from sorting their waste.

In summary, the disruption of routine municipal waste management and recycling activities during the pandemic has resulted in increased landfilling and environmental pollutants on a global scale.

Recently, a substantial amount of disinfectants has been applied to roads, commercial areas, and residential spaces to eliminate the SARS-CoV-2 virus. This widespread use of disinfectants raises concerns as it may unintentionally harm beneficial non-targeted species, potentially leading to ecological imbalances.

Additionally, the detection of the SARS-CoV-2 virus in the feces of COVID-19 patients and municipal wastewater in various countries, including Australia, India, Sweden, the Netherlands, and the USA, highlights the need for additional measures in wastewater treatment. This poses a challenge for developing countries like Bangladesh, where municipal wastewater is often discharged into nearby aquatic bodies and rivers without treatment.

China has responded by intensifying the disinfection process, primarily through increased chlorine usage, to prevent the spread of the SARS-CoV-2 virus through wastewater. However,the excessive use of chlorine in water treatment may give rise to harmful by-products, adding another layer of environmental concern.

<div style="text-align:center">**RESEARCH COMPENDIUM**</div>

CASE STUDIES

◻ PUNE, MAHARASHTRA

 One of India's examples of relative success in dealing with the spread of COVID-19 can be witnessed in Pune. Pune is the second largest city in Maharashtra, a western coastal state in India. With an estimated population of 6.6 million1 in 2020, the city has a population larger than that of the country of Finland living in an area one fifth the size of London. Administered by the Pune Municipal Corporation, it is divided into five zones comprising 15 ward offices. Although Pune's high population density poses a threat, the city also has unique strengths. Its wide and active network of civil society organizations with a long history of working with the local population, particularly its informal settlements, and high literacy rate (86%) provide opportunities to address the challenge posed by the pandemic. The first case of COVID-19 was detected in Pune on 9th March 2020. The city created a COVID-19 response team and a 106-bed isolation facility. Meetings were held with department heads, government hospitals and public representatives to devise a preparedness plan. After the detection of the first case, it took 48 days for Pune to cross 1000 cases but only 11 more days to cross 20002 .A decision was taken to identify and focus on hotspots within the city to control community spread. The city government identified five wards with the highest number of cases and created the Action Plan for Hotspot Areas to address the root causes of COVID-19 spread in these areas. The highest density of cases was reported from informal slum settlements within these wards. It was understood that the lack of space within these settlements made it a challenge to implement proper social distancing within them, as was the case in places like Dharavi—Asia's largest slum, located in Mumbai, the city with the most COVID-19 cases in India—which witnessed an early spread.The city government devised a preparedness and response plan to tackle the crisis, calling it COVID FREE PUNE, which acted as an acronym for the various interventions.
Operationalising this plan required engagement with local donors, community groups, and existing programs to mobilize the required resources and capacities. Within the overall plan, the Action Plan for Hotspot Areas focused on medical interventions and supplies, water and sanitation support, food and shelter planning and public awareness supported by the local police force. Targeted attention was paramount. Medical interventions focused on contact tracing and wide-spread testing, with a focus on high and low risk contacts of confirmed cases. The city established dedicated COVID care booths in hotspot areas and allotted 10 dedicated ambulances for ward-wise response. It also designated 75 teams per ward for the five hotspot wards and 25 teams in the remaining 10 wards. Action was painstaking and localized. These teams carried out door-to-door check-ups of all households in the hotspot areas. Immunity-enhancing medicine was also prescribed, as per state guidelines on the handling of symptomatic persons. Individuals found to be negative were discharged with a packet of five masks, sanitizer, soap and floor disinfectant. The city tried to ensure comprehensive medical, nutritional, and psycho-social care

for those identified as COVID-19 positive. In order to maximize identification of cases, the city adopted standardized systems for molecular testing, supported by assured access to reagents and kits. Along with precautionary measures, great care was taken to ensure that food was not in short supply. Hotspot areas were also sanitized by municipal workers, and water and sanitation services were ensured in high risk areas. In areas under containment, schools were designated as night shelters and central kitchens provided cooked food so that people would not have to venture out for groceries. It was important to engage all stakeholders, including players in the government and existing infrastructure as well as private citizens. The Pune Police played an important role in this plan. It designated 7,500 Special Police Officers (SPO) with some specific powers to help the police to manage micro-clusters, places with high population density and over five positive cases. SPOs were tasked with providing essential services and spreading awareness about social distancing and lockdown norms. In future, these SPOs may become volunteers for supporting COVID Care Centers. Standard operating procedures were developed for the city, and the Police developed a pyramidal reporting structure that was managed through Whatsapp groups. The municipal corporation displayed helpline numbersat all prominent locations. They established two-way communication channels for community and public information sharing such as 24X7 hotline (available via text and phone-calls) and responsive social media and radio shows, with systems to detect and rapidly respond to and counter misinformation.

⬛ KERELA

What can one Indian state teach the world? The global battle against COVID-19 has proved to be a challenge for many countries, India included. There has been a wide range of responses to the virus; while the characteristics of the disease and principal modes of transmission are similar across the world, local factors such as population density, patterns of social interaction and the capability of local public health systems determine the course of the disease. This applies even at the state level; India, a diverse country with several geographies and demographics, has witnessed different responses across its many states. In many places, initiatives driven by local innovations, resourcefulness, and commitment are leading to inspiring success stories—the state of Kerala is one such outstanding case. In fact,its rigorous campaign to defeat COVID-19 attracted international attention early on. Kerala,located on the southwestern end of the Indian subcontinent, is divided into 14 districts in terms of administration. Its population of around 35 million people, is marginally less than that of Canada, living in less than 1/200 of geographical area. The state is unique, with the highest literacy rate in the country and noteworthy achievements in education, health and social justice. It also sends many workers out into the world, as part of India's diaspora, contributing in the fields of healthcare and engineering, among other sectors.

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As the virus began to spread around the world, some Indians began to return home, to relative safety. When Kerala registered India's first COVID-19 case on 30th January, 2020 (IDFC Institute, 2020), the state was prepared. Four days before registering its first case, Government of Kerala (GoK) had already released novel corona virus-specific guidelines that established case definitions, screening and sampling protocol, hospital preparedness and surveillance. Over the weeks that followed, a series of comprehensive measures were rolled out. By the time, the second case was registered on 2nd February 2020 (4th day), the State Government had already modified its testing and tracing protocol and initiated local testing labs. The rapid screening and quarantining of patients and isolation of their contacts delayed the transmission from imported cases for up to 40 days, until Kerala witnessed its first cluster outbreak in the district of Pathanamthitta. A total of 14 confirmed cases were registered over the two days that followed. Given the early spread of the virus in Kerala, it is commendable that the state had two consecutive days of zero new cases over the 100- day period from the day it registered the first case of COVID-19. Given its relatively efficient public health care systems, backed by strong socio-economic foundation and the experience of previously handling the Nipah virus in 2018, the State was able to act swiftly. Kerala prepared itself to address the pandemic as early as January. The State followed the timetested strategy of case identification, isolation, contacttracing and vulnerability mapping in containing the virus. Kerala's public healthcare system is decentralized with facilities at the state, district, sub-district, panchayath, and ward level. Government hospitals at all levels,from the primary health centres to the medical colleges, were given clear responsibilities.

The field-level staff including health inspectors, ASHA (Accredited Social Health Activists) workers functioned in teams as the first line of defence and reached out to people even in remote locations. Coordination at the middle level was largely done by the District Collectors who worked in close coordination with the District Medical Officers and the district-level heads of the police. One of the flagship measures adopted by the State was the development of COVID First Line Treatment Centers and COVID-19 Care Centers. Local testing labs, district-wise allocations and, later, walk-in sample kiosks, allowed Kerala to quickly scale up testing capacities and, over time, conduct mass screenings and serological tests.

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 ☐ **ODISHA**

 The state took a series of steps at an early stage to contain the spread of the virus and to break the chain of infection. As soon as the first case was reported in Odisha on March16th, Odisha was one of the first states to announce the lockdown, even before the central government imposed the lockdown. Odisha was also the first state to set up hospitals to treat only corona-virus patients. In select cities that experience maximum public footfall, drones were used for surveillance and for disinfecting crowded spaces with minimal risk to front-line coronavirus warriors. Additionally, Odisha engaged Women Self Help Groups (SHGs) to assist with awareness generation, ensuring public health and hygiene and providing food security in rural and urban areas to poor and vulnerable groups, especially during the lockdown. SHGs helped implement the 'Mo Jeevan' pledge to all habitations across the state, educating 15.3 million persons so as to break the chain of contact. Many of them have also helped spread awareness about social distancing and safety in rural areas. These groups have been engaged in ensuring public health through 1339 Mission Shakti SHGs who have experience in stitching garments and producing jute items; they own commercial tailoring equipment and have made a commitment to undertake mask-making as a philanthropic activity. Thus, 6.5 million reusable face masks were produced, sold at nominal prices to front-line workers. Another 0.3 million masks were distributed free of cost by SHGs among the poor and the vulnerable as a precautionary measure to contain the pandemic. This not only helped protect public health but also it promoted the livelihoods of
the rural woman.

To ensure the food security of the poor, vulnerable and adversely affected households, the collective strength and commitment of these Mission Shakti SHGs have enabled impoverished households to avail of hot, cooked meals free of cost twice a day during the lockdown. To do so, 7312 SHGs have been engaged in free kitchen management, providing 19.1 million meals in urban and rural areas of the state. During the lockdown, the availability of rations and vegetables posed a major challenge across urban and rural areas because of movement restrictions. Addressing this challenge, 598 SHGs were strategically involved in setting up dry rations, vegetables and fruit shops across the state with the help of district administrations, thereby providing services to more than 0.4 million households. This novel initiative of Mission Shakti has helped citizens at this time of crisis, with livelihood support to SHGs. The lockdown witnessed disruptions in the supply of perishable vegetables due to restrictions on the supply chain; leading to the inability of farmers to sell their vegetables.

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This resulted in the non-availability of fresh vegetables in urban and rural markets, while farmers suffered from financial loss due to the wastage of vegetables at the farm level. With the active support of the district administration and the District Horticulture Office, 500 SHGs procured 171 tons of surplus vegetables from 1500 farmers for onward trading in local markets and supply to free kitchens managed by SHGs as a best practice, saving farmers from the distress sale of vegetables. This ensured the financial stability of farmers and SHG workers, along with food security at a time of crisis.

During such unusual times, children face different kinds of psycho-social distress, requiring interventions to tackle their source, at times. Due to the COVID-19 pandemic, children's continuity of learning has been affected for the most part, due to closures. Parents too underwent a lot of stress during this period; financial, psycho-social and existential, in some cases. The idea of meaningfully engaging with children was therefore conceived to reduce the impact of uncertainty, promote happiness and ensure the healthy development of children, especially the holistic development of children during their early years. These engagements are therapeutic for parents / grandparents and caregivers (elder siblings) as well, and help them to recuperate and cope with this unprecedented situation. The Odisha government's initiative, Mo Pratibha, an online competition with different categories such as art, painting, slogan writing, poster making, short stories and poetry, is one such intervention which helped engage children to imbibe creativity as well as spread awareness about the pandemic; thereby helping the community to contain the spread of the virus. Migrant workers are the ones who have had to face the brunt of the lockdown. Inter-state migrants, large numbers of whom have been stranded in their cities of work, were among the worst affected in the nationwide lockdown imposed since March 24th. This was a huge challenge for the Odisha Government, owing to the huge influx of stranded migrant workers. But the state government swung into action and multi-faceted approaches such as a single unified portal for registration, contact tracing, monitoring health & compliance with quarantine norms, online e-Pass to facilitate the movement of people, medical camp management at major locations along with the provision of food and accommodation etc.were adopted to ensure the containment of the virus and ensure the well-being of the distressed workers. Inter-state migrants, large numbers of whom were stranded in their cities of work, were affected in the nationwide lockdown. The immediate challenge was to reach out to all the stranded migrant workers and provide them a safe and secure environment. Help-desks were set up in other states such as Telangana, Andhra Pradesh and New Delhi. Such Help-desks played a key role in helping the nodal officers in respective states to reach out to migrant workers in different locations and ensure food / dry ration, accommodation and health facilities. Pre-registration of such migrants ensured adequate preparedness in terms of infrastructure and SOPs to handle the incoming migrants. On return, these migrants

workers of different ages were not only screened thoroughly, but also the symptoms of flu, cough, & cold etc., were checked through Mobile Health Units. As many of the migrant workers were in stress, expert counselors from universities were invited to interact with the migrant workers and tender necessary advice to deal with the crisis.Yoga and physical exercise sessions through trainers were also organized to engage the workers with some physical activities and keep them mentally fit. Special care for women and girls was taken through the distribution of personal kits and sanitary pads Similarly,special care for pregnant women and lactating mothers was taken in the camps by ensuring doctors, medicine and care. An On-line Grievance Redressal Portal exclusively for immigrants was also set up to ensure quick redressal of their grievances.

JHARKHAND

The state has been able to keep the number of cases under control in spite of large inbound migration. Technology has been essential in states like Jharkhand. App-based reporting of essential healthcare services was initiated with the aim of resuming the regular services and care provided by healthcare workers in continuation of Covid-19 response activities. Its data covers over 25,000 villages. Developed as a new feature of the existing PLA App used for the reporting of regular Participatory Learning Action (PLA) meetings under community process' Monitoring and Information System (MIS) and nested under the present mode of reporting involving block and district level officials, this new reporting format covers features such as high risk pregnancy, child and adolescent's health, number of individuals in the 60+ age group and social vulnerability mapping; in terms of assessing the spread of communicable and non-communicable diseases in villagers. As tried and tested in PLA MIS reporting, once the data of essential health services indicators is fed in, it becomes immediately available on a digital platform accessible by all respective officials at the National Health Mission (NHM), Jharkhand. The availability of data in all the different geographic units (state, district,community health centre (CHC), health sub-centre (HSC), gram panchayat) helps in better visualization of the scenario, thus aiding line departments in coming together towards field based planning.
One of the major concerns of the battle against COVID-19 is reducing contact. The objective of designing and deploying CO-BOT is to minimise interaction between ancillary healthcare workers and paramedical staff with positive COVID-19 cases. In COVID-19 hospitals, the COBOT delivers medicine, food and water to patients, without requiring health workers and ancillary staff to attend to COVID-19 patients in person. The CO-BOT, which can move freely and operate remotely, is fitted with a camera which has a microphone that allows for two-way communication. The doctors can monitor patients without getting too close to them and can easily pass on

necessary instructions over the microphone. Another feature of the Co-bot is that it will serve food, water and medicines with less chance of spreading the lethal infection. A doctor or nursing staff can check if the patient picks up the correct medicines or not, monitoring them remotely. The cameras can also keep vigil over the interaction between patients in the isolation wards. The speaker will enable staff to communicate with the patient, and the patient can air his/her grievance through the speaker and microphone.Testing was paramount to tackling the virus. Jharkhand State has purchased 30 Quattro machines and placed a supply order for 30 more machines. Also, 22 double channel TruNat machines have been provided by the Government of India (GoI). These 22 double channels Duo and 30 Four Channel Quattro machines have been installed. In future, there is a proposal for installing TruNat at all the CHCs which will empower TB testing as well at the CHC level. At present, more than 1000 tests are being conducted on a daily basis. All together, 52 TruNat machines may test up to 1500 samples every day. All districts have been provided with a confirmatory ASSAY for TruNat test, making them self-sufficient to detect True COVID positives. This has facilitated local testing with ease and convenience to deal with emergencies and quick testing requirements for pregnant women, emergency cases and in re-testing of already positive patients towards releasing them.

It was crucial to identify which areas needed attention first, and at which point. Human migration, one of the important indicators linked with this outbreak, needs to be mapped using better surveillance, and the planning. Importantly, 40,000 healthcare workers and other frontline workers (FLWs) - altogether 56,483 people in Jharkhand in different capacities - were trained in COVID-19 awareness and strategies in field and respective reporting framework. Organized over virtual platforms or through in-person training in small groups maintaining the norms of physical distancing, the entire program took place in matter of a week. The idea was to strategically use the time under the first phase of a countrywide lockdown towards preparedness, identifying quarantine hotspots, isolating persons with symptoms or the asymptomatic - and treating the entire population effectively. Availability of existing healthcare workers (Sahiya) database and demarcation of catchment areas of healthcare workers fellows (sahiya sathis) as "clusters" nested within the boundaries of CHCs, crisscrossing with the boundaries of HSCs, gram panchayats etc, all made this visualization effective in discussion with several line departments who are actively engaged in surveillance planning in the field. Regular sharing of field data by healthcare workers using codes with geospatial attributes thus helped in identifying geographies to focus on, zoning on priority and developing a spatiotemporal database of 4,34,117 individuals under home quarantine across the state; of which 2,55,948 individuals were reported to be safe uponcompletion of 28 days of mandatory quarantine.

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Long-lasting effects on the structure of the economy
The configuration of the economy plays a crucial role in how economic impacts translate into alterations in environmental pressures.The service sectors, heavily impacted by the pandemic, generally generate fewer emissions and utilize fewer raw materials compared to industrial sectors. Consequently, short-term reductions in environmental pressure appear to be smaller than the declines in GDP. The demand for fossil fuels, closely tied to greenhouse gas (GHG) and air pollutant emissions, experiences significant setbacks, particularly due to the effects of lockdown measures on transportation. While electricity demand drops, especially in production as companies temporarily shut down, the decline is less pronounced
than in fuel consumption.Construction activities suffer substantial short-term setbacks, whereas the metals processing sectors primarily face reduced demand for metals in areas like construction and automotive production. The pharmaceutical sector is an exception, witnessing increased output in 2020 due to heightened demand. However, in the medium term, the overall economic contraction negatively impacts this sector, albeit it is expected to fare better than other manufacturing sectors.
Looking ahead, the services and agricultural sectors are anticipated to recover more swiftly and completely than manufacturing. This is attributed to the capital intensity of these sectors and the essential nature of food production. In the short term, labor-intensive sectors are most adversely affected as labor productivity is directly impacted, whereas in the long run, the opposite holds true due to the effects on capital growth.

Long-run effects are larger than macroeconomic effects
In 2020, environmental pressures primarily associated with energy consumption experienced a notable 7-8% decline, followed by a gradual recovery to approximately 2-3% below the pre-COVID baseline projection. This encompasses greenhouse gas (GHG) emissions, as well as air pollutants such as nitrogen oxide (NOx) and sulfur dioxide (SO2), along with the use of fossil fuel materials.
In contrast, environmental factors like air pollutant emissions, materials utilization, and land use changes related to agriculture saw comparatively less impact, both in the short and long term. Among air pollutants, ammonia (NH3) was the least affected. In terms of materials use, biotic resources were less affected, and for land use changes, particularly alterations in harvested area were minimal. In the short term, the cropland area remained relatively stable, and the rapid rebound of food demand ensured that land use changes closely mirrored baseline levels. Despite reduced economic activity, the effects on forestry were minor, suggesting that biodiversity and ecosystem services may not experience significant benefits.

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Other environmental pressures are influenced by distinct economic drivers and exhibit a different pattern of impacts. Emissions of particulate matter (PM2.5), including black and organic carbon, are connected to transport (significantly affected) and residential activities (less affected), among other factors. Metals usage is tied to industrial activities, which were less severely impacted in the short term but have gradually underperformed compared to other sectors over time. While the immediate decline in metal use was minimal, it has increased over time. The decline in construction activities in 2020 had a notable impact on non-metallic minerals.

The regional differences are significant
Regional variations in environmental impacts are influenced by changes in the regional macroeconomy and shifts in its structure. While regional differences are inconsequential for climate change, as greenhouse gas (GHG) emissions uniformly disperse in the atmosphere, they significantly affect local air quality in the case of air pollution. In the short term, the pandemic and associated measures result in regional declines in environmental pressures particularly in GHG emissions and materials usage—that surpass the reductions in economic activity in nearly all countries. Notably, India experienced a substantial decrease in GHG emissions and materials usage, primarily due to the effects on its energy system.
By 2040, both the economic losses and diminished environmental pressures have somewhat subsided globally, yet certain non-OECD (Organization for Economic Co-operation and Development) countries still retain significant environmental benefits. In the OECD,reductions in GHG emissions and materials usage persistently exceed the impacts on GDP,indicating that these economies are specializing to a greater extent in relatively clean sectors as a consequence of the COVID-19 pandemic and associated response measures.

A slower recovery increases long-term effects
The uncertainty surrounding the pace of economic recovery from the pandemic and themedium-term consequences is considerable. If the resurgence of GDP is sluggish, the economic repercussions will endure for a considerably extended period across all countries. In 2025, the variations are particularly pronounced for nations expected to have a swifter recovery. In terms of absolute figures, a delayed recovery entails a substantial and persistent GDP loss for India, given that the more substantial toll on the global economy disproportionately impacts major exporters like India and China. The slower recovery also exerts an influence on all sectors, although not uniformly across the board.
The protracted recovery exacerbates the divergence among sectors concerning the impact on production levels. The repercussions on environmental pressures associated with capital-intensive sectors,specifically energy and manufacturing, endure for a more extended period compared to those pressures linked to

agriculture. Nevertheless, the primary outcome of the sluggish recovery is a decline in macroeconomic activity in the medium term, leading to a corresponding reduction in environmental pressures.

DATA ANALYSIS

The data analysis for investigating the effects of the COVID-19 pandemic on the environment will employ a multifaceted approach to comprehensively assess various environmental parameters.

 AIR QUALITY ANALYSIS: Quantitative analysis of air quality data collected from monitoring stations worldwide during different phases of the pandemic will be conducted. Statistical measures such as mean, median, and standard deviation will be employed to characterize changes in key pollutants, including nitrogen dioxide (NO_2), particulate matter (PM), and carbon dioxide (CO_2). Temporal trends and spatial variations will be explored to identify hotspots and assess the overall impact on air quality.

 WASTE GENERATION PATTERNS: Statistical analysis of solid waste generation data, with a focus on PPE disposal, will be performed. Descriptive statistics will be utilized to quantify the changes in waste generation rates during lockdown periods compared to pre-pandemic levels. Comparative analyses between different regions and demographic groups will be conducted to identify variations in waste management practices.

 BIODIVERSITY IMPACT ASSESSMENT: Biodiversity data, obtained through remote sensing, satellite imagery, and on-the-ground surveys, will undergo both quantitative and qualitative analyses. Spatial mapping techniques will be employed to identify changes in land use patterns, while statistical analyses will assess shifts in species distributions and behaviors. Correlation analyses may be conducted to explore potential relationships between human activity changes and biodiversity impacts.

 VALIDATION AND ROBUSTNESS CHECK: To ensure the reliability and robustness of the findings, the results of the analysis will undergo validation through peer review, consultation with experts, and comparison with existing literature. Sensitivity analyses will be conducted to assess the impact of uncertainties in the data on the overall results.

 POLICY AFFICACY ANALYSIS: A qualitative analysis of implemented environmental policies during the pandemic will be conducted, evaluating their effectiveness and adaptability.Thematic coding will be applied to identify common policy themes, and a comparative analysis will be employed to assess the success of different policy approaches across various regions. The analysis will also consider the influence of socioeconomic factors on policy outcomes.

RESEARCH COMPENDIUM

CONCLUSION

The effects of the pandemic on sectoral economic activity are not yet clearly discerned, and recovery plans are still undetermined in many countries. Although the commencement of vaccine campaigns suggests a reduced risk of a prolonged pandemic, the pace at which life returns to normal remains uncertain.

While numerous countries have declared their intention to make their recovery packages environmentally friendly ("green"), the model does not incorporate specific support for environmental goods and services.There is a need for further exploration into the extent to which recovery packages channel government support to specific environmentally relevant sectors.

Lastly, this Brief concentrates on the implications of COVID-19 shocks for environmental pressures.The assessment of what these implications mean for environmental quality,encompassing factors like GHG and particulate matter concentrations,sea level rise, air pollution-related mortality, biodiversity, and ecosystem services, falls outside the scope of the present paper.

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APPENDIX

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THE ENVIRONMENTAL IMPACT OF FAST FASHION: A Sociological Perspective

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INTRODUCTION

The concept of fast fashion has revolutionised the global fashion industry. Fast fashion refers to a business model characterised by the rapid production and distribution of affordable, trendy clothing. It is driven by the constant introduction of new designs and quick turnover of inventory, resulting in clothing items that are often inexpensive but short-lived in terms of fashion relevance. Brands such as Zara, H&M, and Forever 21 are iconic examples of fast fashion retailers. While this industry has ushered in a new era of accessibility and affordability in fashion, it has also raised numerous concerns, particularly in terms of its environmental impact.

Concerns about the Environmental Impact

The increasing concern about the environmental impact of the fashion industry, and fast fashion in particular, has become a prominent issue. The global fashion industry is now recognized as a significant contributor to environmental degradation. Fast fashion's emphasis on quick production cycles, the extensive use of synthetic materials, and the throwaway culture it encourages have raised alarms about its ecological footprint. The fashion industry's environmental impact includes high water consumption, chemical pollution, and substantial greenhouse gas emissions due to production and transportation. Furthermore, the proliferation of synthetic fibres, like polyester, is contributing to microplastic pollution in oceans and waterways. This environmental crisis necessitates in-depth analysis from a sociological perspective.

Purpose and Significance of the Study

The purpose of this study is to examine the environmental impact of fast fashion through a sociological lens. This research seeks to unravel the complex sociological factors that underlie the fast fashion industry's detrimental effects on the environment. By delving into the cultural, economic, and social aspects of fast fashion, this study aims to shed light on the broader implications of consumer behaviour, labour practices, and globalisation. The significance of this study lies in its potential to provide a holistic understanding of the multifaceted relationship between fast fashion and environmental sustainability. It contributes to the ongoing discourse on how we can mitigate the negative consequences of this industry.

Literature Review

History and Evolution of the Fashion Industry:

The fashion industry has a rich and complex history dating back centuries. It evolved from local and artisanal production to globalised, industrialised, and consumer-driven production. The Industrial Revolution marked a significant shift as textiles and clothing production became mechanised. The mid-20th century saw the emergence of high fashion and luxury brands, and the 1960s brought the concept of "ready-to-wear" fashion to a broader market. This evolution led to the emergence of fast fashion.

Definition and Key Characteristics of Fast Fashion:

Fast fashion is a business model characterised by rapid production of inexpensive, trendy clothing that is quickly marketed and disposed of. Its key characteristics include short production cycles, frequent turnover of styles, low prices, and an emphasis on quantity over quality.
Retailers like Zara, H&M, and Forever 21 are synonymous with the fast fashion model.

Sociological and Environmental Literature on Fast Fashion:

1. **Environmental Impact:**
● Research highlights the vast environmental damage caused by fast fashion, such as extensive water consumption, chemical pollution, and increased greenhouse gas emissions due to transportation and production.
● Studies reveal the extensive use of synthetic fibres like polyester and the microplastic pollution they cause.

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● The concept of "throwaway culture" has gained traction in sociological discussions, where fast fashion encourages a culture of disposability and encourages overconsumption.

2. **Sociological Implications:**
● Fast fashion perpetuates a culture of conspicuous consumption, where individuals buy clothing as a means of identity and status.
● Critics argue that the low prices of fast fashion perpetuate exploitative labour practices, as companies often outsource production to countries with low labour costs.
● The "race to the bottom" in terms of pricing has also been examined in the context of labour exploitation.

3. **Consumer Behaviour**:
● Research has explored how fast fashion influences consumer behaviour, leading to impulse purchases, increased buying frequency, and a reduced appreciation for garment durability.
● The term "consumer socialisation" is used to describe how fast fashion socialises individuals into this culture of frequent purchasing.

Theories and Concepts Underpinning the Study:

● **Sustainable Consumption**: The literature often employs theories related to sustainable consumption to understand the negative impact of fast fashion on the environment and society.
● **Globalisation**: Fast fashion is deeply connected to the globalisation of production and consumption. The literature explores how the global supply chain contributes to environmental problems and labour exploitation.
● **Environmental Sociology**: Environmental sociology provides a theoretical framework for examining the environmental consequences of fast fashion and the social factors that drive it. In conclusion, the evolution of the fashion industry into fast fashion has brought about significant environmental and sociological challenges, which are extensively explored in the literature.
Researchers draw on various theories and concepts to analyse the complex issues associated with this industry
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Methodology Used in the Study of the Impact of Fast Fashion on the Environment:

Research Methods:
In this study of the environmental impact of fast fashion from a sociological perspective, a mixed-methods approach was employed to gather comprehensive data and insights. The research methods utilised include:

1. **Content Analysis:** Content analysis was conducted on academic articles, reports, and media coverage related to fast fashion's environmental impact. This method allowed for the systematic examination of existing literature to identify key themes and trends in the field.

2. **Surveys**: Surveys were administered to consumers to assess their awareness, attitudes, and behaviours concerning fast fashion and its environmental consequences. The survey questions were designed to uncover information on shopping habits, brand preferences, and environmental concerns.

3. **Interviews**: Semi-structured interviews were conducted with random people to understand the common public's views on fast fashion. These interviews provided in-depth perspectives on environmental sustainability.

Sampling Strategy and Data Collection Process:

1. Content Analysis: For the content analysis, a systematic search of academic databases and online sources was conducted to identify relevant articles and reports. A predefined set of keywords related to fast fashion and environmental impact guided the search. A sample of around 10 scholarly articles and few media reports were selected for detailed analysis.

2. Surveys: The survey participants were selected through a stratified random sampling
approach, which aimed to include a diverse range of age groups, income levels, and fashion consumption habits. An online survey was administered to collect responses from a sample of around 30 participants.

3. Interviews: Key stakeholders in the fashion industry were identified through purposive
sampling. Interviews were conducted in person, and participants were chosen randomly to find what people think about fast fashion and environmental issues.

EEthical Considerations

Ethical considerations played a crucial role in the research methodology:
Informed Consent: Participants in the survey and interviews were provided with informed consent forms detailing the research's purpose and how their data would be used. They had the option to withdraw their participation at any time.

1.Anonymity and Confidentiality: Respondents' identities were protected in all phases of the research. Survey responses were anonymized, and interviewees' identities were kept confidential unless they gave explicit permission for attribution.

2. Respect for Participants: The researchers ensured that participants were treated with respect and that their opinions and experiences were valued.

3. Ethical Review: The research project underwent an ethical review to ensure it complied with ethical guidelines and standards.

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Data Analysis Approach:

The data analysis was conducted in the following manner:
1. Content Analysis: Content analysis involves the systematic examination of texts to identify common themes and patterns. Texts were coded based on categories related to environmental impact, consumer behaviour, and industry practices.

2. Survey Data Analysis: Survey responses were analysed using statistical software. Descriptive statistics, such as frequencies and percentages, were used to summarise the survey data. Cross-tabulations were conducted to explore relationships between variables.

3. Interview Data Analysis: Interviews were transcribed and analysed thematically. Key themes related to environmental practices, consumer influence, and industry challenges were identified and discussed. The combination of these research methods and data analysis approaches allowed for a comprehensive examination of the environmental impact of fast fashion, the sociological factors influencing it, and potential strategies for addressing its adverse effects on the environment.

The Fashion Industry's Impact on the Environment
The environmental effects of the fashion industry are considerable and pervasive. Let's look at the effects on the environment, such as resource depletion, pollution, and waste production, and then present data and case studies to show how big the issue is:
● Resource Consumption: The fashion industry uses a lot of resources. It uses a lot of raw materials, energy, and water, which contributes to the depletion of resources.
● Chemical Pollution: Using chemicals in the manufacturing and dyeing of textiles can cause water pollution, endangering both aquatic ecosystems and human health.
● Emissions of Greenhouse Gases: The fashion sector has a substantial role in the production of greenhouse gases, mostly as a result of the energy-intensive manufacturing procedures and product transportation. Waste Production: Fast fashion encourages a disposable culture, which leads to a significant amount of textile waste ending up in landfills.
● Resource Depletion: The fashion business consumes a lot of resources. Cotton cultivation, for instance, needs a lot of chemicals and water. This may result in over-extraction and environmental harm in areas with scarce water supplies.
● Pollution: The textile sector is notorious for dumping pollutants into bodies of water. For instance, microplastic pollution in rivers and oceans is caused by the production ofsynthetic fibres like polyester. Chemicals that are hazardous to both aquatic life and people are released during the dyeing process.

● Waste Production: Due to the "throwaway" mentality of fast fashion, a sizable volume of clothes are disposed of in landfills. Textiles can often take a very long time to degrade,which worsens the environment.
The Ellen MacArthur Foundation estimates that the fashion industry is responsible for about 4% of the world's greenhouse gas emissions.
The World Bank estimates that 17–20% of industrial water pollution worldwide is caused by textile dyeing and finishing.
Approximately 20% of the world's wastewater is generated by the garment sector, according to the United Nations Environment Programme.
Case Studies: The Rana Plaza Disaster: In 2013, the building in Bangladesh that housed many textile companies collapsed, killing over 1,100 people. The disaster brought attention to the unfavourable working conditions in the sector as well as the negative environmental effects of quick, inexpensive production.

The True Cost: This documentary video on the Rana Plaza Disaster that can be found online examines the negative effects of fast fashion on the environment and society, showing how its methods contribute to waste, pollution, and social inequality.
Studies have revealed that washing synthetic clothes causes them to lose microplastic fibres,which contribute to ocean pollution. Many coastal places throughout the world have commented
on this problem.
In conclusion, there are numerous and significant environmental effects of the fashion business.The main negative effects of fast fashion on the environment are resource depletion, pollution,and trash production. In order to lessen the negative effects the industry has on the environment, statistics and case studies highlight the scope of the problem and the need for immediate action.

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This results in environmental degradation in many places, highlighting the tension between industry interests and local residents' welfare. The meanings and symbols connected to rapid fashion are the focus of symbolic interactionism. It can aid in our comprehension of how customers view and engage with fast fashion products in this context. It can also reveal how the business manipulates consumers' opinions of clothing through branding and marketing, frequently encouraging the idea of disposable fashion.

● Consumer Culture: Consumer culture has a significant impact on the purchase of fast fashion. Excessive clothes consumption and waste are caused by the ongoing search for new trends and the urge to wear the newest fashions. To create a sense of urgency and desire for their items, fast fashion brands take use of consumer culture.

● Social standards: People's dress preferences are greatly influenced by social standards.Overconsumption is encouraged by the "wear it once" mentality, which is driven by societal standards and peer pressure. Because people buy more clothes and discard it more frequently, this has an impact on how fast fashion affects the environment.

● Financial Inequalities: Inequalities in wealth are clearly visible in the global fashion supply chain. Poor working conditions and low pay are commonplace for lower-income workers in developing nations, while fast fashion businesses profit from cost-cutting techniques. Due to the fact that these poor populations endure the burden of the pollution and resource depletion brought on by the textile industry, this economic disparity also leads to environmental and ecological injustice When an industry's harmful
environmental effects are disproportionately felt by marginalised populations, environmental injustice has occurred. This is demonstrated in the fashion business by the deterioration of ecosystems in regions where textiles are made, the contamination of water supplies, and landfills overflowing with used apparel. Communities that lack the resources to manage or mitigate these environmental burdens frequently bear them.

Finally, social viewpoints offer an important prism through which to analyse the intricate
interactions between fast fashion and the environment. They aid in our comprehension of the
power relationships, cultural influences, and economic inequalities that fuel the fast fashion
industry and amplify its negative environmental effects. A holistic strategy that takes sociological
and environmental considerations are needed to address these difficulties.

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Consumer Behavior and Fast Fashion:

Numerous elements, including as marketing and advertising, social media, peer pressure, and psychological characteristics, have an impact on consumer behaviour in the fast fashion industry.

Let's explore each of these details:

In the fast fashion industry, marketing and advertising significantly influence consumer decisions. Important things to remember include:

● Promotion and branding: In order to inspire consumers with a sense of urgency and desire, fast fashion brands frequently use aggressive marketing and advertising techniques. To increase sales, they employ strategies like limited-time discounts and celebrity endorsements.

● Impulse buying: Consumers who are influenced by marketing strategies such as flash

discounts and attention-grabbing commercials may make impulsive purchases rather than planned ones worth as Perceived: Consumers are frequently swayed by the impression of worth that advertising conveys. Even if the quality of fast fashion items is frequently poorer than those of more expensive options, customers can think they are getting a great deal.

Peer pressure and social media are significant drivers in the realm of fast fashion consumption.

● Influencers on social media: Fast fashion products can be promoted by influencers on sites like Instagram, TikTok, and YouTube. Their admirers might be driven to adopt their manner, which would increase consumption.

● Social media can worsen FOMO (Fear of Missing Out) : A condition in which people feel pressure to follow the most recent trends. They may buy quick fashion goods that are now popular because of this worry.

● Peer Pressure: Friends and peers may put pressure on a person to follow a certain fashion trend or to constantly refresh their wardrobe, both directly and indirectly. Consumption that is excessive may result from this social pressure.

To address the causes of fast fashion consumption, it is essential to understand its psychology:

● Instant pleasure: The urge for instant gratification is catered to by fast fashion. As a result of being able to buy new products fast and cheaply, consumers feel rewarded.

● Self-Image: A person's choice of clothing can have an impact on their sense of self-worth and self-image. Fast fashion enables customers to try out several looks without having to make a large financial commitment.

● Escapism: Fast fashion purchases and retail therapy can be used as a means of escaping. stress or other unpleasant feelings, which can results. in compulsive shopping habits.

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Customer environmental awareness and attitudes:
A growing concern for sustainability is revealed by data on customer awareness and attitudes towards the environment in the fast fashion sector. Consumers are becoming increasingly conscious of the environmental effects of the fashion business, including problems with waste, water pollution, and carbon emissions.
Shift Towards Sustainable Fashion: Even if they are more expensive, some consumers are actively looking for eco-friendly and sustainable fashion solutions.
Consumer Demand for Transparency: Consumers are pressing fast fashion companies to be more open about their supply chains and sustainability policies. As a result, several companies have changed their business practices.

In conclusion, the fast fashion industry's intricate interaction of marketing, societal pressures,psychological considerations, and environmental awareness shapes customer behaviour. In order to make educated decisions and address the issues related to fast fashion, businesses,policymakers, and consumers themselves must understand these dynamics.

The Fashion Industry 's Response to Environmental Change:

One may not immediately think of the fashion business as a fossil fuel superuser. However, a large portion of the petrochemical materials used in modern textiles originate from the same oil and gas firms that are responsible for greenhouse gas emissions. According to the United Nations Environment Programme, fashion actually contributes up to 10% of the world's carbon dioxide emissions, which is more than international travel and shipping put together.
With an estimated global worth of over 2.5 trillion dollars and over 75 million employees, the fashion industry plays a significant role in our economy. Over the last few decades, the garment industry has experienced remarkable expansion. From 2000 to 2014, the output of clothes doubled. Even though consumers purchased 60% more clothing in 2014 than they did in 2000, they only wore it for half as long. Additionally, it makes up 5% of the 300 million tonnes of plastic manufactured annually worldwide. Cotton has been surpassed by polyester, an oil-based material that is widely used in textile manufacturing. Polyester and other synthetic fibre-based clothing is a major contributor to the micro plastic pollution that is particularly detrimental to marine life

Although the fashion business is growing, a growing number of people are becoming aware of the wide range of detrimental effects the industry has on the environment. The manufacture of fashion pollutes rivers and streams, dries up water sources, and accounts for 10% of humankind's carbon emissions. Furthermore, washing particular types of clothing releases a considerable amount of microplastics into the water, with 85% of all textiles ending up in the trash each year.

Reducing the irreversible impact this sector is having on the environment requires institutional change and accountability. One may contend that both customers and brands have some of the blame for these issues. Governments hold the final seat at the responsibility table for fashion, and while they haven't done much to influence the sector thus far, they still have the potential to do so.

Government regulation, which establishes guidelines, encourages eco-friendly practises, and rewards ethical business conduct, can significantly contribute to the fashion industry's sustainability. The fashion sector may be subject to government regulations that set environmental standards, including restrictions on waste production, water use, and pollution. These guidelines may lessen the damaging effects of the sector on the environment. The use of environmentally friendly and sustainable materials in the manufacture of garments can be encouraged by regulations. This could entail giving businesses who prioritise the use of organic fibres, recycled materials, and non-toxic dyes tax rebates or other advantages. Rules can guarantee that fashion brands follow ethical labour standards and give their workers a safe workplace. This can involve rules pertaining to pay, hours worked, and workplace security. To guarantee that consumers are provided with correct information regarding the environmental and ethical elements of the items they purchase, regulations may mandate transparency in labelling and advertising. Government regulations can encourage sustainable and culturally relevant fashion practises by supporting and promoting regional craftsmen and traditional craftsmanship.Policies have the power to require or encourage educational programmes that inform manufacturers, consumers, and other stakeholders about sustainable fashion practices.Governments have the authority to create green certification programmes that honour and publicise clothing lines and goods that adhere to strict sustainability standards.For the public, business, and government at large, securing a sustainable and morally sound the future for the fashion industry is a significant yet difficult task. In order to assist create a more ethical and sustainable fashion business, we must take advantage of this opportunity to encourage the government to take the lead on a worldwide scale.The fashion business has a significant effect on the environment. It has been subject to essentially zero regulation, which has sparked a race to the bottom in which businesses with the biggest disregard for people and the environment are at a competitive advantage. This has to get over.In. general, invention and novelty are what drive the fashion business, but fast Consumption and overproduction necessitate regulations to lessen their disastrous effects on the environment.

RESEARCH COMPENDIUM

Steps Towards Sustainable Fashion

The fashion industry's environmental effect has been under increased scrutiny in recent times due to growing evidence of rising worldwide clothing consumption as well as increased cost and accessibility of apparel. Over the past three years, a number of thorough reports have been released outlining the extent of the fashion industry's environmental impact. Additionally, a number of sustainability campaigns specifically targeted at the fashion industry have been founded, such as the "2020 Commitment" of the Global Fashion Agenda, which has helped raise awareness of the issues and clearly signalled the beginning of a movement towards real, quantifiable action.Using sustainable materials is one of the best methods for fashion manufacturers to lessen their impact on the environment. Materials classified as sustainable are those derived from renewable resources and don't harm the environment during production or disposal. A material's influence on land use, water use, carbon emissions, and habitat loss decreases with its level of sustainability. There are many various types of sustainable materials available, such as naturally biodegradable conventional materials, bio-based materials, and recycled and upcycled materials.Don't expect fashion firms to overnight transition to sustainable materials, though. High-volume
garment producers are slow to adapt, and many are still in the process of incorporating sustainable materials into their whole product lines.
Since the fashion business uses a lot of water, cutting back on water use throughout the production process is another option for fashion brands to lessen their environmental effect.
The best thing fashion brands can do is utilise fewer materials that demand big amounts of water, although lowering water usage during the production process might be difficult. Just making the move to more environmentally friendly materials—like recycled or organic cotton—will dramatically lower the quantity of water required in manufacturing amounts of water, although lowering water usage during the production process might be difficult. Just making the move to more environmentally friendly materials—like recycled or organic cotton—will dramatically lower the quantity of water required in manufacturing.
When creating their designs, fashion brands must take biodiversity preservation into account.Biodiversity not only offers the fashion industry a wealth of resources, but it also serves to mitigate the effects of climate change. Fashion brands should always look into where they acquire their materials from and encourage their suppliers to do the same in order to ensure that their supply chains support biodiversity.

RESEARCH COMPENDIUM

Brands can seek out suppliers who identify the chemicals they use and ensure that they do not pose a risk to human health or the environment in order to minimise the usage of hazardous chemicals. Fashion firms may shield people and the environment from a variety of environmental issues related to conventional materials by minimising the use of hazardous chemicals.Because the fashion business relies heavily on cheap, outsourced labour, one of the main issues is the treatment of workers.Although some fashion businesses have succeeded in enhancing labour conditions within their supply chains, the majority have not done so sufficiently. It's still very early to tell whether or not workers are receiving a fair salary, are working in safe conditions, and are granted basic human rights.Fashion businesses may guarantee that labourers receive a fair salary by utilising worker-owned cooperatives, which provide them greater influence over working conditions. Fashion firms can lessen the incidence of unjust work practises in their supply chains and contribute to the protection of labourers' rights by purchasing from worker-owned cooperatives.

Societal Implications

Fast fashion enables consumers to buy stylish apparel made quickly by large, more reasonably priced businesses, only to wear it seldom. Fast fashion may make buying clothing more affordable, but it has negative social and environmental effects. One of the main sectors that has a detrimental impact on the environment is the fashion industry. Because of globalisation, it is now feasible to produce clothing at progressively lower costs, leading many consumers to view clothing as disposable. Despite the potential for environmental and occupational dangers, as well as pollution, disposable clothing appears to be in fashion.
It is important to remember that fast fashion has detrimental effects on the environment, but it also has negative social effects that go against many of the 2030 Agenda's sustainable development goals, such as gender equality, decent work and economic growth, and reduced chemicals, generating textile waste, polluting water supplies, and utilising land.Fast fashion industry's relentless pursuit of cheap and trendy clothing has led to a culture of overconsumption. People are buying more clothes than ever before, often wearing them only a few times before discarding them. This "throwaway" mentality contributes to a massive amount of textile waste that ends up in landfills, taking hundreds of years to decompose. This waste not only harms the environment but also puts a strain on waste management systems. Moreover, the production of fast fashion garments has severe environmental consequences. The use of synthetic materials, such as polyester, contributes to the release of microplastics into the environment during washing. These microplastics eventually find their way into our oceans, harming marine life and entering our food chain. Additionally, the production of fast fashion involves the use of toxic chemicals, which can pollute water sources and impact the health of workers in garment factories.

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The fast fashion industry is also notorious for its exploitative labour practices. Many workers, particularly in developing countries, endure low wages, long hours, and unsafe working conditions. This perpetuates a cycle of poverty and inequality, further exacerbating social issues.

Furthermore, the fast fashion model promotes a culture of disposability, where clothing is seen as disposable and easily replaceable. This mindset devalues the craftsmanship and artistry behind clothing production, leading to a loss of traditional textile skills and cultural heritage.

Overall, the ignorance of the environment by the fast fashion industry has far-reaching societal impacts. It contributes to environmental degradation, waste accumulation, worker exploitation and the erosion of cultural values. However, by raising awareness, supporting sustainable brands, and making conscious fashion choices, we can collectively work towards a more environmentally and socially responsible fashion industry.

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RESEARCH COMPENDIUM

APPENDICES

How often do you buy clothing and fashion items (including shoes and accessories)?
29 responses

- Multiple times a month
- Once a month
- Few times a year
- Rarely-

34.5%
37.9%
20.7%

When shopping for clothing, which of the factors are important to you?
29 responses

- Price
- Style
- Brand Reputation
- Environmental Sustainability
- Durability

37.9%
31%
24.1%

Are you aware of the concept of "fast fashion" and its potential environmental consequences?
29 responses

- Yes
- No

31%
69%

Have you ever taken specific actions to reduce your fashion-related environmental impact? (Check all that apply)
29 responses

Buying clothing from sustainable or eco-friendly brands — 5 (17.2%)
Reducing the frequency of clothing purchases — 11 (37.9%)
Donating or recycling clothing — 17 (58.6%)
Repairing or upcycling clothing — 6 (20.7%)
None of the above — 7 (24.1%)

RESEARCH COMPENDIUM

Do you think the fashion industry should be more environmentally responsible?
29 responses

- Yes
- No

100%

How concerned are you about the environmental impact of the fashion industry?
29 responses

- Not concerned at all
- Slightly concerned
- Moderately concerned
- Very concerned
- Extremely concerned

27.6%
37.9%
17.2%
13.8%

Please share any additional thoughts or comments you have regarding the environmental impact of fast fashion:
It needs a general awareness as many are unaware of any impact.
-
Not having much idea about this concept
It should be reduced . People should change their mindset.
I've completely stopped buying my clothes from brands like Sara and h&m. I try to buy fabric and get it stitched. Helps local tailor, more durable and comfortable clothing.

We should work to eradicate the negative impact of fast fashion on the environment.

Everyone has their personal choices but still we can at least give our thoughts towards the environmental impact of fast fashion while buying clothes.
Fast fashion has significant environmental consequences due to its production processes, consumer behaviours, and supply chain dynamics. Here are some additional thoughts and comments on its environmental impact: Resource Depletion: Fast fashion relies on the rapid production of clothing, often using resource-intensive materials like water and energy. This contributes to resource depletion, especially when non-renewable resources are involved. Waste Generation: Fast fashion generates a vast amount of textile waste. Clothing items are often discarded after a few wears, leading to increased landfill waste and overburdening waste management systems. Chemical Pollution: The textile industry uses numerous chemicals in the dyeing and finishing processes. Improper disposal of these chemicals can harm ecosystems and water sources.

RESEARCH COMPENDIUM

I think only people who are buying clothes from fast fashion brands should understand the seriousness of this issue rather than showing off what they have or what they wear.

Fast fashion harms the environment a lot. It creates a ton of waste, uses too much water, and pollutes our surroundings. Also, the people who make these clothes often work in bad conditions. So, it's really important to support eco-friendly and fair fashion choices

Enough for everyone's need but not for any one's greed…. . Time to change definition of fashion and social media

Depletion of renewable resources , soil degradation

I have less knowledge regarding the environmental impact of the fashion industry.

Do you have any suggestions for addressing or reducing the environmental impact of the fashion industry?

Stop useless fashion shows

Recycling clothes…. Few apps allow you to sell and buy used clothes in good condition. But people consider a myth that used clothes shouldn't be worn.

People should be made aware about the consequences of their actions especially the young generation as they are the prime target of fast fashion brands. Social media Influencers should be responsible for not generating such content too frequently.

prefer quality over quantity.Promotion of sustainable brands

People should practise simple clothing. The thirst to chase fashion stems from low self esteem and poor self image. Buy local clothing, focus on comfort and quality of clothing. Or buy from brands that sell quality clothing. (I prefer fabindia and other home grown labels).

Governments may start organisations concerned with eco-friendly clothing and should launch campaigns to make people aware about the importance of eco-friendly clothing.

Promote Sustainable Materials: Encourage the use of sustainable and eco-friendly materials like organic cotton, hemp, and recycled fabrics. These materials have a lower environmental footprint. Circular Fashion: Implement circular fashion practices, such as recycling and upcycling, to extend the life of clothing and reduce waste. Transparency: Fashion brands should be transparent about their supply chains, production processes, and environmental practices, allowing consumers to make informed choices. Reducing Overproduction: Brands can avoid overproduction by producing clothing in line with actual demand, reducing the need for excessive inventory and markdowns. Ethical Manufacturing: Ensure fair wages and safe working conditions for garment workers, addressing both ethical and environmental concerns.

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I think the wastage happening during the manufacturing of fashion clothing and the chemical dyes should be reduced.

Choose Sustainable Brands: Look for clothing brands that prioritise sustainable and ethical production practices. Buy Less, Choose Well: Opt for quality over quantity. Invest in timeless, durable pieces that last longer and are made from sustainable materials.

Quality improvement (quality advertise for itself so spend more there) . Sustainable production (more R&D and focus on REAL usability) . Eco friendly end to end chain (production, wearing, dumping... etc includes whole) . Future oriented (multiple uses)

We can borrow or rent clothes instead of buying on every occasion. We can donate clothes.

Consumption and Concerns of Waste
Amongst the Youth in Delhi University's North Campus

Authors: Viksita Bhardwaj, Sargam Khatri, Sabrath Showkat,Rashi

INTRODUCTION

 An initiation towards the study of 'consumption and concerns of waste amongst the youth in Delhi University's north campus' is presented through this research project. We've made an effort to incorporate appurtenant information in this research project by enlisting almost every issue related to the realm of waste and it's management among youth in a setting of university student's accommodation. This research hence, aims to provide probable solutions for this bone of contention by tracing the patterns of waste disposal and management as practiced by youth in a setting where they live in rented accommodations in a city of which they're not very familiar with. The study therefore also focuses upon how aware the youth population of this area is, with regards to the campaigns organized by the government, on both local and national levels.

RATIONALE

The environment is suffering so much, and yet humanity is still adamant about saving it. We have opted to study the topic of 'consumption and concerns of waste amongst the youth in Delhi University's north campus'. This study determines the issues surrounding environmental degradation and waste recycling. In order to trace the patterns of waste disposal and management as practiced by youth in a setting where they live in rented accommodations, in a city much unknown to them. Also, the main objective of this study is the knowledge and attitude of students towards the practice of waste management.

STATEMENT OF PROBLEM

It is imperative for us to know that improper disposing of waste does not only negatively affect human health, but also the environment. The environment faces lots of problems these include soil pollution, water pollution, and air pollution and what not. As we can observe, with just a short period of rain, there is always a problem with the drainage which later on results to a flood. This is all because of improper disposal of which hinders to flow to the drainage.

We can have a real example of Yamuna bank which was literally overflowed some days back. Indeed , small mistakes make a big difference that's what we see today. Human health can also be at risk when waste disposal does not improve any better. The direct effect that is caused by improper waste disposal ensues from excessive bleeding of vermin and agents of disease such rats, flies, and mosquitoes which leads to the diseases like dengue and malaria (most of the students in North campus have faced this diseases of dengue). Also ,the waste that was thrown in water bodies negatively changes the chemical composition of the water, In short, this is called water pollution. This would have an effect to all ecosystems existing in the water.

All theses shows that lack of practices in proper waste disposal can give bad impact to the environment and to the human health and can cause respiratory problems and other health effects as the contaminants gets from the kings into the other parts of the body which later on can cause

conflict on every organs in the body. Proper waste disposal is the vital part of sanitation. By doing the said parts, cleanliness which is the main goal of sanitation would soon follow. Implying that sanitation has a direct impact on the well-being of a community. Understanding proper waste disposal by youths can be a big help in making the public to comply. If one understood completely the said practices. It would be easier to follow proper waste disposal.

We as researchers see that the understanding of waste disposal among the students of North campus is clear as University administration has provided the facilities of blue , green and red dustbin in order to make everyone aware about the waste disposal. But it is the duty of the students to be cautious while consuming anything in order to dispose the waste because all this can do is to make our life healthier and happiest and make this campus the better place to breathe freely.

METHODOLOGY

In this research project, we have collected different data(primary and secondary data) on concerns regarding waste management. In this section, we have tried to analyse primary data which is based on Issues of waste management, disposal

practices, Waste tackling techniques And impact on environment. We have collected our primary data through survey conducted on the basis of questionnaire, and secondary data is based on newspaper articles which write about different colleges and their students taking up environmental initiatives. From the survey, we came to the analysis that, almost all of the respondents have shown their concerns regarding waste management. Majority practice waste minimization techniques (reduce, reuse, and recycle), they even sort their waste before disposing it off. They even wrote about different practices they do at home for waste minimization such as trying to reduce the use of plastic waste as much as possible. We assure that we paid bills online, By using leftover vegetable peels as compost, using old clothes as dusters etc., use reusable cloth bags for shopping instead of single-use plastic. The data collected through newspaper articles would be discussed further.

LITERATURE REVIEW

In this research project, we have tried to examine the behavior of youth of University of Delhi in North campus on waste management through a review on how University of Delhi has taken initiatives towards waste management and creating awareness among youth to take them forward in order achieve environmental sustainability.

The review on initiatives taken by different colleges of north campus, Delhi University are;

1. During the World Environment Day 5th June the initiative taken by Shaheed Sukhdev College of Business Studies (SSCBS) was to tackle the problem of electronic waste by ensuring its proper disposal.

"Amid the pandemic the reliance on gadgets has increased manifold leading to a greater amount of e-waste. To tackle this problem head on, we have placed customized bins in various target markets to provide convenient disposal options. Old wires that don't work, and other electronic gadgets that people usually discard under a tree because of not knowing what to do with it, can now dispose the waste in a productive way," says Parnika Srivastava, a final year student of SSCBS, informs, "We also channelize this e-waste to help an underprivileged community, by providing them employment opportunities by producing DIY products using the waste component of the collected e-waste. This is then sold through third party, at various digital carnivals." On This Environment day, the group of students from SSCBS celebrated their achievements by connecting digitally and discussing how far they have made it, in tackling e-waste throughout Delhi-NCR."

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RESEARCH COMPENDIUM

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2. Janaki Devi Memorial College prides itself on the numerous environmental initiatives, which have won the college many accolades. We believe that sustainable development must go beyond the classroom and the books, and permeate into the core functions of the institution. With this in mind, the College has initiated several programmes over the last two decades, which reflect the environmentally friendly ideology of the institution like Rain water harvesting programme, Renewable energy and Composting.

3. In April 2019, Lady Irwin College in collaboration with Indian Pollution Control Association (IPCA) took an initiative to install Aerobins in the campus. Aerobins have revolutionized the system of home and garden waste management. They use a patented lung or aeration core inside a sealed bin to promote aerobic breakdown of organic matter releasing nutrients into the soil.
Presently, aerobins are installed near the hostel mess of the college. Other than this, the kitchen and garden waste is also managed by converting it into manure using Roly-poly and Vermicomposting. This manure is used in maintaining the campus's exquisite landscape as well as organic farming. Leaf composting is done in-house which is also put on sale in months of excessive leaf fall in order to clean the pits. Due to COVID, the above systems have been relatively inactive since March 2020.

4. With solutions for waste management and finding sustainable means for curbing stubble burning, Delhi university's Ramjas College has become the only institution whose two projects have been selected to be showcased at Enactus World Cup at San Juan, Puerto Rico in October. The projects were "Swabun" and "Waraq", the project Swabun looks at the problem of managing dry and wet waste in urban areas. They have employed potters in Uttam nagar to create three layered composters called Unnati which are made of terracotta. These composters were placed in households across the city tying up with RWAs. They sold few of them in Dwarka and Hauz Khas. The compost produced was used by the households either for Kitchen gardens or used at the community level. The compost was priced at Rs 1,800. The other project 'Waraq", which means " golden leaf", is at the stage where students are working to make a prototype.

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APPENDIX

Waste Management

S.NO	Submit Date	Do you practice waste minimization techniques like reduce, reuse and recycle?	Do you sort your waste before disposing it off?	How often is waste collected from your locality?	Does your locality provide any waste management services?	How aware are you about the waste reduction and management campaigns run by the government?	Are there any recycling campaigns organized by your local government?	Do you agree that the quantity of waste sent for the disposal to the landfills should be minimized?	What kind of waste is disposed of in a GREEN coloured dustbin?	What kind of waste is disposed of in a BLUE coloured dustbin?	Do you try to reduce, reuse and recycle waste at home? If yes, then enlist some of your techniques.
1	04-11-2023 15:31:40	Sometimes	No	Daily	No	I've heard about some	I'm not aware	Maybe	Dry waste	Wet waste	Sometimes I do.
2	04-11-2023 15:59:34	Sometimes	Yes	Daily	Yes | Sometimes	I've heard about some	Yes	Yes	Wet waste	Dry waste	We try to reduce the use of plastic waste as much as possible. We assure that we paid bills online
3	04-11-2023 16:11:47	Yes	Sometimes	Daily	Sometimes	I've heard about some	Sometimes	Yes	Wet waste	Dry waste	Reuse the body of pens instead of purchasing new ones
4	04-11-2023 18:03:50	Yes	Yes	Daily	Yes	Yes, I'm aware!	No	Yes	Wet waste	Dry waste	By using leftover vegetable peels as compost, using old clothes as dusters etc.
5	05-11-2023 04:55:40	No	Sometimes	Daily	No	I've heard about some	Sometimes	Maybe	Wet waste	Dry waste	No
6	06-11-2023 17:54:22	Yes	Yes	Weekly	Sometimes	I've heard about some	I'm not aware	Yes	Wet waste	Dry waste	Yes
7	06-11-2023 17:57:19	Yes	Sometimes	Weekly	No	I've heard about some	I'm not aware	Yes	Wet waste	Dry waste	Yes whenever I ordered anything I tried to keep plastic and plastic boxes with me for further use.

RESEARCH COMPENDIUM

S.NO	Submit Date	Do you practice waste minimization techniques like reduce, reuse and recycle?	Do you sort your waste before disposing it off?	How often is waste collected from your locality?	Does your locality provide any waste management services?	How aware are you about the waste reduction and management campaigns run by the government?	Are there any recycling campaigns organized by your local government?	Do you agree that the quantity of waste sent for the disposal to the landfills should be minimized?	What kind of waste is disposed of in a GREEN coloured dustbin?	What kind of waste is disposed of in a BLUE coloured dustbin?	Do you try to reduce, reuse and recycle waste at home? If yes, then enlist some of your techniques.
8	06-11-2023 17:58:14	Sometimes	Sometimes	Daily	Sometimes	Yes, I'm aware! | I've heard about some	Yes | I'm not aware | Sometimes	I'm not sure	Wet waste	Dry waste	Sometimes
9	06-11-2023 18:08:58	Sometimes	Sometimes	Daily	No	I've heard about some	Yes	Maybe	Wet waste	Dry waste	..
10	07-11-2023 02:19:31	Sometimes	Yes	Never	No	I've heard about some	No	Yes	Wet waste	Dry waste	Yes, I use recyclable shopping bags,use old clothes[rags /cloths]in cleaning ,reduces use of plastic
11	07-11-2023 03:02:33	Sometimes	Yes	Daily	Sometimes	Yes, I'm aware!	Sometimes	Yes	Dry waste	Wet waste	Cloth bags: Use reusable cloth bags for shopping instead of single-use plastic bags.
12	07-11-2023 03:14:22	Sometimes	Yes	Weekly	Yes	Yes, I'm aware!	I'm not aware	Yes	Wet waste	Dry waste	.
13	07-11-2023 04:06:57	Sometimes	Sometimes	Daily	Yes	No, I don't know about them	No	Maybe	Dry waste	Wet waste	No
14	07-11-2023 04:34:26	Yes	Yes	Daily	Yes	I've heard about some	Sometimes	Yes	Wet waste	Dry waste	Plastic reduction,reuse of bottles,etc., recycling of other materials and segregating diff. wastes.
15	07-11-2023 04:43:45	Sometimes	Yes	Weekly	Yes	Yes, I'm aware!	No | Yes	Yes	Wet waste	Dry waste	No

S.NO	Submit Date	Do you practice waste minimization techniques like reduce, reuse and recycle?	Do you sort your waste before disposing it off?	How often is waste collected from your locality?	Does your locality provide any waste management services?	How aware are you about the waste reduction and management campaigns run by the government?	Are there any recycling campaigns organized by your local government?	Do you agree that the quantity of waste sent for the disposal to the landfills should be minimized?	What kind of waste is disposed of in a GREEN coloured dustbin?	What kind of waste is disposed of in a BLUE coloured dustbin?	Do you try to reduce, reuse and recycle waste at home? If yes, then enlist some of your techniques.
16	07-11-2023 08:09:04	Sometimes	No	Daily	No	No, I don't know about them	No	Yes	Dry waste	Wet waste	Using cloth bags Cutting on plastic by carrying MyBag for vegetable/grocery shopping
17	07-11-2023 08:22:15	Sometimes	Yes	Daily	Yes | Sometimes	I've heard about some	I'm not aware	Yes	Wet waste	Dry waste	Yes 1. Reusable shopping bag should be taken from the shop. 2. Thermal mugs should be used for tea.
18	07-11-2023 08:43:59	Yes	Yes	Daily	Yes	Yes, I'm aware!	Sometimes	Yes	Wet waste	Dry waste	Buy in bulk to reduce packaging. Take reusable bags to carry your purchases home.
19	07-11-2023 08:49:20	Yes	No	Daily	No	I've heard about some	No	Yes	Dry waste	Wet waste	I try to avoid using disposable items at bday parties... I often take my cloth bag with me..
20	07-11-2023 09:00:35	Yes	Yes	Daily	No	I've heard about some	I'm not aware	Yes	Wet waste	Dry waste	I use plastic containers as planters sometimes I make compost by using fruit and veg peels

RESEARCH COMPENDIUM

S.NO	Submit Date	Do you practice waste minimization techniques like reduce, reuse and recycle?	Do you sort your waste before disposing it off?	How often is waste collected from your locality?	Does your locality provide any waste management services?	How aware are you about the waste reduction and management campaigns run by the government?	Are there any recycling campaigns organized by your local government?	Do you agree that the quantity of waste sent for the disposal to the landfills should be minimized?	What kind of waste is disposed of in a GREEN coloured dustbin?	What kind of waste is disposed of in a BLUE coloured dustbin?	Do you try to reduce, reuse and recycle waste at home? If yes, then enlist some of your techniques.
21	07-11-2023 09:10:02	Yes	Sometimes	Daily	Sometimes	Yes, I'm aware!	No	Yes	Dry waste	Wet waste	Yes
22	07-11-2023 09:36:44	Yes	Yes	Daily	No	Yes, I'm aware!	Yes	Yes	Wet waste	Dry waste	We segregate the waste. We reuse wet waste of fruits and veggies for creating food for plans.
23	07-11-2023 10:13:45	Yes	Yes	Daily	Yes	Yes, I'm aware!	Yes	Yes	Wet waste	Dry waste	Yes
24	07-11-2023 10:45:21	Yes	No	Daily	No	No, I don't know about them	No	Yes	Wet waste	Dry waste	I ensure to carry a bag with me whenever I step out of my house for shopping. I resuse plastic bags.
25	07-11-2023 11:12:31	Yes	No	Daily	Yes	No, I don't know about them	Yes | Sometimes	Yes	Dry waste	Wet waste	Yes
26	07-11-2023 11:59:13	Yes	Yes	Daily	Yes	I've heard about some	I'm not aware	Yes	Wet waste	Dry waste	No
27	07-11-2023 12:39:44	Sometimes	No	Daily	No	No, I don't know about them	I'm not aware	Yes	Dry waste	Wet waste	I just reuse containers and waste less
28	07-11-2023 12:49:45	Yes	Yes	Weekly | Daily	Yes	Yes, I'm aware!	No	Yes	Wet waste	Dry waste	I try to use vegetable waste into manure for my plants.
29	07-11-2023 13:36:08	Yes	Yes	Daily	Sometimes	I've heard about some	Sometimes	Maybe	Wet waste	Dry waste	Yes,convert old clothing into wash rags.

S.NO	Submit Date	Do you practice waste minimization techniques like reduce, reuse and recycle?	Do you sort your waste before disposing it off?	How often is waste collected from your locality?	Does your locality provide any waste management services?	How aware are you about the waste reduction and management campaigns run by the government?	Are there any recycling campaigns organized by your local government?	Do you agree that the quantity of waste sent for the disposal to the landfills should be minimized?	What kind of waste is disposed of in a GREEN coloured dustbin?	What kind of waste is disposed of in a BLUE coloured dustbin?	Do you try to reduce, reuse and recycle waste at home? If yes, then enlist some of your techniques.
30	07-11-2023 16:44:09	Yes	Yes	Weekly	No | Sometimes	No, I don't know about them	No	Yes	Dry waste	Wet waste	Yes I will try to reduce waste on my level ,by using minimal level of plastic
31	07-11-2023 18:39:44	Yes	Yes	Daily	Yes	Yes, I'm aware!	Yes	Yes	Wet waste	Dry waste	Yes,Carry re usable shopping bags,re use wrapping gift papers
32	08-11-2023 02:25:21	Yes	Sometimes	Daily	Yes	Yes, I'm aware!	Yes	Yes	Wet waste	Dry waste	We give kitchen waste like vegetable/fruit residues to cow. We make lot of use of old items.
33	08-11-2023 04:46:19	Yes	Sometimes	Daily	Yes	Yes, I'm aware!	Yes	Yes	Wet waste	Dry waste	We always try to minimise the waste that we dispose of.
34	08-11-2023 16:05:29	Yes	Yes	Daily	Yes	Yes, I'm aware!	No	I'm not sure	Wet waste	Wet waste	I ate wet waste cows

RESEARCH COMPENDIUM

Impact of Ecotourism in Landour
A Sociological Study

Authors: Dharanshi Dang, Muskaan Kaushik, Vaishali Grewal, Yashaswini Bahuguna

Abstract:

This research study explores the impact and involvement of the community in ecotourism initiatives within the region of Landour. Through questionnaires, the study aims to uncover the resident's perspective on the effect of ecotourism in the area. Additionally, the research will assess the social, economic, and environmental outcomes associated with different degrees of community involvement. The findings of this study have the potential to inform policy and planning efforts to promote ecotourism that is not only environmentally sustainable but also socially inclusive and supportive of local communities in Landour.

INTRODUCTION

In 2017, Uttarakhand had welcomed almost 3.5 crore tourists and the number shot up to over 5 crore by 2022. In Mussoorie itself, there were 2,794,108 domestic tourist arrivals and 1865 foreign arrivals in 2017. As per data of Uttarakhand Environment Protection & Pollution Control Board (UEPPCB), no Sewage Treatment Plant (STP) was installed in Mussoorie to treat waste water/sewage till 2019. A concerning problem brought on by the growing popularity of tourism locations is overcrowding. These formerly tranquil havens have become busy metropolises due to the large number of tourists. Travellers begin to gravitate away from the original tranquillity and toward noise, pollution, and depletion of local resources. The ramifications of overcrowding are complex and go beyond one particular problem. Ecologically speaking, uncontrolled tourism and high foot traffic place the fragile ecosystems of mountainous regions at risk. The natural balance is upset, pollution levels rise, and waste management is tougher.

There is no question that 'green' sells. Almost any terms prefixed with the term 'eco' will increase interest and sales. Thus, in the last few years there has been a proliferation of advertisements in the travel field with references such as ecotour, ecotravel, eco vacation, ecologically sensitive adventures, eco(ad)ventures, ecocruise, ecosafari, eco expedition and, of course, ecotourism (Wight, 1993). Orams (1995) reviewed the variety of ecotourism definitions to show that, "at a minimum, ecotourism is tourism which is based on the natural environment and seeks to minimise its negative impact on that environment." However, many definitions argue that ecotourists should attempt to do more than simply minimise impacts. They should also contribute to the health and quality of the natural attractions which they visit. It may be that one of the challenges for the ecotourism industry is to assist in moving ecotourists from a minimal 'passive' position to a more 'active' contribution to the sustainability of 'eco-attractions'. The wide variety of definitions of the term 'ecotourism' implies that the debate over what ecotourism is, and what it should be, continues.

In the context of this study, the operational framework for defining ecotourism is drawn from the seminal work of Donohoe and Needham (2006), who delineate key tenets essential to the characterization of ecotourism. These foundational principles encompass: (1) nature-based orientation; (2) commitment to preservation and conservation of natural resources; (3) educational imperatives; (4) a dedication to sustainability; (5) equitable distribution of benefits; and (6) an emphasis on ethical considerations, responsibility, and heightened environmental awareness. By adopting this conceptual framework, our study seeks to elucidate the nuanced dynamics and outcomes of ecotourism within the specific context of Landour, Uttarakhand.

Landour, situated in the state of Uttarakhand, has been selected as the focal point for our investigation due to the prevalence of nature-based tourism within the region. The subsequent analysis of our field survey findings will be anchored in the aforementioned tenets, allowing for a comprehensive examination of the ecological, socio-economic, and ethical dimensions of ecotourism in Landour. This methodological approach underscores our commitment to a rigorous academic exploration of the multifaceted implications and effectiveness of ecotourism practices in this particular locale.

Landour is located in the Lower Western Himalaya, in the Mussoorie Range, the second of the five parallel folds of the Himalaya. On average, Landour is about 984 ft (300 m) above Mussoorie, which itself is mostly at an altitude of 6,800 to 7,798 ft (2,250 to 2,377m). The first permanent building in all of Mussoorie-Landour

was built in Landour in 1825 by Captain Fredrick Young, the "discoverer" of Mussoorie, who was also the Commandant of the first Gurkha (or Gorkha) battalion raised by the British after prevailing in the Gurkha War. Landour was initially built by and for the British Indian Army and much of it is a Cantonment. The town's name is drawn from Llanddowror, a village in Carmarthenshire in southwest Wales as it was common to christen places with nostalgic English, Scottish, Welsh or Irish names during the British Raj.

Since Landour is a cantonment town, it is administered by the cantonment board which is under the control of the Ministry of Defence. Councillors, or representatives of citizens, are elected from six wards in Landour. According to the 2001 India census, Landour had an "official" population of roughly 3,500. Males constitute 55% of the population and females 45%. The town has an average literacy rate of 78%, higher than the national average of 59.5%: male literacy is 85%, and female literacy is 70%. 8% of its population is under 6 years of age. However, these statistics do not account for the transient population of the Cantonment, which includes military personnel on study tours, or the "second home" crowd that owns many of the properties in Landour Cantonment.

In recent years, Landour has become a popular tourist destination. It is seen as a small hill-station surrounded by a well-preserved natural environment. As one travel website notes, "Looking for some quiet time amidst nature? Landour in Mussoorie is an idyllic choice to enjoy the beauty of a hill station away from the city bustle." Another travel blog markets it as a town which has "managed to hold on to its colonial charm as well as its natural wonders" because of being away from commercialization, making it the "best destination for naturalists and adventurers." The Landour Cantonment Board cites enjoying the "joys of simple living while being one with nature" as one of the facilities available in the area.

Map 1

RESEARCH COMPENDIUM
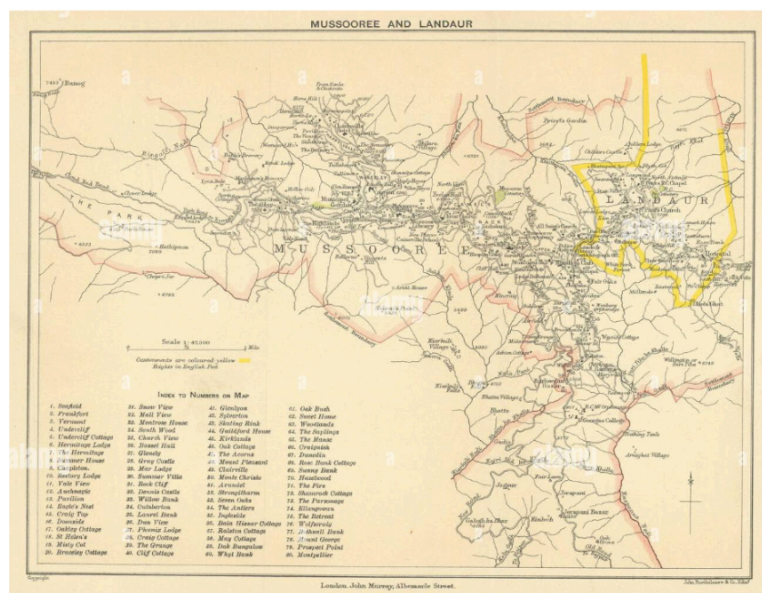
Rationale

Landour, although known for its natural beauty, had not been very popular among the tourists as the other towns in the region due to the restrictions on the constructions of any new structures. Recently, new hotels have opened in the already constructed buildings of landour could be noted as a factor that has encouraged tourism in the area. Many people to escape the hustle and bustle of the cities, visit the town to enjoy nature

The purpose of this study is to point out the impact growing tourism is having on the environment in the area. The aim is to observe the popular perception of the locals on the increased tourism. The study also aims to focus on the impact of ecotourism in the area. As mentioned above the definition of this term is still debated over. Often cited as a form of tourism that minimises the negative effects that tourism might have on an area, the definition is not crystal clear. So if it is an actual tool that helps sustainable tourism or not can be studied through this study. Although Landour is not listed as a protected area (PA), a significant chunk of the tourists visit the place for ecological purposes like bird watching, trekking etc. The purpose for choosing landour as the research site is the recent rise in tourism in the area which makes it easier to observe and track the impact of tourism.

Statement of Problem

Tourism in the hilly regions of the state of Uttarakhand have increasingly shown signs of pushing the risk in the area. Constructions on the banks of rivers, building of dams led to the situation of Garhwal floods. The central problem of this study is the negative effects that tourism has on the natural environment of an area. It also attempts to compare the positive effects of ecotourism with its negative effects. Through the study, the intent is to uncover the residents' perception on the effect of tourism in the area. The social, economic and environmental effects that tourism has on their everyday lives are to be observed. Community's perception and the level of their involvement in addition to the initiatives by the local authorities will help in understanding the sustainability level of tourism in the area.

The local authorities tend to promote tourism in the area as it may have positive effects economically but the larger picture often shows the negative effects of it on the environment which are overlooked. Often there is no redressal system for the locals to put forward their grievances regarding the same. With increased tourism should come better management which is not always the case. Landour is a small cantonment with limited capacity to support increasing numbers of tourists. Hence it can't be treated as some other hilly tourist attractions which have the capacity to support more tourists every year

Methodology and Limitations

The study employs a mixed-method approach that incorporates survey questionnaires, semi-structured interviews, and analysis of local planning reports to study the impact of Eco-Tourism in Landour. This integration of methods aims to provide a comprehensive understanding of the ecological, socio-cultural, and economic implications of ecotourism in the region. Participants will be fully informed about the study's purpose and their rights, and their informed consent was obtained before data collection (See Appendix). Measures were implemented to ensure the confidentiality of participants and sensitive information.

A random sampling technique was used to distribute questionnaires among tourists, local residents, and businesses involved in ecotourism in order to assess the perceived impact. Purposeful sampling was employed to select key stakeholders such as environmentalists, community leaders and ecotourism service providers. The sample size for interviews was determined based on data saturation, ensuring depth and richness of information. Existing local planning reports and documents were used to understand the evolution of ecotourism in Landour, changes in land use patterns, and the establishment of new structures. Descriptive statistics were employed to analyse survey data, providing insights into community perception. Thematic analysis was employed to identify patterns, themes, and variations in the qualitative data gathered from semi-structured interviews to understand the qualitative dimensions of ecotourism impact.

The study may be constrained by limited resources both in terms of time and budget constraints. Secondly, the findings of this study are specific to the unique context of Landour and may have limited generalisability of the results beyond the study area. Additionally, reliance on secondary data like the local planning reports may constitute inherent limitations in the original data collection processes which may impact the study's precision.

Literature Review

The development of ecotourism principles and policies in India has been a subject of limited attention compared to that in developed nations over the last decade (Hannam, 2005). However, recognizing the need for rectification, the central government initiated policies and criteria as part of the 12th five-year plan, incorporating various action plans for sustainable tourism. This has spurred the establishment of numerous organisations dedicated to sustainable tourism within protected areas (PAs) across the country. Nevertheless, India's ecotourism policy remains in a fragmented state, characterised by vague and contradictory features defining ecotourism.

In examining the positive impacts of ecotourism, a three-dimensional perspective reveals its benefits in economic, social, and environmental dimensions. Economically, ecotourism initiatives play a pivotal role in creating employment opportunities and generating income in regional economies, particularly in underdeveloped areas (Karmakar, 2011; Sinha et al., 2012) as showcased from the example of Anamalai Tiger Reserve (Surendran & Sekar, 2011). On the social front, ecotourism has demonstrated the empowerment of vulnerable groups, particularly women, as seen in a case study in Meghalaya (De, 2013) wherein it not only improved women's status but also empowered them to sustain their livelihoods independently. Environmental impacts of ecotourism are most pronounced in the conservation of flora and fauna within PAs. Success in these initiatives depends on the balance between the benefits derived from conservation efforts and the associated costs. Examples from destinations like Periyar National Park (Banerjee, 2012), Eaglenest Wildlife Sanctuary (Mohan & Athreya, 2011), Andaman and Nicobar Islands (Chand et al., 2015), and Kaziranga National Park highlight the positive impacts of ecotourism on conservation efforts (Das & Hussain, 2016).

While a plethora of review studies have explored ecotourism development (Buckley, 2012; Das & Chatterjee, 2015; Lu and Nepal, 2009; Mgonja et al., 2015), few studies (Puri, Karanth, & Thapa, 2019) have conducted descriptive analyses, examining positive impacts, challenges, and solutions in the tourism literature. However, limited studies have explored how ecotourism leads to a sporadic rise in pollution and environmental degradation. Chowdhury and Maiti (2016) argued that the surge in anthropogenic activities associated with tourism has led to heightened contamination of heavy metals in the Sunderbans Biosphere Reserve which is exacerbated by inadequate sustainable tourism practices. Batta (2006) conducted an analysis encompassing socio-cultural, economic, and institutional dimensions, affirming that tourism activities contribute significantly to environmental deterioration in PAs.

Analysis

A substantial 92.9% of the respondents acknowledged witnessing a noticeable difference in their surroundings during their tenure in Landour. This indicates a high level of awareness among the local populace about the changes occurring in their environment. Interestingly, a significant portion of the respondents, approximately 85.7%, attributed these observed changes to tourism initiatives. This finding suggests a strong correlation between the influx of tourists and alterations in the local landscape. It raises questions about the nature of these initiatives and their implications for the ecological balance and sustainability of the region. A

noteworthy consensus emerged among the respondents regarding the detrimental effects of tourism on environmental quality. All participants unanimously agreed that Landour is experiencing an increase in pollution due to tourism activities. This collective insight highlights a shared concern among the residents about the environmental consequences of the burgeoning tourism industry.

Chart 1

Do you think that tourism can, to a large extent, be held responsible for these changes?
14 responses
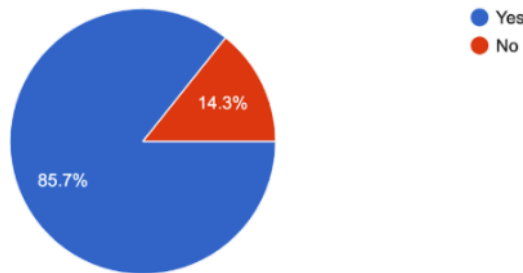
Data Source: Primary Data Collection

Moreover, a parallel insight surfaced during the research, with 85.7% of respondents concurring that the local environment exhibited improvements during the lockdown when tourism activities were significantly reduced. This finding underscores the role of tourism in exacerbating environmental degradation in Landour. It invites further exploration into the specific mechanisms through which tourism contributes to pollution and degradation and how these can be mitigated or managed sustainably.

Chart 2

Did the local environment improve during the lockdown when tourism had reduced?
14 responses

Data Source: Primary Data Collection

RESEARCH COMPENDIUM
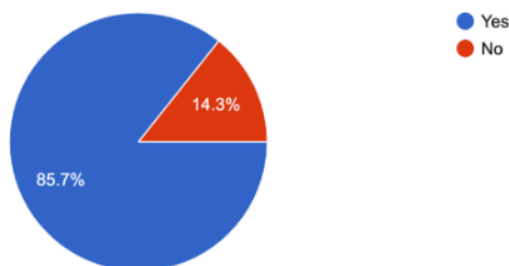
The findings of the survey reveal a prevailing sentiment among the respondents, with a substantial 92.9% expressing the view that tourism practices in Landour are lacking in sustainability. Similarly, a significant majority, constituting 85.7%, concurred that the broader region's tourism activities are not conducted in an environmentally sustainable manner. From our interviews, we came to realise that one of the most important reasons for this were the tourists who did not care about the environment of the area as deeply as the residents. This overwhelming consensus underscores a deep concern among the surveyed population regarding the impact of tourism on the ecological integrity of the area.

A noteworthy aspect is the limited awareness among the respondents regarding government policies aimed at either promoting or regulating tourism in the region. Only 28.7% of those surveyed demonstrated familiarity with such policies across educational levels. This raises pertinent questions about the efficacy of current communication strategies employed by authorities to disseminate information about regulations and incentives related to tourism in Landour. In the context of sustainable tourism management, enhancing public awareness of governmental initiatives is crucial for fostering a sense of responsibility and compliance among stakeholders. Another finding is the unanimous agreement among respondents that the escalating influx of tourists poses a significant threat to the environmental equilibrium of the area. This consensus suggests a shared apprehension about the adverse consequences of uncontrolled tourism on the local ecology. It further highlights the imperative for concerted efforts towards devising and implementing sustainable tourism practices to mitigate potential ecological degradation.

Chart 3

Are you aware of any government policies regarding promotion or regulation of tourism in your region?

14 responses

- Yes
- No

71.4%

28.6%

Data Source: Primary Data Collection

RESEARCH COMPENDIUM
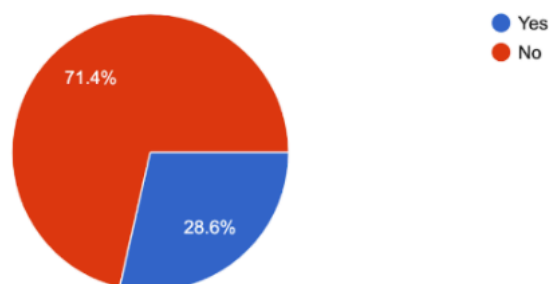
Along with the onset of monsoons and elevated temperature there is an increase in the count of mosquitoes also in the area. Over the years the area has witnessed many constructional transformations in lieu of development and urbanisation as we discovered in one of our interviews. The forest cover has also deteriorated which has otherwise resulted in a high rate of soil erosion further paving way for puddles and ditches which are breeding sites for mosquitoes. These ecological changes might have triggered the ecological disturbance in the area. There is evidence that fireflies have vanished from many places where they formerly were abundant.

Large scale dumping of garbage along the highway near bypass road is also one of the causes which have further disturbed the ecology of this Landour. Non-biodegradable refuse has been a local menace in the region. Much refuse is just dumped down hillsides—langurs, macaques, civets, stray dogs and other animals forage these open dumps. Landour Cantonment Board is responsible for overall sanitation of the Landour Cantonment such as garbage lifting, waste disposal, cleaning of drains, public roads & various public places. The authority has issued guidelines regarding Solid Waste Management in the town.

Chart 4

Are there any community-led initiatives in place to minimize the negative effects of tourism in the area?

14 responses
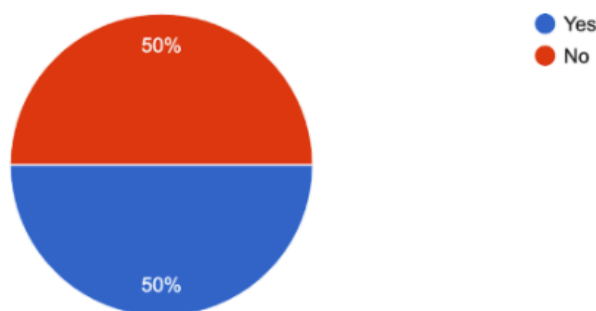
Data Source: Primary Data Collection

Further, the findings suggest that a substantial 85.7% of the respondents were unaware of grievance redressal mechanisms. This suggests a significant gap in communication and accessibility to information. This finding raises concerns about the effectiveness of the existing mechanisms or, more importantly, the visibility and outreach efforts made by the relevant authorities to educate the public about the channels available for addressing their concerns. In the context of sustainable tourism management, having robust grievance redressal mechanisms is crucial.

RESEARCH COMPENDIUM

It not only provides a platform for locals to voice their grievances but also serves as an essential feedback loop for policymakers to understand and respond to the evolving needs and challenges posed by tourism.

Additionally there is limited awareness (50%) among respondents regarding community-led initiatives aimed at mitigating the negative effects of tourism in the area points to a potential disconnect between community efforts and public knowledge. This finding highlights the importance of enhancing communication channels to disseminate information about the initiatives undertaken by local communities. Community-led initiatives are often pivotal in addressing the specific concerns and needs of the local populace, as they bring an intimate understanding of the area's dynamics. Increasing awareness about these initiatives can not only garner support from the residents but also potentially attract participation and collaboration from tourists who may be interested in responsible and sustainable tourism practices.

Contrary to a widely held belief that increased tourism contributes positively to the local economy through employment opportunities and financial investments, a surprising 64.3% of respondents reported not deriving benefits from the surge in tourism. This discrepancy prompts an exploration into the actual economic impacts of tourism in Landour. The incongruity between the perceived economic advantages and the reported experiences of the surveyed population raises questions about the equitable distribution of tourism-related benefits. It prompts a critical examination of the existing economic structures and policies governing tourism in the region. Assessing the socio-economic impact of tourism is imperative for ensuring that the benefits are inclusive and sustainable, reaching a broader segment of the local community.

Chart 5

Do you benefit from increased tourism in the area?
14 responses

Legend: ● Yes ● No
64.3%
35.7%

Data Source: Primary Data Collection

RESEARCH COMPENDIUM
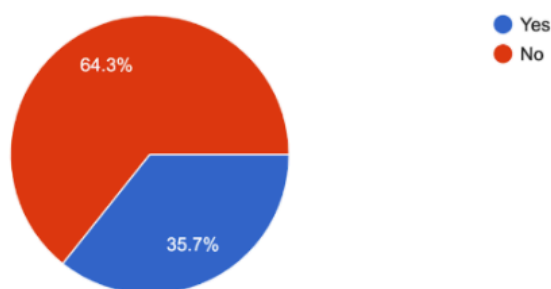
These findings include the need for a comprehensive and proactive communication strategy from local authorities. This strategy should prioritise informing the public about the grievance redressal mechanisms available to them. Additionally, efforts should be made to showcase and amplify the impact of community-led initiatives, fostering a sense of collective responsibility among residents and visitors alike. Furthermore, these findings underscore the importance of community involvement in the decision-making processes related to tourism management. Engaging the local community in designing and implementing solutions can lead to more sustainable and inclusive outcomes. Authorities should consider leveraging various communication channels, such as community meetings, educational programs, and online platforms, to bridge the information gap and ensure that residents are well-informed and actively participate in the sustainable development of their area.

Conclusion

Our findings evidently suggest that eco-tourism in Landour is increasingly leading to pollution in the area. Residents of Landour perceive a higher prevalence of negative effects associated with ecotourism in comparison to positive effects within the region. Eco-tourism is often directed towards natural environments that may be threatened and is intended to support conservation efforts and observe wildlife. However, the residents claim that the tourists do not engage in the preservation of ecological surroundings. Additionally, most residents of Landour are not aware of any established system of redressal management for concerns associated with the issues caused by growing tourism in the region.

Among the conclusions of this study is the necessity for local government to have a thorough and proactive strategy for communication. Educating the public about their options for grievance redress should be the primary focus in this plan. It is also important to highlight and magnify the effects of community-led projects in order to instil a sense of shared accountability in both locals and visitors. These results further highlight the significance of community participation in tourism management decision-making processes. More inclusive and lasting results can result from including the local community in the planning and execution of solutions. It is recommended that authorities take advantage of several communication channels, including community gatherings, educational initiatives, and internet forums, in order to close the knowledge gap and guarantee that locals are knowledgeable and engaged in the sustainable advancement of their communities.

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APPENDIX i:

Pictures of field site

RESEARCH COMPENDIUM

RESEARCH COMPENDIUM

RESEARCH COMPENDIUM
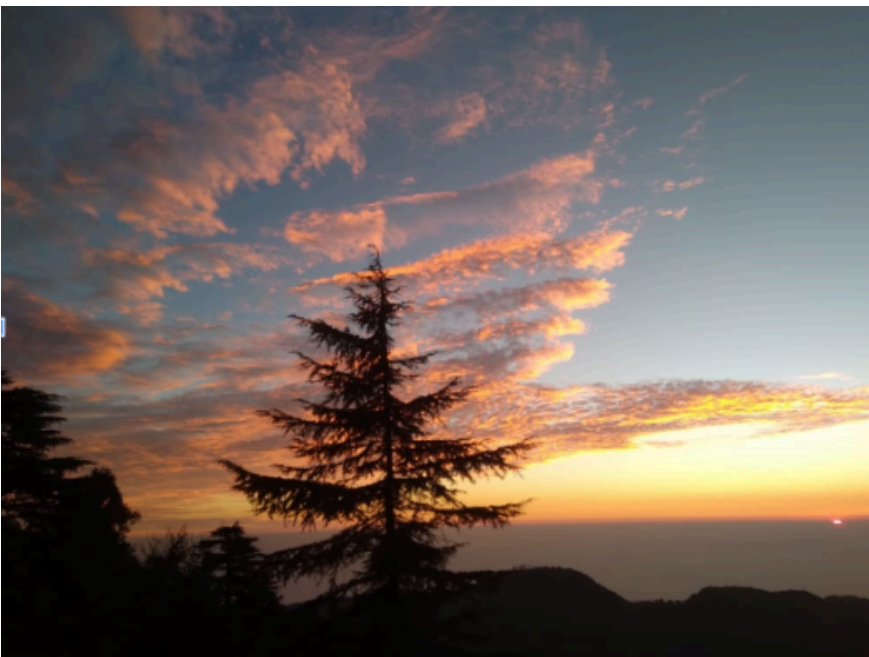
CONSENT FORMS (for qualitative responses)

Refined Research Question

The purpose of this study is to point out the impact growing tourism is having on the environment in the area. The aim is to observe the popular perception of the locals on the increased tourism. The study also aims to focus on the impact of ecotourism in the area. As mentioned above the definition of this term is still debated over. Often cited as a form of tourism that minimises the negative effects that tourism might have on an area, the definition is not crystal clear. So if it is an actual tool that helps sustainable tourism or not can be studied through this study.

Informed Consent Form

TITLE OF STUDY

Impact of Ecotourism in Landour: A Sociological Study

RESEARCH COORDINATORS

Dharanshi Dang, Muskaan Kaushik, Vaishali Grewal, Yashaswini Bahuguna

PURPOSE OF THE STUDY

This research study explores the impact and involvement of the community in ecotourism initiatives within the region of Landour. Through interviews, the study aims to uncover the resident's perspective on the effect of ecotourism in the area.

PROCEDURES

If you agree to participate in this study, you will be asked to do the following:

Answer a multitude of open-ended questions provided by the project coordinators in an interview format, on your personal experiences with the adversities resulting from tourism in Landour. This will take approximately 20 minutes of your time. You will also be asked to provide select background information, including your age and gender.

You may opt out of answering some or all questions should you feel uncomfortable. You may also opt out of providing background information.

RISKS

Potential risks include being asked uncomfortable questions, including the request for personal background information. In this case, you may oppose responding to these questions, providing information, and revoke your choice to participate. In addition, all provided information will be withdrawn if you no longer want to participate in this project.

CONFIDENTIALITY

All efforts will be made to ensure the confidentiality of identifying information obtained from your responses to the asked questions. No directly recognisable information will be recorded. Participant data will be kept anonymous and confidential.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. If you choose to participate in this research study, you will be asked to sign the consent form below. You can withdraw if you no longer participate after signing the consent form.

CONSENT

I have read and understand the provided information and have been made aware of the nature of the research project. I understand that my participation is voluntary, allowing me to withdraw at any time without providing reasoning.

Participant's Signature - ██████████

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Environmental Crisis and Gender:
Climate Change's Impact on Women's Health

Authors: Avantika, Gaurisha Nath, Namgey Chomu, Pratibha Meena, Tadar Yakam

Abstract:

Men and women relate to the environment in different ways, and environmental changes have different impacts on their lives. Women play a critical role in sustaining communities and managing natural resources, but their contributions are often undervalued and neglected. Women face greater risks and vulnerabilities compared to men due to social, cultural, and economic vulnerabilities. Physical health is the most significant degradation, as women undergo periodic menstruation and pregnancy, making gynecological issues a focus of study for women.

Gender inequalities, such as weak rights to own land and reduced access to energy, water and sanitation facilities for women, have a negative impact on human health, the environment and sustainable development. Therefore, mainstreaming gender into the global environmental agenda is essential to strive for a healthier planet for all.

Keywords: *Ecofeminism, climate change, gender inequality, menstrual health*

Methodology:

A questionnaire is an exploration instrument that consists of a set of questions or other types of prompts that points to collect information from a replier. An exploration questionnaire is generally a blend of close-ended questions and open-ended questions. The data collected from a data collection questionnaire can be both qualitative as well as quantitative in nature. A questionnaire may or may not be delivered in the form of a survey, but a survey always consists of a questionnaire. With a survey questionnaire, one can gather a lot of data in less time. There's a lower chance of any bias (like selection bias) creeping in if one has a standard set of questions to be used for your target followership. This can apply to questions grounded on the repliers' answers, but the questionnaire will remain

standard for a group of repliers that fall in the same group. Surveying online survey software is quick and cost-effective. It offers you a rich set of features to design, distribute, and assay the response data. It can be customized to reflect your brand voice. Therefore, it can be used to support your brand image. The responses can be compared with the literal data and understand the shift in repliers ' choices and experiences. Repliers can answer the questionnaire without revealing their identity. Also, numerous survey software complies with significant data security and privacy regulations.

Introduction

Our comprehension of the climate crisis and our responses to it have often been in conflict. Since the 1980s, research has extensively informed humanity about the repercussions of activities like deforestation and fossil fuel combustion, warning of the potential ecological collapse. Despite this knowledge, our relentless pursuit of comfort and convenience has propelled the world to its current precarious state.

The lack of substantial action in the face of an immediate crisis has further deteriorated global conditions. Soaring temperatures, extreme weather events, rising sea levels, and global warming are symptomatic of the climate crisis, significantly impacting both our collective physical and mental well-being. Gender inequality, intertwined with social and economic factors, is both influenced by and influences climate change. Ample evidence suggests that climate change exacerbates existing gender inequalities. For instance, women who survive climate-related disasters face heightened risks of reduced life expectancy, mental health disorders, gender-based violence (GBV), and complications during childbirth.

The rapid climate changes observed in the past decade have not only negatively impacted our environment but have also taken a heavier toll on women and gender minorities compared to men globally. This disparity arises from the heightened levels of risks and vulnerabilities that women face, both in terms of severity and frequency. In addition to the social, cultural, and economic challenges exacerbated by a deteriorating climate, women experience a significant degradation in their physical health. It is crucial to recognize that women's health is more profoundly affected than men's, particularly due to factors such as periodic menstruation and pregnancy. Gynecological issues have consistently been a focal point of research when examining the adversities confronted by women.

Ecofeminism

A simple way to explain ecofeminism is to define it as an encounter between feminism and ecology. Today, ecofeminism is booming, mainly among young women, and is slowly emerging after a long period in which it was little known or poorly understood. All forms of ecofeminist ideology are said to identify women with nature and constitute a biological category. In ancient Indian philosophy, women's connection to nature has even deeper roots than in Western thought. However, unlike in the West, the opposition between masculinity and femininity, and more broadly between nature and culture, does not exist in Indian philosophical thought. Reality shows us a wide diversity of individuals but also trends related to the socialization of particular tasks and attitudes. In general, women have historically not had access to weapons and have traditionally been responsible for caring for the most vulnerable (children, the elderly, and the sick) and maintaining physical infrastructure. domestic substances (kitchen, clothes, etc.), develop, in statistical terms, a "relational" subjectivity, more attentive to others and more emotionally expressive. When these characteristics are complemented by appropriate information and a critical approach to hegemonic discourses, conditions will emerge to awaken their interest in the protection of nature and its other creatures. The environmental and social conditions of the 21st century require feminism and environmentalism to play a key role. On the one hand, women have gained self-awareness and have committed to overcoming centuries-old barriers to full integration into paid work, culture, and politics. Their achievement of emancipation goals can be delayed through diverse strategies but it will be impossible to impede it in the long term. On the other, the unsustainability of the techno-economic development model is becoming increasingly clear, as it has a destructive nature that compromises the future of humankind.

Nature and culture

Agarwal talks about some conceptual issues she sees in Ecofeminism, for which she draws out the central ecofeminist arguments: 1) there are important connections between the domination and exploitation of nature; 2) In patriarchal thought, women are identified as being closer to nature and men being closer to culture. Nature is seen as inferior to culture and hence women are inferior to men; 3) Because the domination of women and nature have occurred together, women have a stake in ending the domination of nature; and 4) the feminist movement and environmental movement both stand for egalitarian, non-hierarchical systems and therefore need to work together to evolve a common perspective, theory and practice.

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The idea that women are seen as closer to nature than men was introduced by Sherry Ortner who argued that women are being identified with something that every culture devalues and that something is nature wherein women are being symbolically associated with it. In her initial formulation, the connection between women and nature was clearly rooted in the biological processes of reproduction. Her view has been criticized by social anthropologists on several counts such as the fact that the nature-culture divide is not universal across all cultures and there is no uniformity in the meaning attributed to "nature", "culture", "male", and "female".

 Still some ecofeminists accept the emphasis on biology uncritically such as Ariel Kay Salleh while other such as Ynestra King and Carolyn Merchant argue that while the nature-culture dichotomy is a false one, they accept the view that women are ideologically constructed closer to nature because of their biology.

 Ecofeminist discourse therefore highlights some of the important conceptual links between the symbolic constructions of women and nature and the ways of acting upon them and the underlying commonality between the premises and goals of the women's movements and the environmental movement; and an alternative vision of a more egalitarian and harmonious future society.

The ecofeminist argument is constructed is problematic according to Agarwal on several counts: first, it posits woman as a unitary category and fails to take into account distinctions such as class, race, ethnicity and so on; secondly, it locates the domination of women and nature solely in ideology and third, even in the realm of ideological constructs it says little about the social, economic and political structures within which these constructs are produced and transformed and neither does it address the central issue of the means by which certain dominant groups are able to bring ideological shifts in their own favor and how these shifts get entrenched. Fourthly, the ecofeminist argument does not take into account women's lived material relationship with nature and those who trace the connection between women and nature to biology are engaging in a form of essentialism which indicates that female essence is unchangeable; this flies in the face of evidence which suggests that concepts of nature, culture, gender are historically and socially constructed and vary across and within cultures and time periods.

Agarwal argues that women's and men's relationship with nature needs to be understood as rooted in their material reality, in their specific forms of interaction with the environment. Hence, gender and caste/class/race structure people's interaction with nature and their responses to environmental change. Therefore, taking the example of poor peasant and tribal women who have been responsible

for fetching fuel and fodder in hill and tribal communities, we can understand that they are likely to be adversely affected in specific ways by environmental degradation. At the same time, due to everyday interaction with nature, they acquire a special knowledge of species varieties and natural regeneration and therefore they can be seen as both victims of destruction and repositories of knowledge about nature, in ways that are distinct from males.ontological continuity with humanity, transcending and encompassing them. Life, in all its forms, is characterized by the feminine principle, erasing the dualism between men and nature. Prakrit, the sustaining force of life, is not an abstract concept but an integral part of everyday life, unifying the sacred and secular. This embodiment of the feminine principle is marked by creativity, productivity, diversity, interconnectedness, and continuity between humans and nature.

Feminine principle

The feminine principle in Indian culture perceives women as integral to nature, as articulated by Vandana Shiva in her reference to the Kulacudmim Nigama:
"There is none but myself
Who is the mother to create it?"

Shiva emphasizes the symbolic connection between women and nature, illustrating the interplay of ideas and the dynamic balance of creation and destruction embodied in Shakti. Shiva purposefully explores these symbols to underscore their consequential implications. Unlike the dominant stance of men over nature, she elucidates that the creative forces and the created world are intricately interconnected, diverse, and dynamic.

Shiva clarifies that the creative expression of the feminine principle in nature establishes an , this goes unrecognized and is destroyed and allocated with through homogenisation and privatization that reduces nature to raw accouterments and goods and women to bare reproducers of life. It's important for us to understand that when we therefore look at nature as a "resource" to be exploited, we're creating a relationship between development and terrain which is erected on the idea of a "mastering of nature by the patriarchal/ masculine. Shiva says that this not only enables the exploitation of nature but also allows the "death of Prakriti'' and the marginalization, devaluation, relegation and dispensability of women. What Ecofeminism is basically arguing is that when we destroy nature we destroy women, when we violate nature, we violate women. The part of women in creating and conserving life is lost in an ecologically alienated world which is eyeless to the part of women and their harmony with the ecosystems. We need to honor that the cooperation between women and nature ensures sustainability and it's this critical cooperation that's destroyed when the

design of development becomes a patriarchal design.

Gender and environment

The ecofeminist perspective firmly establishes the inseparable connection between women and nature, viewing any exploitation of nature as an exploitation of women. Patriarchy, driven by a desire to control and oppress what it perceives as powerful forces in nature and women, becomes a force behind such exploitation. Women, intimately tied to nature, are seen as change-makers, especially in addressing the adverse impacts of climate change, making it fitting for them to lead protests against the destruction of nature. In the Indian context, women renew their relationship with the cosmos daily, and their connection is more deeply rooted in both ideology and reality compared to Western counterparts.

The concern of maldevelopment is intricately linked to the consumerist behavior fostered by capitalism, which seeks to accumulate wealth at the lowest cost. This capitalistic hierarchy is sustained by patriarchy, justifying the historical oppression of the feminine, and by extension, nature.

Nature as a Resource and the Devaluation of Women's Work

The western understanding of the relationship between man and nature as we have seen is based on a dualism that has allowed the subjection of nature and the terrain by patriarchy and development. This has given rise to a new worldview in which nature is (a) inert and unresistant (b) uniform and mechanistic (c) divisible and fractured within itself (d) separate from man and inferior (e) to be dominated and exploited by man . This dominant patriarchal perspective of development is embedded in the idea of capital accumulation and it renders both nature 's work and women 's work as unnoticeable and insignificant. This leads to the devaluation and the de recognition of nature as well as women which has led to the resemblant exploitation of both. This station of blindness towards the work done and unnoticeable wealth created by nature and women, by those who have power and dominate, threatens the survival of the species and the ecological balance so necessary for a sustainable life.Shiva argues that this work and wealth in agreement with the womanlike principle are significant because they're embedded in stability.

Significance of Ecofeminism

The ecofeminists argue that marginalized communities, women, third world, peasantry, tribals etc are all victims of maldevelopment. But at the same time, we can not deny that they're the depository agents of traditional knowledge. They can not be reduced to bare victims of development by the manly world. The marginalized communities are capable of action and questioning exploitation and

can pose a challenge to the inequalities created by maldevelopment .What's demanded is for us to change the way we suppose so that a new intellectual ecological paradigm arises.The significance of ecofeminism can be captured this way.

Women have first hand knowledge of what it means to be victims of violence and exploitation and what motivates them is their direct engagement with the terrain. They've traditional knowledge about nature, timbers and ecosystems and are deeply embedded in environmental protection and preservation. As they're bedded in nature, they come forerunners in working the problems related to nature. It's no wonder, that a perspective like Ecofeminism and women 's ecological movements pose a challenge to the paradigms of patriarchy and maldevelopment.

Effects of climate change on women's menstrual health

Research on the effects of climate change on women's menstrual health is an emerging area, and findings may vary based on geographic location, socioeconomic factors, and individual health conditions. However, some potential impacts are worth considering:

● Water Scarcity: Climate change can lead to changes in precipitation patterns, causing water scarcity in certain regions. Limited access to clean water may affect menstrual hygiene practices, potentially leading to increased health risks for women.

● Extreme Weather Events: More frequent and intense extreme weather events, such as hurricanes or floods, can disrupt infrastructure and access to healthcare. Women may face challenges in managing menstrual health during such events, affecting their well-being.

● Temperature Extremes: Changes in temperature patterns can influence women's comfort during menstruation. Extreme heat or cold can impact the overall experience of managing menstrual hygiene, potentially leading to discomfort or health issues.

● Vector-Borne Diseases: Climate change can alter the distribution of vector-borne diseases. Some of these diseases, like dengue or Zika, may have implications for women's reproductive health, including menstrual health.

● Nutritional Impacts: Climate change can affect food security and nutritional patterns. Inadequate nutrition can impact women's overall health, including menstrual health.

● Psychological Stress: The broader impacts of climate change, such as displacement, loss of livelihoods, or environmental degradation, can contribute to psychological stress. Stress can influence menstrual cycles and exacerbate menstrual symptoms. **RESEARCH COMPENDIUM**

Findings

The extrapolations concluded from the questionnaire distributed is mentioned in the following points:

1. Many of the individuals have experienced health issues due to environmental factors even if they have not experienced themselves, they have seen people experience health issues such as allergies, itchy throat, breathing problem, fever ,migraine, eye burn etc.

2.Do you believe there's a link between climate change and maternal health issues?

⊛ 18 responses

94.4%
5.6%

● Yes
● No

3.Have you or any women you know experienced health problems due to contaminated water sources?

⊛ 18 responses

88.9%
11.1%

● Yes
● No
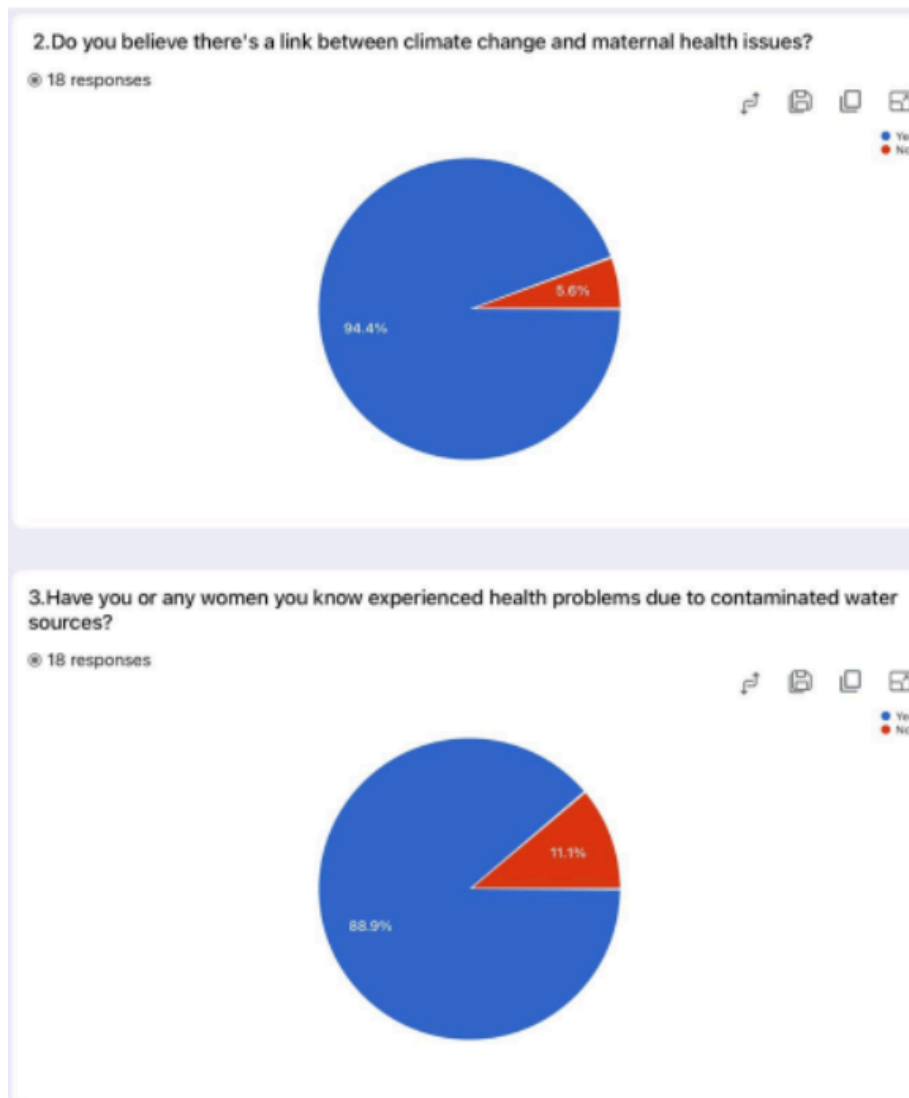
4) Women face unique health challenges due to various environmental and societal factors. In many regions, scarcity of water resulting from environmental changes disproportionately affects women, as they often bear the responsibility of fetching water, impacting their health due to inadequate hygiene and care. Environmental shifts can also lead to complications in reproductive health, affecting pregnancies and contributing to high maternal mortality rates in several countries. Moreover, in many global south countries, women often work in minimum wage conditions exposed to severe levels of noise, air, and water

pollution. Hazardous wastes and toxic landfills pose additional risks to women's reproductive health, further exacerbating their health challenges in these environments.

5) Communities residing near contaminated water bodies, wastelands, or factories due to limited space and economic reasons face heightened susceptibility to diseases. In regions like South America and Southeast Asia (Philippines, Thailand, Cambodia), women from these communities bear a heavier burden of environmental issues. They're affected by waste dumped from first-world countries without proper regulations, aggravating their health challenges. These women, often from low-income families, lack adequate healthcare services and have limited control over their living environment.

In Delhi NCR, one of the most affected regions by severe air pollution due to factors like landfills, field burning, construction, vehicle emissions, and fireworks, women face direct health impacts. Their skin suffers due to direct exposure to pollution, leading to skin issues and various infections. Additionally, air pollution affects pregnancies, causes irregular menstrual cycles, and contributes to numerous other health complications for women in this area.

6) 5 of the respondents answered that they are not aware of any societal and cultural factors that exacerbate the impact of environmental issues in women's health. Whereas the other respondents agreed that distinct gender roles depending on where they live and what they do impacts women unequally. Women who are engaged in agricultural activities in mountainous regions and women who gather supplies in arid regions, for example, face different difficulties. Additionally, gender inequity is a global problem steeped in long held cultural attitudes, laws, and institutions. Due to this long standing gender inequity women's access to resources, information, training, and decision making opportunities are scarce leading to their low survival rate and a higher risk of injury when disaster occurs. Moreover their lack of education and training lands them in jobs in the informal sector such as ragpicking and industrial works, which exposes them to more diseases. A debasing climate just adds to their degrading health factors which thus influences their gynecological framework and moves into the infants that they bear. This highlights how gender inequality intersects with the environmental crisis.

7. Are you aware of any governmental or nongovernmental initiatives addressing the environmental impact on women's health?

◉ 18 responses

● Yes
● No

61.1%

38.9%

8. What is more important to achieve:

◉ 17 responses

● Environmental crisis
● Women empowerment

52.9%

47.1%

9) Out of 18 respondents, 11 respondents (61.1%) answered that they are not aware of any governmental or nongovernmental initiatives that address the environmental impact on women's health and only 7 respondents(38.9%) were aware of some. This disproportionate result depicts how there is a lack of awareness among people about the Governmental policies. The majority of our respondents approved of educating the public and creating awareness as important strategies for improving the healthcare status of women, with special recognition given to the women belonging to marginalized communities. Women have unique health needs and are at higher risk for certain health conditions, therefore the government and private insurers can also work together to develop policies that are specifically tailored to the needs of women, including those that cover reproductive health and maternity care. These policies should aim at improving access to quality healthcare and educational services for women and should make health insurances more affordable by offering subsidies or other financial incentives to women. However, many women and their families are unaware of the benefits of health insurance and may not realize its importance. This necessitates the development of public awareness campaigns

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through governmental or non governmental bodies.

10) Our respondents have advocated for the active participation of women on environmental issues by raising awareness, participating in decision making and promoting sustainable practices influencing positive changes in policies and behaviors of the public. The inclusion of women leaders within these discussions are critical to introducing more women-centric interventions which can lead to more impactful outcomes.

The importance of women in environmental policy making

It's crucial for policymakers to grasp the interconnectedness of social issues and environmental effects. Climate change disproportionately impacts various groups, necessitating climate legislation that fosters fair socio-economic progress while addressing the crisis. However, women remain significantly underrepresented in global environmental decision-making, holding only 12% of top national ministerial positions in environmental sectors globally. This gender gap extends to local decision-making roles, skewing environmental policy making towards male perspectives.

Empowering women should extend beyond ensuring access to education and healthcare; they should actively engage in environmental policymaking at all levels. Enabling women's participation often leads to more effective environmental policies. Women often prioritize social issues, such as education, healthcare, and environmental concerns. Studies suggest that women in elected offices tend to focus on resolving tangible issues affecting women, families, and children. Given the disproportionate impact of climate change on women and children, female politicians display greater awareness of environmental impacts and integrate relevant solutions into their policy agendas.

A study conducted in 2021 examined the demographics of present-day environmental activists by surveying 367 individuals from 66 countries. The findings suggested a notable gender disparity among different age groups within these activists. Among respondents over 65 years old, only a quarter were women, whereas among those under 25, two-thirds were female. This shift in demographics signifies a change in the landscape of climate activism, with younger, highly educated females emerging as a prominent force in this movement. It emphasizes the importance for both developed and developing nations to recognize and nurture this trend, encouraging today's young women to assume leadership roles within the climate movement.

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The above graph shows :Age and gender demographics of climate activists across 66 countries worldwide; Boucher et al; Energy Research and Social Science; 2021.

The Way Forward

From the result of interviews conducted it becomes essential to take an approach which is more sensible and accomplishable in a sense such as-

● Gender-Inclusive Policies: Governments and organizations must prioritize gender-inclusive climate policies. Recognizing and addressing the specific vulnerabilities of women in policy frameworks is crucial for effective adaptation and mitigation strategies.

● Accessible Healthcare Services: Strengthening healthcare systems, especially in vulnerable regions, is paramount. This includes ensuring access to reproductive healthcare, maternal services, and mental health support. Proactive healthcare measures contribute to community resilience.

● Water and Sanitation Solutions: Implementing sustainable water and sanitation solutions is essential. Investments in infrastructure to ensure reliable access to clean water can alleviate the burden on women and improve overall community health.

● Education and Capacity-Building: Empowering women through education and skills training enhances their ability to adapt to climate-related challenges. Education equips women to actively participate in decision-making processes related to climate change and fosters sustainable practices.

● Community Engagement and Empowerment: Engaging communities, with a focus on women, is crucial for effective climate adaptation. Community-based initiatives, awareness campaigns, and involving women in decision-making processes contribute to building resilience at the grassroots level.

● Innovative Agricultural Practices: Promoting climate-resilient agricultural practices is vital. Providing women with access to resources, technology, and training fosters sustainable farming methods, contributing to enhanced food security.

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● Research and Data Collection: Continuous research on the impact of climate change on women's health is essential. Robust data collection and analysis inform evidence-based policies, ensuring that interventions effectively address the specific challenges faced by women.

● International Collaboration: Recognizing that climate change is a global challenge, international cooperation is imperative. Supporting developing nations in building resilience, transferring sustainable technologies, and providing financial assistance contributes to a more equitable response to climate-related health challenges.

Conclusion

"Vasudhaiva Kutumbakam," in its recent glory, has once again reminded all of us that the world is one family and thus while addressing the intersection of climate change and women's health there is a requirement of a comprehensive and collaborative approach. By implementing gender-sensitive policies, improving healthcare access, and empowering communities, we can forge a path towards a more resilient and equitable future for women in the face of climate challenges.

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STUBBLE BURNING IN INDIA

Authors: Akanksha Singh

Intoduction

Stubble burning is the practice of intentionally setting fire to the straw stubble that remains after grains, such as rice and wheat, have been harvested. Stubble burning is a common practice in India that has been increasing greenhouse gases over the past few decades fueling climate change due to the particulate matter contamination it distributes into the atmosphere.

Stubble burning in Punjab, Haryana, and Uttar Pradesh in north India has been cited as a major cause of air pollution in Delhi since 1980. The smog that arises from the burning contributes fine black and brown carbon into the atmosphere which affects light absorption. As the weather is cooler in November in India, the stubble burning generates a thick haze of fog, dust, and industrial pollution. From April to May and October to November each year, farmers mainly in Punjab, Haryana, and Uttar Pradesh burn an estimated 35 million tons of crop waste from their wheat and paddy fields after harvesting as a low-cost straw-disposal practice to reduce the turnaround time between harvesting and sowing for the first (summer) crop and the second (winter) crop. Smoke from this burning produces a cloud of particulates visible from space and has produced what has been described as a "toxic cloud" in New Delhi, resulting in declarations of an air-pollution emergency. For this, the NGT (National Green Tribunal) instituted a fine of ₹2 lac on the Delhi Government for failing to file an action plan providing incentives and infrastructural assistance to farmers to stop them from burning crop residue to prevent air pollution.

Although harvesters such as the Indian-manufactured "Happy Seeder" that shred the crop residues into small pieces and uniformly spread them across the field are available as an alternative to burning stubble, and crops such as millets and maize can be grown as an sustainable alternative to rice and wheat in order to conserve water, some farmers complain that the cost of these machines is a significant financial burden, with the crops not incurred under MSP prices when compared to burning the fields and purchasing crops that are produced under MSP prices.

The Indian Agricultural Research Institute, developed an enzyme bio-decomposer solution, that can be sprayed after the harvest, to increase organic carbon in the soil and maintain overall soil health. In 2021, they began licensing its use to various companies. In May 2022, the Government of Punjab announced they will purchase maize, bajra, sunflower and moong crops at MSP, encouraging farmers to adopt less water consuming options as a sustainable alternative to paddy and wheat in the wake of fast-depleting groundwater.

Despite the solutions provided by the experts and steps taken by the government the farmers don't find it effective in managing with the stubble after their harvest as a result they end up in burning the stubble leading to more and more environment issues and also igniting many political debates over the same.

Rationale

Stubble is considered as the leftover after grain segregation. To dispose it, farmers carry out stubble burning on a large scale. Rice–wheat cropping systems have led to several concerns in northwestern India, including groundwater depletion, global warming, deteriorating soil health, air pollution, shifting weed flora, pest infestations, and stubble burning. Farmers generally resort to residue burning of mechanically harvested rice due to its poor economic value, given the lack of alternative uses and the short time gap between rice harvest and wheat sowing. Stubble burning increases air pollution, deteriorates soil health, and causes serious health concerns such as respiratory infections and cardiac diseases.

Stubble burning results in the emission of smoke which if added to the gases present in the air like methane, nitrogen oxide and ammonia, can cause severe atmospheric pollution. These gaseous emissions can result in health risk, aggravating asthma, chronic bronchitis and decreased lung function. Burning of crop residue also contributes indirectly to the increased ozone pollution. To avoid stubble burning, it can be reused or recycled by many factories for many purposes. But despite the number of initiatives the farmers are unable to reach

out to the factories neither the factories are able to reach out to each farmer individually which would be a hectic task. Hence, to bridge the distance there requires to be alternatives provided to the farmers. Thus, there is a need for more effective ways to manage the stubble which can also act as another source of income for farmers who are suffering financial crisis.

Hypothesis
Inadequate or ineffective policies related to agricultural practices and environmental conservation contribute to the persistence of stubble burning.
Thus, this Research Project aims to find out if the Inadequate or ineffective policies related to agricultural practices and environmental conservation contribute to the persistence of stubble burning where the aim is to find out the reasons for stubble burning being so persistent despite the number of policies by the government and examining if the policies are implemented efficiently or not .

Problems Caused by Stubble Burning
Stubble burning has also caused severe pollution of land and water on local as well as regional scales. It is estimated that burning of paddy straw results in nutrient losses viz., 3.85 million tons of organic carbon, 59,000 t of nitrogen, 20,000 t of phosphorus and 34,000 t of potassium. This also adversely affects the nutrient budget in the soil. It results in the emission of smoke which if added to the gases present in the air like methane, nitrogen oxide and ammonia, can cause severe atmospheric pollution. These gaseous emissions can result in health risk, aggravating asthma, chronic bronchitis and decreased lung function. Burning of crop residue also contributes indirectly to the increased ozone pollution.
Environmental Effects
 The burning of crop residues generates various environmental issues. The most adverse effects of crop residue burning embody the emission of greenhouse gases (GHGs) that contribute to global climate changes. In addition to that, enhanced levels of PM and other air pollution that cause health hazards, loss of diversity of agricultural land, and the deterioration of soil fertility . The burning of the crop stubble in an open field influences soil fertility, eroding the sum of soil nutrients.
Air Pollution
 Crop residue burning produces various air pollutants like GHG emissions, CO, NH_3, NOX, SOX, non-methane organic compound (NMHC), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and PM , leading to

the loss of organic carbon, nitrogen, and alternative nutrients, which otherwise might have preserved in soil. In Punjab, approximately 22 Mt of CO_2, 0.92 Mt of CO, and 0.03 Mt of SO_2 is generated from around 15 Mt of rice residues on an annual basis. Similarly, according to a study by Jain et al., GHG emissions account for 91.6% of total air emissions caused by the burning of 98.4 Mt of crop residue and the remaining 8.4% are CO, NO, NMHCs and SVOCs.

Mortality

Annually, 3.3 million people are dying prematurely due to air pollution around the world. If air emissions continue to rise, this number will double by 2050 .The Organization for Economic Cooperation and Development (OECD) estimates that in Delhi NCR alone, air pollution contributes to approximately 20,000 premature deaths and this number is expected to increase to 30,000 by 2025 and to 50,000 by 2050 (OECD, 2016).

The burning of crop waste also puts in danger of the survival of animals that produce milk. Air pollution can lead to animal death, as high CO_2 and CO levels in the blood can alter normal haemoglobin leading to death. More than 60,000 people who live in rice-growing areas are vulnerable to air pollution as a result of rice stubble burning.

The burning of crop straw and stubble has severe negative impacts on health. Pregnant women and infants are most prone to suffer adverse effects due to stubble burning pollutants. Respiratory inhalation of suspended PM2.5 prompts asthma and can even worsen symptoms of bronchial attacks.

Soil Fertility

According to the Department of Agriculture, Government of Punjab, the soils of Punjab typically contain low nitrogen content, low to medium phosphorus, and moderate to high potassium. Besides, the organic carbon in the soil has decreased to very low, and insufficient levels and organic manure and crop residue have not been properly applied.

In addition, repeated burns can diminish by more than 50% the bacterial population. Long-term burning also reduces the amount of 0–15 cm soil loss along with loss of total nitrogen, biomass, and potentially mineralized nitrogen and organics. The burning of agriculture residues raises the soil temperature and causes depletion of the microorganism and flora population

The state government, from time to time, advises farmers not to set their field blazing. This is publicized in the native newspapers to create individual awareness

of the adverse effects of crop husk burning. The administration even makes such announcements by loudspeakers within the villages. However, farmers who store the husk rather than burning it are not given any incentive from the administration, and farmers are not privy to the provision of alternative techniques to burning. The majority of farmers would be interested in adopting other practices if the state government offers enough resources.

Inadequate or ineffective policies related to agricultural practices and environmental conservation

The Punjab Reservation of Subsoil Water Act of 2009 was enacted with the primary objective of preserving and efficiently utilizing groundwater resources in the state of Punjab, India. The law aimed to regulate the extraction of groundwater, which had been extensively used for agricultural purposes. While the Act had positive intentions regarding water conservation, it unintentionally contributed to the promotion of stubble burning through certain indirect consequences.

Early Harvest and Late Sowing: Early harvesting of paddy leaves a shorter time gap between the paddy harvest and the subsequent wheat sowing. This compressed timeframe limits the options for managing crop residue, pushing some farmers towards the quick and convenient solution of stubble burning to clear fields rapidly.

Limited Time for Alternatives: Stubble burning provides a swift and cost-effective means of clearing fields for the next crop, fitting within the shortened timeframe imposed by the water conservation regulations.

Economic Pressure on Farmers: Stubble burning emerged as a seemingly expedient and economically viable method for farmers facing time constraints and economic challenges, even though it had detrimental environmental consequences.

Limited Implementation of Alternatives: In the absence of viable alternatives, farmers may have continued resorting to stubble burning as a default method for clearing fields, despite the environmental implications.

In terms of policy design, the national programme on crop diversification does not have clear provisions on outreach activities to inform farmers about alternate crop options. Similarly, there is insufficient convergence with other programmes, such as the National Rural Employment Guarantee Scheme, National Rural Livelihood Mission and agro-enterprise related schemes, which could help with the management of paddy stubble or crop diversification. In terms of

implementation, much-needed equipment is still unaffordable to many farmers despite subsidy provisions. Constraints in the supply chain and rental markets are other issues impacting the adoption of the happy seeder and other farm machines, and there is little awareness about new technologies and alternate cropping patterns.

Conflict of Interests

Effectiveness and Adequacy of Policies to curb the stubble burning

The Ministry of Agriculture and Farmers Welfare (MoA&FW), Government of India (GoI), launched the National Policy for Management of Crop Residues in 2014 to combat air pollution. The policy focuses on technology promotion for in-situ crop residue management.

Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh, and NCT of Delhi' has been launched in 2018 for the distribution of in-situ crop residue management machinery to the farmers on subsidy, the establishment of Custom Hiring Centres (CHCs) of in-situ crop residue management machinery and undertaking Information, Education and Communication (IEC) activities for creating awareness among farmers.

However, farmers, especially small landholders, cannot afford expensive agricultural implements or labor due to their poor financial position. As a result, these punitive measures failed to reduce the fire counts significantly. The farmers continued this practice, so a committee on the behest of the National Institution for Transforming India (NITI) recommended a machinery-based solution. In 2018, the Cabinet Committee for Economic Affairs, GoI, approved US$0.15 billion for the Promotion of Agricultural Mechanization for In-Situ Management of Crop Residues in Punjab, Haryana, Uttar Pradesh, and National Capital Territory of Delhi (MoA&FW 2019) to check air pollution. Financial assistance of up to 50% has been offered to individual farmers and 80% to farmer groups to purchase machinery for crop residue management.

The Punjab government announced a New and Renewable Sources of Energy Policy in 2012 to promote renewable energy in the state, setting a capacity target of 600 MW from biomass and 500 MW from cogeneration by 2022. Haryana state formulated the Haryana Bio energy Policy 2018 to use surplus crop residue to generate bio-CNG, bio-manure, and bio fuel.

Under the Indian Penal Code, section 188 makes stubble burning a crime. It was also notified as an offense under the (Air Prevention and Control of Pollution Act)

of 1981. The National Green Tribunal (NGT) also banned crop residue stubble burning in Uttar Pradesh, Punjab, Haryana, and Rajasthan on December 10, 2015. In November 2019, the Supreme Court of India directed the governments of Punjab, Uttar Pradesh, and Haryana to pay farmers a financial incentive to stop the practice of stubble burning.

The Supreme Court's observation on stubble burning is given as follows

The Supreme Court said that incentives should be provided to those who are avoiding or not burning this stubble and disincentives to those who continue the practice of stubble burning. The Supreme Court also added that the existing Minimum Support Price or MSP scheme should be interpreted in a way that will enable the states concerned to wholly or partly refuse to benefit those who continue the practice of burning stubble.

Case Study of Generation of Electricity from Stubble

The Jalkheri, Fatehgarh Sahib District thermal plant is the first plant in India using bio energy sourced from agricultural and forestry residues. The plant uses rice husk, wood chips, and stalks from different crops, such as paddy, wheat, etc. In June 1992, Bharat Heavy Electricals Limited (BHEL) commissioned this plant to use rice straw at the cost of Rs. 47.2 crore from Punjab State Electricity Board (PSEB). Originally, some of the teething problems were investigated by small-scale experiments, and a process of 10 MW was realized by modifications of an existing boiler to accept biological feed stocks like rice husk, wood chips, etc. The plant was leased and run on a sustainable basis in its full capacity of 10 MW. The Punjab Biomass Power, Bermaco Energy, Archean Granites and Gammon Infrastructure Projects Limited in Punjab have also built another 10–15 MW agricultural waste power plant. The plant uses local farm wastes, including stubble ,rice paw and sugar cane bagasse. The annual total biomass consumption is approximately 120,000 tonnes of biomass obtained from that region.Punjab annually produces approximately 20–25 million tonnes of rice straw, conventionally disposed of by burning. As the technology is developed, this straw waste can now be used to generate electricity. The plant will provide 15,000 farmers with additional income from supplying agricultural waste. The development of this plant will be an important milestone for protecting the environment and creating new jobs and revenues by turning farm waste into bio energy or green electricity. Taking a holistic approach.

A holistic approach is required to address crop residue burning. This includes a multi-disciplinary and multi-agency setting involving technical agencies, market-

based economic tools, supporting agricultural and environmental policies, and awareness and capacity building for farmers.

Stubble burning can be prevented by effectively implementing both in-situ and ex-situ methods. Though legal measures exist to effectively control the practice of stubble burning, the only way to prevent it, in the long run, is by bringing about change in the community's social behavior.

Thus, in the short term, misconceptions among farmers regarding paddy straw management needs to be resolved. These misconceptions include improvement in soil fertility due to stubble burning and reduction in yield due to use of in situ machines. Even though national schemes provide for establishing farm machinery banks to provide hiring services to farmers, there are serious issues of timely availability of machines to farmers. To address the issue of paddy straw burning, crop residue management needs to be made cost effective for the farmers. This is another priority action that concerned agencies need to deliver on.

In the medium term (the next seven years), there is a need to encourage crop diversification and rotation. While technological interventions for the management of crop residue may be useful in the short term, crop diversification as a policy intervention needs to be emphasized by the government given the multiple environmental externalities of present cropping patterns, such as depleting groundwater, poor soil quality and air pollution. Crop diversification can improve resilience from the effects of greater climate variability and extreme events. It can be implemented in various ways such as crop rotation, poly-cultures, increased structural diversity, or agro forestry.

Methodology
The methodology used for collecting first hand information for this report is qualitative method which comprises of the structured interview from the farmers of Uttar Pradesh belong to villages of Moradabad. The interview has aims to find and put forth the first hand experiences of the farmer regarding the burning of stubble and difficulties faced by them in the process while dealing with stubble management and certain effective ways suggested by them to deal with the same.

Conclusions/Findings
Considering the findings for the research studies and the responses of questionnaire suggests that the government policies are largely adequate and effective however the trouble lies in their improper implementation and inability to provide farmers proper directions and way out for their implementation.

Thus, the hypothesis proved to be falsified as the findings indicate that policies are adequate but the inefficiency lies in their implementation.
 Thus, the Indian Government should advise and provide adequate means to farmers on alternative solutions to open field burning of crop residues, in order to reduce the toxic clouds over Delhi at the very least. For instance, to stop burning stubble altogether, many farmers from Punjab are pleased with the Happy Seeder, a system that can seed crops while minimizing stubble burning. Thus, it is noteworthy to implement the proper alternative methods in a proper way considering geographic location, transportation, economic feasibility, etc. Also opting for policies that prioritize short-term gains over long-term sustainability may inadvertently encourage practices like stubble burning thus, shifting the focus towards sustainable and environmentally friendly practices may require a more holistic and forward-looking policy approach which is to use the stubble for alternative uses.

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APPENDIX
QUESTION
Stubble burning in India

Hypothesis- Inadequate or ineffective policies related to agricultural practices and environmental conservation contribute to the persistence of stubble burning.

Name-
Occupation -
Age/sex-

Q1.Do you agree that North Indian farmers rely heavily and also at times unnecessarily over rice irrigation, why according to you they don't explore other crops alternatives for incomes?

Q2. Do you think that farmers don't have any alternatives for utilising the crop residue or stubble effectively?

Q3. Do you agree that farmers don't know how to deal with the waste as they can't afford new technology available to handle the waste material or are there some other reasons like political reasons for not handling the waste well?

Q4. Do you agree that burning of stubble leads to large impact over the environmental issues, including the smog in North India during stubble burning, what according to you could be some steps from your side to end this?

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Q5. What according to you are the other environmental degradation due to burning of stubble ,don't you agree it leads to degradation of your own land microbes as well?

Q6. Are you aware of the alternate use if paddy straw viz Biomass power project,feed stock for 2G ethanol plants ,fuel for industrial boilers?If yes then how it has been benefited you and if not then what steps you think to take to use your stubble for these.

Q7.What according to you are the economic impacts that the farmers have to bear in case of crop failure and how does that leads to burning of stubble?

Q8. Do you think that the government policy aren't effective in controlling the burning of stubble?

Q9. What according to you could be proposed measures or changes in policy and laws that could be taken to bring control over the stubble burning?

APPENDIXII
Participant Consent form
(Consent to take part in research)

I…………………… voluntarily agree to participate in this research study over 'Inadequate or ineffective policies related to agricultural practices and environmental conservation contribute to the persistence of stubble burning'.
I agree to provide my best knowledge over the subject and also agree to justify over my responses in case, if required in future for clarification.
I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
This questionnaire filling shall be done in my name and disguising any details of my interview which may reveal my identity or the identity of people I speak about. I understand that disguised extracts from my interview may be quoted and the questionnaire shall be used for research purposes for which I agree upon.
I understand that a transcript of my responses shall be provided to me for reviewing and asking for my consent over the same. I understand that under freedom of information legalisation I am entitled to access the information I have provided at any time .
I understand that I am free to contact the person involved in the research to seek further clarification and information Names, degrees, affiliations and contact details of researcher.

Signature of participant ------------------------------

RESEARCH COMPENDIUM

WOMEN AND ENVIRONMENT -
A COMPARATIVE STUDY BETWEEN DEVELOPING AND DEVELOPED COUNTRIES

Authors: ASTONISH BAGHEL
DEEKSHA VERMA
MEREENA ABRAHAM
FAREEHA FAISAL

Introduction

The relationship between women and the environment is a complex and multifaceted subject that has gained significant attention in recent years. Environmental issues are becoming increasingly critical as the world faces challenges such as climate change, resource depletion, and ecological degradation. Women, particularly in the context of the developed and the developing countries, play vital roles in shaping and responding to these environmental challenges. This comparative study aims to explore the intersection of gender and environmental issues, with a focus on the disparities and commonalities between women's experiences and contributions in the developed and developing countries. Women in both settings play unique roles in mitigating, adapting to, and being affected by environmental change.

Rationale

This study's rationale lies in the understanding that women's experiences and contributions to environmental sustainability differ significantly across the developed and developing countries. This project investigates the nexus of women and the environment, comparing challenges and contributions in developing and developed countries. By discerning disparities, it aims to guide targeted policies fostering gender-inclusive sustainable practices. This comparative study seeks to unveil insights crucial for global initiatives addressing both gender equality and environmental sustainability.

Statement of the Problem

The project addresses the pressing issue of unexplored gender and environmental disparities in developing and developed countries. Despite women's integral role in sustainable development, there's a lack of comprehensive research on how socio-economic factors intersect with their environmental contributions and vulnerabilities. This study aims to elucidate these dynamics, identifying challenges hindering women's active participation in environmental conservation in both settings. By understanding the nuanced differences, the project seeks to inform targeted policies that empower women and foster sustainable practices. Bridging this knowledge gap is essential for achieving inclusive, gender-responsive environmental policies on a global scale.

Methodology

The research will involve a combination of qualitative and quantitative methods, including interviews, case studies, and content analysis. Data will be collected from a diverse range of regions in the First World and Third World, ensuring a broad representation of experiences and perspectives. The brief aims to illustrate some of the connections between gender and the environment in the first world countries as well as the third world countries collecting data from official statistics. To the extent possible, internationally agreed indicators were used to illustrate the gender-environment nexus across these areas. To illustrate the gender-environment nexus across the globe, additional statistics were sourced from databases of international agencies [such as the United Nations(UN), UN Women , the World Health Organization (WHO), United Nations Educational, Scientific and Cultural Organization (UNESCO)], and in some instances microdata analysis was conducted. This comparative approach will allow us to draw meaningful insights and recommendations for fostering gender-inclusive environmental sustainability.

Literature Review

Women and Environment: Developing Countries

In developing countries the relationship of women and environment is linked to the livelihood concerns in rural areas. Women in developing countries play a crucial role in managing natural resources on family and community levels and are most affected by environmental degradation. In communities all over the world, women manage water, sources for fuel, and food, as well as both forests and

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agricultural terrain. The various case studies ranging from India's Chipko movement and Kenya's Green Belt Movement all highlighted the role of women's voices and perspectives in sustainable development.

In developing countries, women are primarily responsible with the management and conservation of resources for their families. They spend large amount of time collecting and storing water, food and fodder, securing sources of fuel and managing land like forest and agricultural terrains. Women play a significant role as caregivers to children, the elderly and the sick. In short, the whole community relies on them.

Their generational and traditional knowledge about the environment makes them an important figure in supplying communities with medicine, nutritional balance and much more. While any kind of natural calamities affect everyone living in that particular region, many studies have shown that these natural disasters disproportionately hit women, lowering female life expectancy rates and killing more women than men majorly in regions where we witness lower gender equality.

In developing countries, the majority of women don't own land and farm, they are usually the ones who spend most of their time working on the farm to feed the household. This responsibility automatically leads them to know more about the environment. While men are also involved, they often leave their home to go to cities to find jobs and women are left with the task of taking care of everything. With their direct connection with nature they know more about the soil, plants, trees, waters and other resources therefore they do not abuse them. This creates a culture of preservation and conservation of environment among women in order to ensure that the future generation are able to get their needs available from the environment and to avoid the scarcity of resources.

Despite their regular interaction and dependence on the environment, women have less access to and control over them than men. In fisheries, for instance, due to the nature of women's work in nearshore capture, processing and marketing seafood rather than offshore fishing, the participation of millions of women in this business remains invisible and informal. This unacknowledged and unappreciated role of women in natural resource management has not only created an undervaluation of the domestic sphere and unpaid work but rather an underestimation of the economic and societal benefits that women provide to the

environmental sector. Since women's role with regards to the environment is often not recognised in the developing countries, it also affects their representation and participation in matters relating to environmental decision making.

A study was conducted in Ecuador, a developing country, to understand the participation of women in the environmental decision making process. Ecuador. An ecologically and culturally diverse country is situated in South America. It is known for being one of the leading countries in Latin America to take initiatives in environmental protection. It has also made significant progress in recognising women's rights and government policies on gender issues. Yet, despite the legislation process, women are subjected to severe discrimination, from pay scale discrimination to limited role in the decision making process. Since 1990's, there have been efforts and initiatives made to link gender and environmental issues. This step was taken to help organizations working with communities to grasp the importance of gender and carry out gender analysis in natural resource management at the community level. But it was noted that there were challenges in addressing gender in environmental projects, one of the reasons being the low awareness about the value of women's participation in environmental management. Various interviews that were conducted revealed that one of the primary challenges that affected women's participation in the decision making process was the prevalence of machismo-marianismo culture. This ideology refers to the cultural norm that men retain the right to subordinate women and women must hold to their submissive role in society. A similar case was also witnessed in the Philippines wherein women faced a lot of obstacles notably because of the male-dominant culture.

In Peru, women often participate in food production and family farming, yet they do not generally benefit directly from their labour. Their work is not considered as valuable as men's. Women in the Caribbean have always been associated with agriculture and do have access to land ownership. However, women still do not have the same access to technology as men and generally have smaller plots of land. The dependence on nature and the environment for survival is common among women living in areas commonly designated as the Third World. It has been argued by environmental feminists that this dependence creates a deeply rooted connection between women and their surroundings. The dependency women have on natural resources, based on their responsibilities, creates a

specific interest that may be different from the interests of men. The views women have on nature are unique in that they connect the land to immediate survival and concern for future generations rather than simply looking at the land as a resource with monetary value. With the development of newer technologies since the 1940s, there has been a shift to more non-farm activities, however, men more than women are the ones participating in the shift, leaving women behind. It has been projected that with the continuation of men shifting to urban livelihoods, more and more women will be depended on to maintain the household by farming. Especially during the neoliberal policy regime in Latin America, with the increasing use of exports, women were ideal for their 'gendered skills,' they were paid less for their farming labour and not likely to organize, coining the term 'feminisation of responsibility.' Issues such as climate change could have a greater impact on women because the land they farm will be negatively affected.

One of the common themes among the countries mentioned above and the developing countries in general is that the majority of women, in both rural and urban areas, experience some degree of discrimination inherent in the historical patriarchal system and related set of cultural expectations, restricting their ability to reach high level environmental decision-making positions. There is still a great need within these countries to address gender in environmental projects, recognize women's valuable knowledge and capacity, and ensure national policies and projects benefit from the participation and leadership of both men and women.

Colonial Effects on Third World Countries

Development initiatives supported by Western nations by colonizing to modernize the Third World have ultimately benefited their own interests more than the intended recipients. Consequently, and against predictions, the Third World continues to evade growth and wealth. The colonial era had profound and lasting impacts on both women and the environment in third-world countries. The effects of colonialism were multifaceted, encompassing economic, social, cultural, and environmental dimensions. Here are some ways in which colonialism influenced the relationship between women and the environment in these regions:

● Economic Exploitation: Colonial powers often exploited the natural resources of the colonized territories for economic gain. This exploitation disrupted traditional patterns of resource use and distribution, affecting the roles that women played

in managing local ecosystems.

● Land Displacement: The imposition of Western land tenure systems during colonization often led to the displacement of indigenous communities. This displacement had significant consequences for women, as they were traditionally responsible for agriculture and resource management. Loss of land and resources undermined women's ability to sustain their families and communities.

● Introduction of Cash Crops: Colonizers introduced cash crops for export, altering local agricultural practices. The shift towards cash crops often marginalized traditional subsistence farming, impacting women who were primarily involved in food production for local consumption.

● Social Disruption: Colonialism often disrupted existing social structures and gender roles within indigenous societies. The imposition of European norms and values, including patriarchal systems, affected women's status and participation in decision-making processes.

● Cultural Changes: The imposition of Western cultural values and norms during colonial rule contributed to the erosion of indigenous knowledge and practices related to sustainable resource management. Traditional ecological knowledge held by women, in particular, was often devalued.

● Environmental Degradation: The extraction of natural resources by colonial powers, such as logging and mining, contributed to environmental degradation. Deforestation, soil erosion, and pollution had direct consequences for the communities dependent on these ecosystems, disproportionately affecting women who were often responsible for resource collection.

● Health Impacts: The introduction of new diseases by colonial powers, along with changes in land use and living conditions, had significant health implications. Women, as primary caregivers, were particularly affected, dealing with increased health burdens and reduced access to healthcare.

● Limited Educational Opportunities: Colonial policies often restricted educational opportunities for indigenous populations, and women, in particular, had limited access to formal education. This hindered their ability to engage in

environmental conservation practices and sustainable resource management.
Resistance and Social Movements: Women played key roles in resistance movements against colonial rule. Their involvement in these movements often extended to advocating for environmental and social justice, recognizing the interconnectedness of their struggle for independence and the preservation of their natural resources.

● Legacy of Inequality: Many of the inequalities and imbalances introduced during the colonial era persist today. Post-colonial governments and societies continue to grapple with the legacies of exploitation and environmental degradation, affecting women in various ways.

Understanding the historical context of colonialism is crucial for addressing the ongoing challenges faced by women and the environment in third-world countries. Efforts to promote sustainable development, gender equality, and environmental justice often involve acknowledging and redressing the historical injustices imposed by colonial powers.

➤ **CASE STUDY**

Green Belt Movement:
The Green Belt Movement is an environmental and social initiative that originated in Kenya. It was founded by Nobel Peace Prize laureate Wangari Maathai in 1977. The movement focuses on tree planting, conservation, and women's rights, aiming to address environmental degradation while promoting sustainable development and gender equality.

Key features of the Green Belt Movement include:
 - Tree Planting: The Green Belt Movement is perhaps best known for its tree-planting activities. The organization encourages communities, especially women, to plant trees to combat deforestation and soil erosion, improve water quality, and provide a sustainable source of fuel and building materials.

- Environmental Conservation: Beyond tree planting, the Green Belt Movement is involved in various environmental conservation efforts. This includes advocating for the protection of natural habitats, raising awareness about the importance of biodiversity, and promoting sustainable land use practices.

- Women's Empowerment: Wangari Maathai recognized the crucial role of women in environmental conservation and community development. The Green Belt Movement emphasizes empowering women by involving them in tree planting and other environmental initiatives. This empowerment extends to education, healthcare, and economic opportunities.

- Advocacy for Social Justice: The Green Belt Movement is not only focused on environmental issues but also addresses broader social justice concerns. Wangari Maathai and the movement have been vocal in advocating for democracy, human rights, and good governance in Kenya and beyond.

- Community Development: The movement engages in community development projects, promoting sustainable practices that improve livelihoods. This includes activities such as water resource management, agroforestry, and sustainable agriculture.

- Education and Awareness: The Green Belt Movement places a strong emphasis on education and raising awareness about environmental issues. This involves working with local communities, schools, and organizations to build an understanding of the interconnectedness of environmental health, social justice, and sustainable development.

- International Impact: While the Green Belt Movement originated in Kenya, its influence has spread globally. Similar initiatives and organizations inspired by the Green Belt Movement's model have emerged in various countries, contributing to the global environmental and social justice movement.

Wangari Maathai and the Green Belt Movement received international recognition for their efforts, and Maathai was awarded the Nobel Peace Prize in 2004 for her contribution to sustainable development, democracy, and peace. The Green Belt Movement serves as an inspiring example of how grassroots environmental initiatives can have a significant impact on both local communities and the broader global conversation about environmental sustainability and social justice.

India: Women's Movement

The women's movement in India is diverse, addressing a wide range of issues from violence and discrimination to economic disparities and political representation. Balancing these diverse concerns poses organizational and strategic challenges. Deep-rooted patriarchal norms and cultural resistance can impede progress. Challenging traditional gender roles requires persistent efforts to change societal attitudes and perceptions. Recognizing and addressing the intersectionality of issues, such as caste, class, and religion, is crucial. Women from marginalized communities often face compounded challenges, necessitating inclusive approaches within the movement.

The women's movement in India has been a powerful force for social change, advocating for gender equality, justice, and the empowerment of women across diverse socio-cultural landscapes. Harsh Sethi (a leading scholar on environmental issues) divides the environmental struggles in India, into five categories: (1) forest based—forest policy, use of forest resources, etc.; (2) land use— industrialisation and loss of agriculture and, indiscriminate popularization of chemical inputs resulting in degradation of land and waterlogging, exploitation of mineral resources; (3) against big dams involving the problem of involuntary displacement of tribals and non-tribals residing in the upstream of the river, environmental degradation including destruction of forests; (4) against pollution created by industries; and (5) against overexploitation of marine resources.

Ecofeminism in India is a socio-environmental movement that examines the intersectionality of gender, ecology, and social justice. Rooted in the recognition of women's unique roles as stewards of nature, it critiques patriarchal development models causing environmental harm. Indian ecofeminists actively engage in environmental movements, resisting corporate exploitation and advocating for sustainable resource management. Celebrating indigenous wisdom, the movement promotes alternative economic models emphasizing women's participation. It addresses health impacts on women, links reproductive rights with environmental justice, and fosters global solidarity. Ecofeminism in India strives for a harmonious coexistence of gender equality, ecological sustainability, and social equity.

This case study explores key aspects of the women's movement in India, highlighting its historical evolution, major milestones, challenges faced, and the impact on society. The roots of the women's movement in India can be traced

back to the 19th century when social reformers like Raja Ram Mohan Roy and Jyotirao Phule championed women's rights. However, the organized women's movement gained momentum during the late 20th century. The 1970s and 1980s marked a period of increased activism, with women addressing issues such as violence against women, dowry deaths, and unequal socio-economic conditions.

Major Milestones

○ Chipko Movement (1973): Although not exclusively a women's movement, the Chipko Movement involved significant participation from women in the Himalayan region. Women played a crucial role in hugging trees to prevent deforestation, highlighting their environmental activism and the interconnectedness of women's rights and environmental issues.

○ The Bhopal Gas Tragedy Protests (1984): Women were at the forefront of protests against the Bhopal gas leak disaster, demanding justice for the victims and drawing attention to the environmental and health impacts. This event catalyzed a broader movement for corporate accountability and environmental justice.

Anti-Dowry Protests (1980s): The women's movement actively campaigned against the practice of dowry, which led to numerous cases of violence against women. These protests advocated for legal reforms and societal awareness to combat dowry-related harassment and violence.

○ The Vishakha Judgment (1997): The gang rape of a social worker in Rajasthan prompted the Supreme Court of India to lay down guidelines for preventing sexual harassment at the workplace. The Vishakha Judgment was a landmark moment that empowered women and set the stage for future legal frameworks.

○ Women's Reservation Bill (2008): The women's movement in India has consistently advocated for political representation. While the Women's Reservation Bill, which proposes a 33% reservation for women in the Parliament and state legislative assemblies, has faced obstacles, its advocacy underscores the movement's commitment to political empowerment.

Policies Supporting the Women's Environmental Movement in India

○ National Policy for Women (2016): This policy aims to create an enabling environment for the development of women and to ensure equal opportunities and benefits for them. While not specifically focused on the environment, it recognizes the need to address the gendered impacts of development and promotes women's participation in decision-making processes.

◦ National Biodiversity Action Plan (2008): This plan emphasizes the importance of involving local communities, including women, in biodiversity conservation efforts. It recognizes the traditional knowledge of women in resource management and encourages their participation in sustainable practices.

◦ National Water Policy (2012): This policy acknowledges the crucial role of women in water management, especially in rural areas. It emphasizes the need to enhance women's participation in water-related decision-making processes and to provide them with access to water resources for agriculture and domestic use.

◦ National Policy for Skill Development and Entrepreneurship (2015): While not directly related to the environment, this policy recognizes the importance of empowering women economically. Skill development and entrepreneurship programs can contribute to women's participation in sustainable livelihoods, including those related to environmental conservation.

◦ National Mission for Green India (2014): This mission focuses on increasing forest and tree cover, restoring ecosystems, and enhancing biodiversity. While the policy does not explicitly highlight the role of women, the inclusive and participatory approach encourages the involvement of local communities, potentially benefiting women engaged in environmental activities.

◦ National Clean Energy Fund (2010): While not specific to women, policies promoting clean energy can indirectly benefit women by improving access to cleaner and more sustainable energy sources. This can reduce the environmental burden on women who are often responsible for household energy needs.

In conclusion, the women's environmental movement in India has gained momentum over the years, addressing a spectrum of issues at the intersection of gender and the environment. Women's environmental groups often collaborate with other civil society organizations, governmental bodies, and international agencies to amplify their impact. The women's environmental movement in India reflects a holistic approach that goes beyond conservation efforts to address gender inequalities and empower women in the context of sustainable development. While challenges persist, the movement continues to make significant strides in reshaping environmental policies and practices with a focus on inclusivity and gender equity.

Role of Patriarchy: Affecting the relationship of women and environment in the developing countries

Patriarchy, or the social system where men hold primary power and predominate in roles of political leadership, moral authority, social privilege, and control of property, plays a significant role in shaping the relationship between women and the environment in third-world countries. Here are several ways in which patriarchy affects this relationship:

● Access to Resources: Patriarchal systems often result in unequal distribution of resources, with men having greater access and control. This can extend to control over land, water, and other natural resources. Women, who are frequently responsible for resource management in many communities, may find their efforts constrained by patriarchal norms that limit their access to and control over these resources.

● Limited Decision-Making Power: Patriarchal societies tend to restrict women's participation in decision-making processes at various levels, including within households and communities. When it comes to environmental decisions, such as land use or resource management, women's voices are often marginalized. This can lead to unsustainable practices that further degrade the environment.

● Division of Labor: Traditional gender roles reinforced by patriarchy often assign specific tasks to men and women. In many third-world countries, women are typically responsible for tasks such as collecting water, fuelwood, and managing household agriculture. These gendered roles can contribute to women's heightened vulnerability to environmental changes, as they are on the frontline of resource-dependent activities.

● Impact of Climate Change: Climate change disproportionately affects vulnerable communities, and within these communities, gender inequalities exacerbated by patriarchy amplify the impact on women. Changes in weather patterns, extreme events, and natural disasters can disrupt traditional gender roles and increase women's burdens, particularly in agricultural and caregiving responsibilities.

● Limited Access to Education Patriarchal norms can restrict women's access to education, limiting their awareness and understanding of sustainable environmental practices. Education is a key factor in empowering women to engage in environmental conservation and sustainable resource management.

● Health Implications: Patriarchal norms can contribute to women's limited access to healthcare and family planning resources. This lack of access can lead to higher birth rates and increased pressure on local resources, contributing to

environmental degradation.

● Violence Against Women: Patriarchy often perpetuates gender-based violence, including within the context of environmental conflicts. Women who are involved in environmental activism or who challenge unsustainable practices may face harassment and violence, limiting their ability to advocate for sustainable solutions.

Addressing the impact of patriarchy on the relationship between women and the environment in third-world countries requires challenging and transforming deep-rooted gender norms. Efforts should include promoting gender equality, empowering women economically and socially, ensuring their participation in decision-making processes, and recognizing and valuing their contributions to sustainable development and environmental conservation. Ecofeminism in India highlights the interconnected oppressions of gender and ecology.
Sustainable solutions that must involve both men and women working together to create more equitable and environmentally resilient societies.

Women and Environment: Developed Countries

The World Summit on Sustainable Development held in Johannesburg in 2002, confirmed the need for gender analysis, gender specific data and gender mainstreaming in all sustainable development efforts, and the recognition of women's land rights. The summit Declaration states: "We are committed to ensuring that women's empowerment, emancipation and gender equality are integrated in all the activities encompassed within Agenda 21, the Millennium Development Goals (MDGs) and the Plan of Implementation of the Summit." In 2002, the United Nations Commission on the Status of Women adopted agreed conclusions on environmental management and the mitigation of natural disasters, which included a comprehensive set of policy recommendations to enhance women's empowerment and promote gender equality in situations of natural disasters. In 2005, the Governing Body of UNEP adopted a decision that called upon Government and UNEP to mainstream gender perspectives into their environmental policies and programmes, to assess the effects on women of environmental policies, and to integrate further gender equality and environmental considerations into their work. By 2005 only three of the major conventions on natural resource issues explicitly addressed the participation of women in environmental decision-making and the need to raise awareness among women on environmental issues: the Stockholm Convention on Persistent Organic

Pollutants (2004), the Convention on Biological Diversity (1993) and the Convention to Combat Desertification (1996).

Gender Perspective on Climate Change

One of the most urgent environmental issues today is climate change. The UN's Intergovernmental Panel on Climate Change reported in early 2007 that global warming is 'unequivocal', and that human activity is the main driver of this activity. To date, however, there has been little discussion on the gender dimensions of this threat and strategies to deal with it. Some authors have pointed out that since the poor are the most vulnerable to the impact of climate change, then women, as a disproportionate percentage of the poor, are particularly vulnerable. Given increased environmental instability, women will face challenges given their primary care-giving roles in times of disaster and environmental stress. Despite these challenges, many women have developed adaptive strategies to protect the sustainability of their environments and livelihoods. For example, poor nomadic women may have a relatively high adaptive capacity because of their intimate knowledge of their natural environment. Some analysts have argued that gender inequalities and roles are also relevant variables in tackling climate change in northern countries as well. Research from Germany also indicates that there are gender differences in attitudes and perceptions of climate change, and these are relevant in developing strategies to address this issue. It is clear that we do not know enough about gender aspects of climate change, particularly in the north. More research and sex-disaggregation of data is required.

Climate Change and Gender Equality in China

One goal of the Canada-China Cooperation in Climate Change initiative is to increase the contribution of women by empowering them to participate equally in the development and implementation of climate change related policies and programmes. Specific objectives include: Increase awareness of gender inequalities and support for women's full participation in decision-making and technical activities associated with climate change; Increase the capacity to analyse gender equality issues relevant to the project and incorporate the results of the analysis into project activities; Develop and implement appropriate targets for male/female participation in project activities, based on sex disaggregated baseline research (the minimum expectation is 30 per cent participation by women; and Increase the awareness, abilities, self-confidence and motivation of

women working to address the issue of climate change.

Gaps in Environmental Assessment

In many circumstances, environmental assessments are seen as technical exercises to be carried out by engineers and scientists. Significant investments have been made in the development of methodologies and tools, yet these tend to omit gender perspectives and can often fail to incorporate aboriginal women's perspectives. For example, a United Nations training manual designed to build capacity on environmental assessments has almost no attention to gender equality issues. A study from Canada revealed that in the complex mix of aboriginal land claims, nickel mining and environmental assessment, both the participation of aboriginal women and gender-based analysis was weak. Analysts found that although some socioeconomic data in the environmental assessment was disaggregated by sex, there was little analysis of the differential impact of the proposed development on Inuit women. There was also insufficient attention to women's concerns over the impact of the development on the levels of violence against women.

Women and environment in the developed nations :
• Sweden

Sweden has historically had a political culture that inherently protects the environment. Sweden is one of the highest-ranking countries when assessing gender equality, but the government does agree there is room for improvement. Women in Sweden have been empowered to protect the environment through the government and policies, a lot like other developed nations. In Sweden, the majority of local government workers are women at 64% and since the 2010 election, 45% of Swedish parliament is made up of women. The government has recognized that women are the most affected by climate change and environmental degradation. Through this recognition they have committed to contribute to increasing the participation for women in decisions and policy debates surrounding climate change and other environmental issues. They also have committed to increasing resources for women in civil society who present issues about the environment, hoping to increase accountability and transparency. Peterson and Merchant draw on the idea that the women's environmental movement in Sweden was based on both symbolic and political perspectives. In the early stages of the environmental movement and women's movement in Sweden, women were very aware that changes had to be made both

within society and ideologies, then enacted politically to create a cohesive collective society. Elin Wagner (1882–1949) presented herself as a radical feminist in early movements. She was a writer, journalist, environmentalist, ecologist and pacifist. She was a large inspiration for the environmental and feminist movements. She saw a large flaw in the popular ideology after World War II: that men had the ability to control and conserve nature for the entire global community or all of mankind. With a place in both politics and writing, she was inspired to write her novel, Alarm Clock. Her novel was barely noticed when released in 1941, but during Sweden's women's movement in the 1970s, her messages became a driving force behind the movement. She believed that there should be a large presence of intellectuals in social movements. Wagner and other key Swedish feminist scholars and intellectuals of that time shaped the parameters of Swedish thinking and both the environmental and women's movements. Throughout her life, Wagner stressed the importance of nature and the environment, an idea we see through the identity of Sweden. Sweden has it ingrained in both their identity and traditions to have a deep sense of nature, which has played a huge role in shaping the overall consensus of the country to protect the environment, especially for women. Through the transformation of the opinion and ideologies of the Swedish people, it became much easier to entrench environmental policies. Women working within institutions protected the global environment by pushing for bans on nuclear energy or industry degrading local environment. In 1980, there was a national referendum on nuclear power in Sweden. The voting patterns revealed that 43% of women were against nuclear power, while only 21% of men opposed it. Sweden and the women of the country have demonstrated that environmental protection can be achieved through transitioning ideologies followed by institutional change.

• **United States**

Women's involvement in environmental movements of the United States can be traced back to the early 20th century when women of upper and middle-class backgrounds became active in urban organizations advocating for reform in environmental issues such as sanitation, smoke and noise abatement, civic cleanliness and purity in food and drugs. Female activists of this period included Alice Hamilton, Jane Addams, and Ellen Swallow Richards who brought to the forefront issues of pollution, urban degradation and health hazards. Rose Schneiderman,, a labour activist, advocated for the cleanup of hazardous work environments during this period as well. During the eras of World War I, the Great

Depression and World War II the United States saw a period of inactivity on environmental issues. It was not until 1962, with the publication of Silent Spring, written by Rachel Carson, denouncing the U.S. government's use of pesticides and the nation's increase in industrial waste, that women in the United States returned to environmental issues. The book is considered one of the seminal pieces of environmental works written. The 1970s found women actively engaging in environmental issues. W.A.R.N. (Women of All Red Nations) was formed by Native American women to combat the environmental and health effects of uranium mining on native lands. Lesbian women formed communal spaces, returning to living on the land, recycling materials, using solar power and growing organic foods in their efforts to combat industrial pollution and degradation of natural resources. The 1980s was an important decade for women in the environment. In 1980 the term 'ecofeminism' was born with two important events taking place. In April 1980 the conference, "Women and Life on Earth: Ecofeminism in the 1980's" was held in Amherst, MA, the first in a series of conferences on ecofeminism. In November 1980 the Women's Pentagon Action took place in Washington, D.C., when the group, "Women and Life on Earth" gathered to protest war, militarism, nuclear weapons and the effects on the environment. At its core, ecofeminism recognizes the link between the oppression of women and the oppression of nature. The liberation of women and nature are linked, and it is towards this end that ecofeminists work towards. Inherent to this concept is sexism. Australian ecofeminist Ariel Kay Salleh was an early critic of deep ecologists of this time claiming that most of its spokespersons were male and therefore were afraid to confront the naturism and sexism causing environmental crises. Carol Adams furthered this ideology with her work The Sexual Politics of Meat in which she established the link between sexual objectification of women to the consumption of animals as objects of food. Environmental issues continued to dominate women's activism work in the 1980s with the publication of Judith Plant's book, Healing the Wounds the Promise of Ecofeminism in 1989, the first North American anthology of ecofeminism. Also of importance, in June 1989, the Ecofeminist Caucus of the National Women's Studies Association was formed. The second half of the decade saw the emergence of American socialist ecofeminists, Karen Warren and Carolyn Merchant. Warren 's work was instrumental in defining the four core principles of ecofeminism; the connections between women and nature, the need for the understanding of those connections, that feminist theory and perspective must include ecological perspectives and that ecological solutions must come from a feminist perspective. Socialist ecofeminists are concerned with

issues impacting the environment resulting from the intersection of oppression by race, class or gender. Specific issues addressed by Socialist ecofeminists are colonialism, multinational corporate development of the South, global distribution of wealth, overpopulation and the critique of biotechnology.

Since the 1990s the United States has seen women continuing to foster their concerns of the environment. The decade saw the growth of the Environmental Justice movement beginning with Lois Gibbs, who formed the Centre for Health, Environment and Justice, helping community organizations battle toxic waste issues and others. The Principles of Environmental Justice were adopted at the First National People of Colour Environmental Leadership Summit in Washington, D.C., on October 24–27, 1991. In a series of seventeen mandates, the principles call for public policies guaranteeing the right to responsible uses of renewable resources and land, creating a sustainable planet for all living beings. Feminists involved in current ecological movements continue the examination of the intersectionality of race, class and gender in human's experiences within their environments and the examination of perceptions and how values of the connection between humans and the environment are shaped by gender roles and assumptions. Other topics of concern include structures of power at the political and economic institutional level that are instrumental in the ecological movement, particularly the interdependence between oppression and domination. Today's environmental feminists' scholarship focuses upon transnational, post-structuralist and postcolonial deconstructions. During the 2000s women in the environment have turned their focus to another aspect of the environmental justice movement, that of gender justice. Gender justice differs from ecofeminism in that this perspective argues that women are affected by the environment in gender-specific ways as opposed to the focus on the connection between the oppression of women and nature. Gender disparities for women include the increase of environmental burdens due to their involvement in women's work of care taking and lack of access to resources due to lower incomes or poverty. Women are more likely to make food sacrifices for their family, and are more impacted by climate change, which impacts at a greater risk those that are already environmentally disadvantaged. Women are at greater risk during natural disasters, and subjected to increased levels of male violence in the wake of these disasters. Overall, women are less likely to be able to avoid or adapt to environmental degradation. The response to these gender inequities has been an increase in activism by women of colour. In a marked difference from mainstream environmentalists, women of colour, primarily Native American and Hispanic, are

driving political change using grassroots organizations in a desire to address the gender specific differences of environmental effects. Gender justice activists also seek to empower their communities and preserve their cultural traditions in addition to preserving the environment. Following these principles, environmental leaders such as activist Julia Butterfly Hill, founder of the Circle of Life Foundation, and Native American activist Winona LaDuke, founder of Indigenous Women's Network, are continuing women's participation in the environmental gender justice movement in the United States today. Women have had a longstanding impact on the environment in the United States, with efforts being shaped by larger feminist movements. In the early 20th century women's involvement in the ecological movements grew out of the Social Feminist work that occurred in between the First and Second Waves of feminism. Ecofeminism stems from the Second Wave of Radical Feminism that was prevalent in the 1960s and 1970s. Environmental Justice and Gender Justice arose from the feminist move towards intersectionality of race, class, and gender in the 1990s. As feminists continue to examine these issues, the environment and women's roles pertaining to it will continue to be topics of concern.

Women and environment in Australia Australia is a developed country with a high per-capita carbon pollution rate. In Australia, like many well-off nations, everyday lifestyles can be wasteful and polluting. This overconsumption harms the planet, the climate and future generations. Women make most of the household spending decisions, which means women have enormous economic power to make a difference and save money. If one million women were to make better choices it can lead to real change. So far 80,000 women have joined the "1 Million Women" campaign, and together they have committed to cut more than 100,000 tons of carbon pollution. Since 2009, "1 Million Women" has grown to become Australia's largest women's environmental organization. When the campaign reaches its ultimate target of one million women members and cutting more than one million tonnes of carbon, it will be equivalent to taking 240,000 cars off the road for a year. The campaign can be replicated in different countries – refined, modified and shaped in a way that makes it relevant to different cultures and communities – to foster women's leadership on climate change. In 2011, "1 Million Women" launched its SAVE program, which helps its members conserve energy, cut waste and pollution while saving money at the same time. The program revolves around a series of monthly themes – Food, Drive, Power, Wear, Shop, Build and Invest. SAVE summit events in metropolitan and regional cities attracted more than 1,500 participants. SAVE includes a practical guide to shrink household bills by

$1,000 a year simply by cutting waste. By April 2013, "1 Million Women" had 79,066 registered members who had committed to cut 104,726 tonnes of CO2-e. When they reach their ultimate target of a million women as members and over a million tonnes of CO2-e pollution saved, this will be equivalent to taking 240,000 cars off the road for a year. In its first three years, "1 Million Women" has focused on building its campaign in Australia. During the next three years, the campaign aims to go global. In 2013 and beyond, "1 Million Women" is adapting its core message to a universal one of 'Less is More,' aimed at both climate change impacts and wider resource management, based on the need for women in developed countries to consume and waste less so that everyone can have greater quality of life while preserving environmental well-being. Finding ways to make "1 Million Women" an organisation that engages women and girls everywhere is central to its development plans for the next three years 2013-16, and longer-term to 2020 by which time it aims to have recruited one million members or more.

Women and Environment in France Terre de Femmes
A world of initiatives Women's contribution to and influence over environmentalism is considerable. To promote their efforts and shine a spotlight on courageous, innovative initiatives across the planet, the Yves Rocher Foundation has created the Terre de Femmes Award. Given annually to about 30 women committed to protecting the planet, the Award recognises women who "change the world" through initiatives big and small. Each of these initiatives addresses environmental issues in its own way. French women's and feminist associations have joined forces in the Gender and Climate Justice group to participate in citizen mobilisation and contribute to political advocacy before, during and after the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 21, 30 November – 11 December 2015, Paris). Gender equality, women's empowerment, and combating gender-based violence constitute a cross-cutting challenge to the achievement of sustainable human development. Representing 70% of the world's poor, overburdened with domestic work and having limited access to resources, land, credit, etc., women are particularly affected by the consequences of climate change. Flooding, desertification and biodiversity loss all exacerbate gender violence and the plight of refugees. In all countries women and women's organizations play an important role, which has been recognised by the work programme on gender initiated at COP 20 in 2014. At COP 21 in Paris, an approach

to gender and women's rights (civil, political, economic, social, cultural, sexual and reproductive) must be incorporated throughout the final text – not only in the general principles, but in provisions concerning the implementation of policies and financial and technological mechanisms. The associations in the French Gender and Climate Justice group call for: Reinforcing women's participation and a focus on gender equality! Ensuring decision-making parity in all processes involved in climate-related negotiations and mechanisms. Enshrining the principles of women's rights and equality in all climate-related texts and mechanisms: mitigation (reducing greenhouse gas emissions), adaptation to the effects of climate change, loss and damage, technologies etc. Integrating perspectives on gender and gender-sensitive budgeting in climate mechanisms and all strategies relating to climate and energy, sustainable development and Agenda 21. Implementing documented impact assessments of public and private women's rights initiatives (e.g. "Climate-Smart Agriculture", "Reducing Emissions from Deforestation and Forest Degradation (REDD)" and "REDD+").

Women and Environment in Germany
Germany has not yet taken any steps towards integrating an effective gender perspective into its climate policy and action at national, regional and local government level, including the recommended activities of the gender action plan adopted in 2017 under the United Nations Framework Convention on Climate Change. In its most recent list of issues for Sweden, the CEDAW has asked for information about the measures taken: (a) to ensure that climate change and energy policies take into account the differentiated and disproportionate impact of climate change on women; (b) to better integrate a gender perspective into policies and programmes on climate change, including the recommended activities of the gender action plan adopted in 2017 under the United Nations Framework Convention on Climate Change; and (c) to ensure the effective participation of women in decision making processes on climate change at the local and national levels, in line with the Committee's general recommendation No. 37 (2018) on the gender-related dimensions of disaster risk reduction in the context of climate change.

Women and environment in Japan
Although Japan is a world leader in terms of scientific research, and citizens enjoy a high standard of living, its international gender-equality rankings remain low, with women underrepresented in government and business leadership roles.

Japan is also vulnerable to natural disasters such as typhoons, earthquakes, and landslides, making climate change an area of great concern. For example, as an island nation, food security and the environment are strongly linked for Japan. With the ever present risk of climate change ahead, and an aging workforce, Japan's agricultural sector needs revitalization. Women's participation in agriculture equals that of men, yet they lack representation in leadership positions. Against this background, Japan is striving to integrate gender perspective into its efforts towards mitigating the effects of climate change. Since 2014, the Japan-led Innovation for Cool Earth Forum has been serving as a platform to bring together leaders from industry, politics, and academia for dialogue about global warming. At the event in 2022, discussions were focused on gender equality. The Government of Japan has also been hosting the World Assembly for Women since 2014, as part of ongoing efforts to promote gender equality. The latest assembly was held in December 2022, and included a breakout session entitled 'Women and Environment/Green Society – Decarbonisation from a Gender Perspective'. "The high emissions industries and science fields in Japan are male dominated. Getting to look at things from a gender perspective will take time." While many challenges lie ahead, informed by global organizations such as the UN and the Intergovernmental Panel on Climate Change—that recently introduced its Gender Policy and Implementation Plan dedicated to mainstreaming gender in its work—and inspired by change-makers such as Yoshitaka and Endo, Japan will steadily work toward instigating organizational and policy changes to create more opportunities for women in the fight against climate change.

Ecofeminism

Feminism's branch on ecofeminism looks at the relationships between women and the natural world. Françoise d'Eaubonne, a French feminist, came up with the term in 1974. Ecofeminism draws on the fundamental feminist principles of gender equality, a reappraisal of non-patriarchal or nonlinear systems, and a worldview that honours natural processes, interconnectedness, intuition, and teamwork. To these ideas, ecofeminism adds twofold: a knowledge of the connections created between women and nature and a dedication to the environment. In particular, this worldview highlights the ways that patriarchal, or male-centred, society treats women and the natural world. Examining the impact of gender categories, ecofeminists show how social norms unfairly dominate women and the natural world. Additionally, the philosophy argues that those

conventions result in an inadequate understanding of the universe, and its adherents support an alternative perspective that acknowledges humanity's dependence on nature, cherishes the environment as sacred, and views all life as valued.

Origins of Ecofeminism

A coalition of academic and professional women organized several conferences and workshops in the US in the late 1970s and early 1980s, which gave rise to the current ecofeminist movement. Motivated by the idea that a long history of linking women with nature had resulted in the oppression of both, they convened to debate how feminism and environmentalism may be merged to promote respect for women and the natural world. They observed that men were usually portrayed as rational, organized, and thus capable of managing the usage and development of women and nature, whereas women and nature were generally portrayed as chaotic, irrational, and in need of control. According to ecofeminists, this arrangement creates a hierarchical framework that gives control to men and permits the exploitation of both women and the environment, especially when the two are connected. Therefore, early ecofeminists concluded that changing either constituency's social standing would be necessary to resolve their dilemma. The majority of the early work on ecofeminism was devoted to first cataloging historical links between women and the environment, and then figuring out how to break those links. Theologian Rosemary Ruether, one of the pioneers of ecofeminism, argued that in order for women to fight for their own freedom, they had to recognize and challenge the dominance of nature. In order to overthrow patriarchal institutions that prioritize power, hierarchy, and unequal socioeconomic ties, she pushed women and environmentalists to collaborate. Feminist academics and activists seized onto Ruether's challenge, challenging not only ecological theories that disregarded the impact of patriarchal structures but also feminist ideas that neglected to examine the relationship between women and environment.

FINDINGS / DATA ANALYSIS

Analyzing the primary data from the UN websites and a sample survey hereby enables us to draw concrete data. Our interview and survey mostly conducted on the young population. Below is a comprehensive analysis of the research that goes on to prove our hypothetical understanding that the role of patriarchy and economic situation in the two broadly classified sets of countries intensifies the

wide divide between the challenges, opportunities, and variations in the roles that women play in environmental sustainability.

➢**Social Context -**
Developed: Women in developed countries often have better access to education and employment opportunities, enabling them to actively participate in environmental professions and research. Given the economic empowerment of women in developed nations they may contribute to their ability to engage in sustainable practices, invest in eco-friendly technologies, and make environmentally conscious choices.

Developing: Women in developing countries may face challenges accessing education, limiting their awareness of sustainable practices and environmental issues. Economic constraints restrict women's ability to adopt sustainable technologies or practices, and they may be more reliant on traditional, resource-dependent livelihoods.

➢ **Cultural Context -**
Developed Countries: Cultural attitudes in developed countries may be more flexible, allowing for shifts in traditional gender roles and greater acceptance of women in leadership roles in environmental sectors. Women in developed countries are actively seen engaging in community-based environmental projects, often with support from established networks and organizations.
Developing Countries: Deep-seated cultural norms limit women's participation in decision-making processes and leadership roles related to environmental conservation in some developing countries. Women in these countries often play pivotal roles in community-based initiatives, utilizing traditional knowledge for sustainable resource management.

➢ **Economic Policy Framework -**
Developed Countries: Developed nations may have more advanced gender-inclusive policies and frameworks that promote women's participation in environmental governance and decision-making. Stringent environmental regulations in developed countries may influence women's involvement in sustainable practices, compliance with eco-friendly standards, and the adoption of green technologies.
Developing Countries: Some developing countries may experience gaps in gender-

sensitive policies, limiting women's inclusion in environmental decision-making processes.

Although most of such countries prioritize adaptation strategies that integrate women's perspectives, recognizing their roles as primary users of natural resources. Initiatives such as the "Action Coalition on Feminist Action for Climate Justice", introduced in March 2021 at the Generation Equality Forum organized by Mexico, France and UN Women show that increasing policy attention is paid to efforts to integrate the gender and climate action agendas (Forum Generation Equality, 2021[9]).

➢ **Patriarchal Impact -**
Developed Countries : In developed countries, patriarchy historically limited women's access to education and professional opportunities. Male-dominated leadership in environmental sectors perpetuate traditional power structures. But in contemporary times, women in first-world countries often have better access to education and resources, enabling them to acquire knowledge about environmental issues and technological advancements provide women in first-world countries with platforms like social media and online networks, allowing them to amplify their voices, raise awareness, and mobilize support for environmental causes globally. Women in first-world countries may have greater opportunities to influence environmental policies and legislation given their access to legal avenues and political participation.

Developing Countries : In many developing countries, traditional rural patriarchal structures influence resource management. Men often control land ownership and decision-making, limiting women's roles in sustainable agriculture and resource conservation. Traditional gender roles often assign women responsibilities and intensify women's workloads and vulnerabilities. Our research finds that women produce between 60 – 80 percent of the world's food. They are the chief resource managers for many families across the world.
This is also the reason why they are most vulnerable to environmental threats because they are often more dependent on natural resources for food, fuel, and shelter despite the fact that they have a smaller environmental footprint.

➢ **Impact on Women -**
Developed Countries: Women in developed countries may benefit from a wider array of professional opportunities in environmental sciences, sustainability, and

conservation. The level of awareness and advocacy on gender and environmental issues may be relatively higher, contributing to a more active role for women in shaping environmental policies.

Developing Countries: Women in developing countries often contribute significantly to community resilience by implementing sustainable agricultural practices, water management, and renewable energy solutions. While facing challenges, women in developing countries may find opportunities for empowerment through community-based projects and initiatives.

Common Themes
We also come across through a few prominent similarities while studying both the countries looking at the interaction between the women and the environment there:
● Activism and Resistance:
Patriarchal Influence: Women in both developed and developing countries resist patriarchal norms to engage in environmental activism. They challenge power structures, advocate for sustainable practices, and fight against environmental injustices.
Impact: Women-led environmental movements play a crucial role in pushing for policy changes and fostering sustainable practices.
● Intersectionality:
Patriarchal Influence: Patriarchy interacts with other forms of oppression, such as racism or classism, affecting women differently based on their intersectional identities.
Impact: Women facing multiple forms of oppression may have compounded challenges in addressing environmental issues and accessing resources.

Conclusion
Through this research project we wanted to highlight the role of women in environmental movements, both in developed and developing countries. It is evident that everywhere, there has been a long history of the involvement of women in environmental causes. Be it developed or developing, gender inequality has existed everywhere.
Women in movements are taking every step to fight and correct this imbalance. They are not just victims, but also key agents of change in environmental issues. It needs to be realized that women can be key players in the move towards a more

 sustainable future. Thus, for the conservation of natural resources and promotion of environment cannot be done without involving the women in planning and training for promoting the values for conservation and promotion of the environment.

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 sustainable future. Thus, for the conservation of natural resources and promotion of environment cannot be done without involving the women in planning and training for promoting the values for conservation and promotion of the environment.

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Appendix

Women and Environment

* Indicates required question

1. Email *

   _____

2. Name *

   _____

3. Occupation *

   _____

4. Which option describes women's relationship with the environment? *

   Check all that apply.

   ☐ Women produce between 60 – 80 percent of the world's food
   ☐ Women are the chief resource managers for many families across the world
   ☐ Women are most vulnerable to environmental threats because they are often more dependent on natural resources for food, fuel, and shelter.
   ☐ Women, have a smaller environmental footprint
   ☐ All of the above

5. Do you think there is a difference between women and environment in the first world countries as opposed to the third world countries? *

   Mark only one oval.

   ⬭ Yes
   ⬭ No
   ⬭ Maybe

6. On the scale of one to ten, how much do you think patriarchy influences the   *
   relationship of women and environment?

   Mark only one oval.

1	2	3	4	5	6	7	8	9	10
○	○	○	○	○	○	○	○	○	○

7. If there exists a relationship between women and environment, do you think they *
   should play a primary role in making policies that concern the environment?

   Mark only one oval.

   ○ Yes

   ○ No

   ○ Maybe

8. Do you think women in the first world countries are able to voice their concerns   *
   in the society with regards to the environment as compared to women in the
   third world countries?

   Mark only one oval.

   ○ Yes

   ○ No

   ○ Maybe

9. Do you think women in the first world countries have an upper hand in raising   *
   their concerns with regards to the environment because of their economic
   capabilities?

   Mark only one oval.

   ○ Yes

   ○ No

   ○ Maybe

RESEARCH COMPENDIUM

10. Do you think natural calamities like global warming, earthquake etc., bring *
    women from the first world and the third world countries on the same ground to
    address these issues in their specific regions?

    Mark only one oval.

    ◯ Yes

    ◯ No

    ◯ Maybe

11. Do you think women from the first world and the third world could actually unite *
    'globally' in addressing the current environmental issues?

    Mark only one oval.

    ◯ Yes

    ◯ No

    ◯ Maybe

12. Are you aware of any environmental issues that were addressed by women, if *
    yes, please mention below

    _____

    _____

    _____

    _____

    _____

13. Name *

    _____

14. Occupation *

    _____

RESEARCH COMPENDIUM

15. Which option describes women's relationship with the environment? *

Check all that apply.

☐ Women produce between 60 – 80 percent of the world's food
☐ Women are the chief resource managers for many families across the world
☐ Women are most vulnerable to environmental threats because they are often more dependent on natural resources for food, fuel, and shelter.
☐ Women, have a smaller environmental footprint
☐ All of the above

16. Do you think there is a difference between women and environment in the first world countries as opposed to the third world countries? *

Mark only one oval.

◯ Yes
◯ No
◯ Maybe

17. On the scale of one to ten, how much do you think patriarchy influences the relationship of women and environment? *

Mark only one oval.

1 2 3 4 5 6 7 8 9 10
◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯ ◯

18. If there exists a relationship between women and environment, do you think they should play a primary role in making policies that concern the environment? *

Mark only one oval.

◯ Yes
◯ No
◯ Maybe

RESEARCH COMPENDIUM

19. Do you think women in the first world countries are able to voice their concerns *
     in the society with regards to the environment as compared to women in the
     third world countries?

     Mark only one oval.

     ◯ Yes

     ◯ No

     ◯ Maybe

20. Do you think women in the first world countries have an upper hand in raising *
     their concerns with regards to the environment because of their economic
     capabilities?

     Mark only one oval.

     ◯ Yes

     ◯ No

     ◯ Maybe

21. Do you think natural calamities like global warming, earthquake etc., bring *
     women from the first world and the third world countries on the same ground to
     address these issues in their specific regions?

     Mark only one oval.

     ◯ Yes

     ◯ No

     ◯ Maybe

RESEARCH COMPENDIUM

22. Do you think women from the first world and the third world could actually unite *
'globally' in addressing the current environmental issues?

Mark only one oval.

Yes

No

Maybe

23. Are you aware of any environmental issues that were addressed by women, if *
yes, please mention below

_____

_____

_____

_____

_____

Introduction to Sociological Research

Pink Tax:
The Persistence of Gender Price Disparity

Authors: Ashveen Kaur, Irijaya Dash, Nandini Das, Panna Singhal, Rhea Arora, Shubhani Kant, Srishti Sinha, Hiya Paul, Devanshi Panwar, Aitreyi Biswas

Index

Introduction

The pink tax is an extra amount that women pay daily as consumers for products and services that are similar or equal in merit to men's products. The pink tax, or gender-specific pricing on women's goods, contributes to the disproportionate financial burden that women in all societies face. The pink tax isn't an actual government tax, it is a form of discriminatory pricing that inflates the cost of goods marketed to women. The name "Pink tax" is derived from the association of the colour pink with traditional femininity. Critics argue that this pricing discrepancy reflects and perpetuates gender-based stereotypes, reinforcing the idea that products designed for women are inherently more valuable or luxurious.

The California Senate Committee on Judiciary and Senate Select Committee on Women, Work & Families stated in 2020 that Californian women pay an average of about $2,381 more, for the same goods and services, than men per year. That can add up to about $188,000 in pink tax throughout a woman's life. These include soaps, lotions, razor blades and deodorants that are marketed differently to women and men. The strategy adopted by most brands, which contributes to this price gap is the "pink it or shrink it " strategy in which products are made smaller in pink colour and sold at a higher price without much or any difference in the product. Data from the Bureau of Labor Statistics showed that as of 2020, women who worked full time earned just 82% of what a man earned. Due to the pink tax, as women spend more on consumption, their purchasing power gets hindered significantly.

Rationale
Advocates for gender equality and consumer rights often call for increased awareness of the pink tax, and some have urged companies to reevaluate their pricing strategies to eliminate this form of gender-based discrimination. In various regions, there have been discussions and initiatives aimed at addressing and reducing the impact of the pink tax on consumers. As women who will soon earn and spend their personal incomes on goods and services, we found this topic intriguing and wanted to research more about the origins of these unfair price standards and how most women are affected but unaware about it. As all women are experiencing gender-based price discrimination knowingly or unknowingly, this research becomes an opportunity for us to learn more about the pink tax. The concept of the pink tax raises awareness among consumers about the potential biases in pricing structures. When people become aware of these disparities, they may be more likely to question and challenge them, fostering a sense of consumer empowerment. The pink tax is rooted in societal norms and stereotypes regarding gender roles and expectations. Examining this issue allows for a deeper exploration of how these norms are reinforced and perpetuated through economic practices. It prompts discussions about challenging and changing these norms. The pink tax has economic implications for individuals and households. Women, on average, may end up paying more for products and services over their lifetime, impacting their financial well-being.

Statement of the Problem

The pink tax, which has imposed an additional economic burden on women since times immemorial, is essentially discriminatory but it is not against the law in India and many other nations. This unjust pricing has not only greatly chipped away women's purchasing power, even the market forces and capitalist seller giants which have traditionally steered the trajectory of this tax and benefitted with full pockets cannot justify its gender-biased undertone. Women are also likely to spend more, in proportion to their salaries, than men do, as the average single woman pays more in housing, healthcare and apparel and services due to cost of living, family size and other factors. Factors such as pay gaps, as well as unequal spending and saving, all result in stark wealth inequality between women and men. Such problems might be brushed off as minor problems in the layman's discourse but they map out the global economic structure, at large. While other governments have taken action to end the practice of "pink tax," India is yet to do so.

Hypothesis

There is less awareness about the pink tax in our society. It's important to continue raising awareness about the pink tax and advocating for fair pricing practices. Consumers can play a role by making informed choices, supporting brands that promote gender-neutral pricing, and advocating for policy changes that address gender-based price disparities. Brands would be motivated to normalise their marketing and pricing strategies if women gained a better understanding of the effects of the pink tax through consumer education and awareness campaigns aimed towards women.

Through this hypothesis, we aim to explore how the pink tax is still persistent in our society and is a discriminatory practice and how it affects women. Other than analysing some other distinctive attributes of the phenomenon of gender-price disparity as well, it shall be our key objective to spread awareness about this entity which most people are unaware of in their daily lives, try to gain the commoners' opinions vís-a-vís on how it is to be dealt with. Therefore the hypothesis, *pink tax continues to persist within society and contributes to gender price disparity*.

Methodology

Case Study
The case study was conducted on Gillette razors (personal hygiene product). The subject had noticed a price disparity between the two products catered towards the different gender demographics.

Survey
The survey was conducted in the region of New Delhi. The total number of respondents were 60, falling in the age group of 17 to 25.

Interview
10 individuals (5 males and 5 females, all hailing from the National Capital Region of Delhi and belonging to the age group 17 - 25) were interviewed with questions related to Pink Tax as part of the research process.

Case Study

Introduction
"The pink tax is more than money, and it's entirely too costly. It's time for change." Was rightly said when it comes to the phenomena 'Pink Tax'. Pink Tax refers to the gender bias when it comes to the pricing of various commodities. The products marketed towards women are often described as dainty with stereotypically feminine traits and often associated with the color 'pink'. But where does this gender biased price disparity come from? This disparity varies from product to product but the question of its existence remains. Through this case study we'll try to understand whether this disparity is justified or it's another case of good ol' sexism.

Bhumika Deb (Subject)
The subject had gone to a local shop to buy a packet of Gillette Venus ComfortGlide Women's Razor and found that the cost (₹900) had greatly differed from the Gillette Mach3 razor for men (₹675). The subject found this to be very odd and stated that the razors did not seem to be very different design wise.
A thorough research was carried out on the background and the structure of the razors. The razor industry, a thriving multi-billion-dollar market, sees constant innovation from companies like Gillette, striving to provide increasingly precise

shaving experiences. Gillette, known for introducing the first safety razor for men over a century ago, expanded its offerings in 1915 with the Milady Decolletée, the initial safety razor designed for women. Since then, the market has been divided, sparking discussions on the "pink tax" and the obvious price disparity. The price range for women's razors in India go from about INR ₹80 to ₹500 while for men the range starts from a price as low as ₹35.

Women's razors, more accurately termed body razors, are crafted for various hair types across the body. Unlike facial razors tailored for shorter, coarser hair (given the robust nature of beard hair), body razors excel at removing longer, finer hair through extended strokes. Distinguishing the Venus and Fusion Razors initially lies in their design and appearance. The Venus razor boasts a curvier handle, claimed to be ergonomically shaped for enhanced grip and better shaving control. Additionally, the handle showcases a smooth metallic finish and pastel colour palette.

In contrast, the Fusion Razor presents a more intricate look with a flat handle, vibrant colours, and a matte texture. While maintaining ergonomic design, the Fusion's handle appears tailored to a grip requiring increased pressure during shaving. When it comes to blade technology, the Venus razor, along with many women's razors, features rounded oval edges to prevent nicks in sensitive areas. In contrast, razors like the Fusion designed for men often have smaller, boxier heads. The Venus razor is equipped with five thin, closely positioned blades to achieve a close shave while minimising irritation. Additionally, it includes a "ribbon of moisture" around the blades, facilitating a smooth glide and decreasing the chance of cuts. The Fusion Razor, like the Venus, incorporates five blades, reportedly slightly more spaced apart to enhance rinsing and prevent clogging. Utilising Voyager's dimensioning tools, we measured CT scans of one sample cartridge from each razor and found an average blade spacing of 1.05 mm. No notable distinction in blade spacing between Venus and Fusion was observed. A noteworthy functional contrast is the Fusion's inclusion of a precision trimmer on the cartridge's back (visible above the row of blades), specifically designed for trimming sideburns, under the nose, and other challenging-to-reach areas—an element absent in the Venus razor.

However, in conclusion, after employing a CT scanner, an in-depth examination of the internal components of both razors was conducted by Lumafield. The CT scans disclosed that the internal configurations of the two razors were largely alike, showing only slight distinctions in blade placement and the design of the cartridge attachment mechanism.

RESEARCH COMPENDIUM

Statistics

As highlighted in the CBC report on the Pink Tax, women might be unaware that they're being charged more for everyday items. In some cases, the primary distinction between men's and women's products lies in the packaging, with pink and floral designs commanding a higher price. Companies capitalise on women's preferences for these designs, leading them to pay extra. Interestingly, it's worth mentioning that the colour pink didn't always have a connection to girls. In the early 20th century, pink was regarded as a robust, masculine colour, while blue was perceived as delicate and feminine. In a 2015 study conducted by the New York City Department of Consumer Affairs, it was found that products marketed towards women tended to be priced, on average, seven percent higher than comparable products marketed towards men. This price difference extended across various categories, including apparel, toys, healthcare items, and personal care products. Notably, personal care and hygiene products exhibited the most significant gap, with women's options being 13 percent more expensive than those designed for men.

Literature Review

According to Alara Efsun Yazıcıoğlu, women earn less than men, and not only due to lack of proper education, heavy burden of unpaid housework they mostly carry alone, low-skilled (and thereby low-wage) jobs that are made predominantly available to them or gender stereotypes constantly undermining their qualities while inflating their 'flaws'. Women earn less even when they overcome all the social, economic and psychological disadvantages, work in high-skilled jobs and provide services, the quality of which is considered to be 'equal to the ones provided by men. This phenomenon is referred to as the 'gender wage gap'. As established by the indicators prepared by the Organization for Economic Cooperation and Development (OECD), the gender wage gap exists in almost every country, may it be as consequential as 36.7% or as minor as 1.8%. In January 2018, Iceland became the first country in the world to enact a specific law aiming to counteract the gender wage gap. The practice is expected to be entirely eradicated in the country by 2022. Other countries do not seem to follow its example, at least for the
moment.

The emergence of the terms 'pink tax' and 'tampon tax' in everyday language suggests that women may also be paying more than men. The terms refer to the additional amounts paid by women to purchase goods and services that are

substantially similar to the ones acquired by men at lower prices and to the consumption tax collected on women's sanitary protection products, which are deemed to be 'luxury items'. Duesterhaus et al. conducted a test in 2011 within the categories of dry cleaning, hair salons and personal hygiene items. These categories were chosen since the service or product was aimed at one of the two genders, allowing for the ability to be compared as well as having similar nature. The authors emphasise the selection of product categories since this decision alters the implication of the test as well as the accuracy of the result. Hence, the products must be consumed in a comparable manner, and fulfil the corresponding basic need and each sample product can only be targeted at one gender. These requirements were conducted to minimise the possibility of comparison between similar but not identical products, thus increasing the chances of observation of gender-based price discrimination. Duesterhaus et al. could conclude that women tended to pay more for deodorant, haircuts, and dry-cleaning of shirts in the area where their test was conducted.

Women don't build wealth in the same way that men do - and it's not because we shop too much. Younger generations are struggling to match the financial successes that generations before them experienced, and this is even more true for women, who continue to earn less for doing the same work as men. As a result of this wage gap, women have less to save, less to invest and, ultimately, accumulate less wealth over a lifetime.

In The Pink Tax, award-winning CPA, Janine Rogan, draws from multiple studies, researched statistics, and her own experiences to shine a spotlight on the gender wage gap and the state of female wealth. The pink tax extends far beyond the insulting costs of pink branded products and extends into the very fabric of our society. By dismantling the current systems at play, Janine explores how the financial inequities between men and women are perpetuated, and how those inequities negatively affect not only women but the entire economy.

From whether your lattes are really sabotaging your financial goals, to how supporting new mothers and improving child care is for the benefit of all society. Rogan offers small- and large-scale solutions for both personal and societal change. Because it's time, time for women to flip the narrative on how we approach financial inequality and untangle the patriarchal systems that uphold our current financial system. The Pink Tax is a financially feminist approach to closing the gender wealth gap and reaching economic equality for women through smashing the pink tax, breaking down bias, and dismantling a financial system built by men, for men.

Data Analysis

The sampled data has been accumulated from the region of New Delhi, the map of which is attached in Appendix IV. According to the data collected, the respondents gave the following responses:-

Q1) Are you aware of the term 'Pink Tax'?
60 responses

- Yes
- No

21.7%

78.3%

fig.1
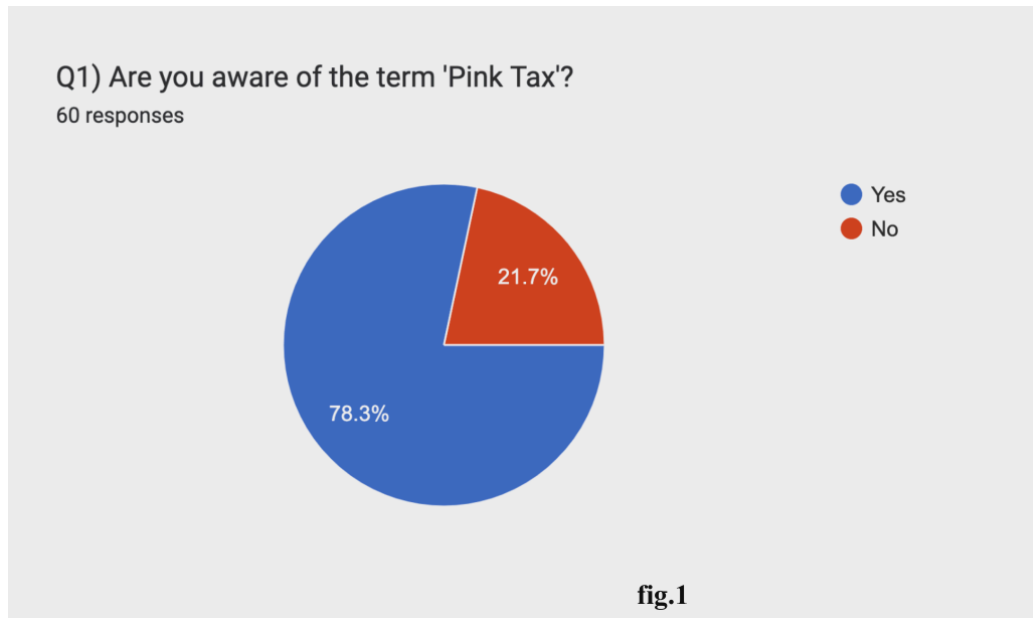
Based on the responses to this question, we can conclude that the majority of the participants were aware of the term pink tax, with 78.3% falling into this category.

Q2) Do you think spending more on products similar to that of men affect women's purchasing power?
60 responses

- Yes
- No

18.3%

81.7%

Fig.2
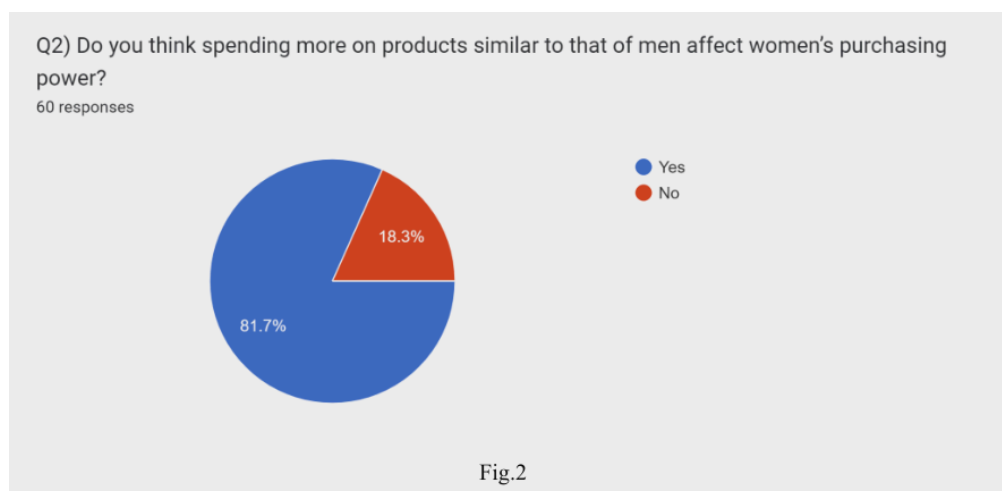
Roughly 82% of the students believe that spending more on products similar to that of men affects women's purchasing power.

Q4) Should Pink Tax be levied when we know there is no such thing as 'Blue Tax'?
60 responses

Yes
No

85%

15%
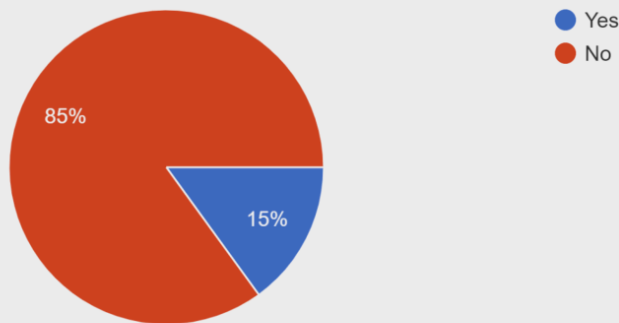
Fig.3

Through the surveys we have concluded that 85% people are against pink tax as there's no such thing as blue tax.

Q9) Which of the following can be a solution to address the issue of Pink Tax ?
60 responses

Implementing government regulations
Raising awareness and educating consumers
Boycotting gendered products
All of the above

71.7%

20%

fig.4

While looking for solutions to address the issue on pink tax we have come across 4 conclusions while most of the responses have been to perform all of them while raising awareness and educating the consumers coming just after that followed by implementing government regulations with boycotting gendered products.

RESEARCH COMPENDIUM

Q10) Pink Tax refers to an actual government imposed tax on gender specific products.
60 responses

fig.5

61.7% of our consumers believe that pink tax isnt an actual government levied tax while 38.3% believe it is indeed a government levied tax.

Interview
According to the responses we have gathered from our interviews, we gained an understanding of the views of young males and females alike on the phenomena of pink tax. Gender-based marketing has been cited as a probable reason for the continuance of pink tax. It can be seen that a common response is a strong disagreement against this phenomenon and an awareness that it is not justifiable as well. Real-life examples included items which are essential commodities and often hygiene-related products. These reflections can be ordained and certainly, not unduly attributed to patriarchal norms which have marked society since ages and continue to replicate themselves via consumerism which plagues the present world and are propounded by capitalist institutions. Changes in policy, advocacy have been listed as suggestions to get rid of the socio-economic, discriminatory phenomenon. Overall, the opinion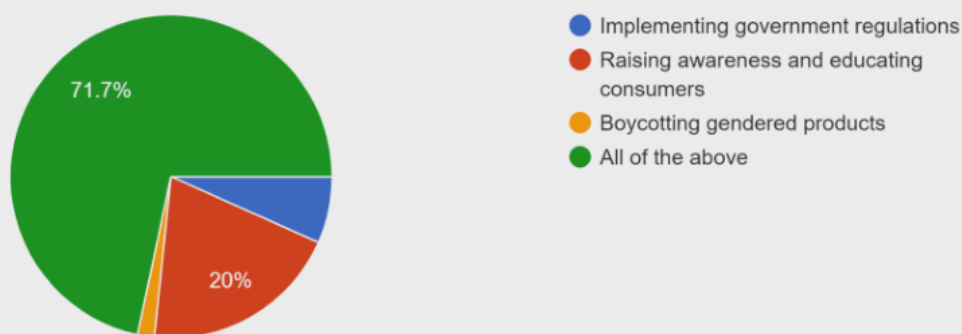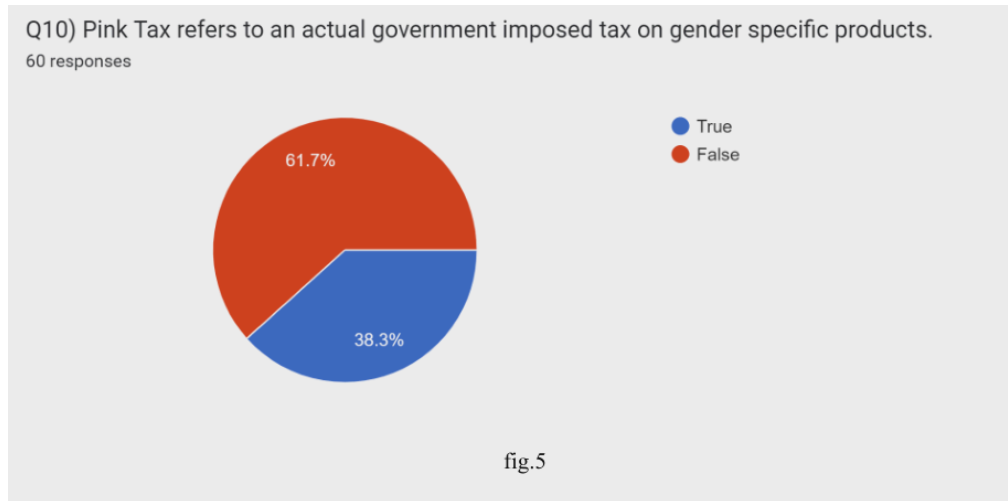s of the respondents reflect how they feel the pink tax perpetuates economic injustice, strengthens prejudices and restricts the financial freedom and movement of women.

Conclusion
Through this research we have tried to explore the reasons behind the existence as well as prevalency of the pink tax and how it affects women. We have come to a conclusion that in an urban area like Delhi, most individuals are aware about the pink tax and its negative effects on the finances of women. Studying the pink tax helps raise awareness about gender-based pricing disparities, where products marketed towards women often cost more than similar products for men.

RESEARCH COMPENDIUM

Understanding this phenomenon can contribute to efforts advocating for gender equality and fair pricing practices. It sheds light on systemic issues and encourages discussions about addressing these disparities in the marketplace. The case study has portrayed through an actual example about how products as trivial as a razor blade show us marketing and price discrimination. The interviewees have also shared their personal experiences about how pink tax plays a role in their day to day consumption. Women's incomes are less than that of men; therefore when they are charged more on products, the purchasing power of women gets adversely affected. The very persistence of the discriminatory pricing is due to the lack of awareness however, through our research we saw that in urban areas like Delhi, people are aware of the pink tax. The research has thrown light on the marketing strategies behind products for women. The "pink it shrink it" strategy refers to the approach of creating stereotypically feminine products by making them pink and smaller and is the main reason behind the existence of the pink tax. This approach can be seen as patronising and doesn't resonate well with modern consumers. Instead, focusing on understanding and meeting the diverse preferences and needs of the female audience, avoiding gender stereotypes in product design and marketing and charging the exact same price for products which are exactly similar to men is required in modern society.

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● The Cost of Doing Femininity: Gendered Disparities in Pricing of Personal Care Products and Services by Megan Duesterhaus. (25th October 2011).
● The Organisation for Economic Co-operation and Development. (2020). Income inequality, OECD. https://data.oecd.org/inequality/income-inequality.htm#indicator-chart.
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APPENDIX I

Informed Consent Form:
● I, _____, voluntarily agree to participate in this research study.
● I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
● I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
● I understand that participation involves a review of the persistence of gender price disparity via Pink Tax.
● I understand that I will not benefit directly from participating in this research.
● I agree to my interview being audio-recorded for the researchers' benefit.
● I understand that in the report on the results of this research, my identity will not remain anonymous. I agree to my photographs/videos featuring myself being produced as proof to the ethical conduct of the research process, as and where required.
● I understand that extracts from my interview will not remain confidential and may be quoted in data analyses, conference presentations, published papers and the like.
● I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
● I understand that signed consent forms, transcript of my interview and original audio recordings will be retained with the researchers until the relevant period of their dissertation.
● I understand that under the freedom of information legalisation I am entitled to access the information I have provided at any time while it is in storage as specified above, and that I am free to contact any of the people involved in the research to seek further clarification and information.

RESEARCH COMPENDIUM

Researchers' Credentials:
(Ashveen Kaur, Irijaya Dash, Nandini Das, Panna Singhal, Rhea Arora, Shubhani Kant, Srishti Sinha) - Undergraduates pursuing
B. A. Sociology (Hons.), Year I at Miranda House, University of Delhi.

Contact details:
8457941555 (Irijaya Dash)
9205541236 (Rhea Arora)
7678302083 (Srishti Sinha)

Signature of the Respondent:

_____

Date:

Signature of any one Researcher:

_____

APPENDIX II

This is the link for the questionnaire used for the survey -
https://docs.google.com/document/d/19kpHrafX93mAFRUglgVyzFnrf4j
tOSpXfNfjp0dTn8k/edit?usp=sharing

This is the link for the responses given by participants -
https://docs.google.com/spreadsheets/d/1-DY-6U6XUxXoa1u55nVrMY
OjSryD7xCdsAurNQuydyA/edit?usp=sharing

APPENDIX III

Interview Questions:
1. Why do you think the gender-price disparity which pink tax refers to exists?
2. Do you think this gender price disparity is justified and why or why not?
3. What do you think are the further consequences of the continuing existence of the pink tax?
4. What instances have you faced in your own life which correlate to the existence of the pink tax?
5. In practical terms, do you think it is possible to truly evade or deconstruct this gender-price disparity? How and why?

A snippet of the interview with Aishani Malviya was conducted in private and, with her consent, was recorded on a digital voice-recorder.
Me: Are you saying that the imposition of pink tax can never be eradicated in practicality?
Aishani: Yes, I think so and can supplement my answer with various arguments. The tax exists as an inseparable component of the economic superstructure that exists now, so much that it is more than just a totem of patriarchal continuation. It adds a massive chunk to the annual revenue of many institutions and big-shots, and they would obviously not want that to change in the near or distant future.
Me: How would you view the deconstruction of this entity, if it were to occur at some point of time?
Aishani: Needless to say, it'd be a clear win for all those individuals who've worked at a multiplicity of points in history for the emancipation of women from undue subjugations. Cheers to that.
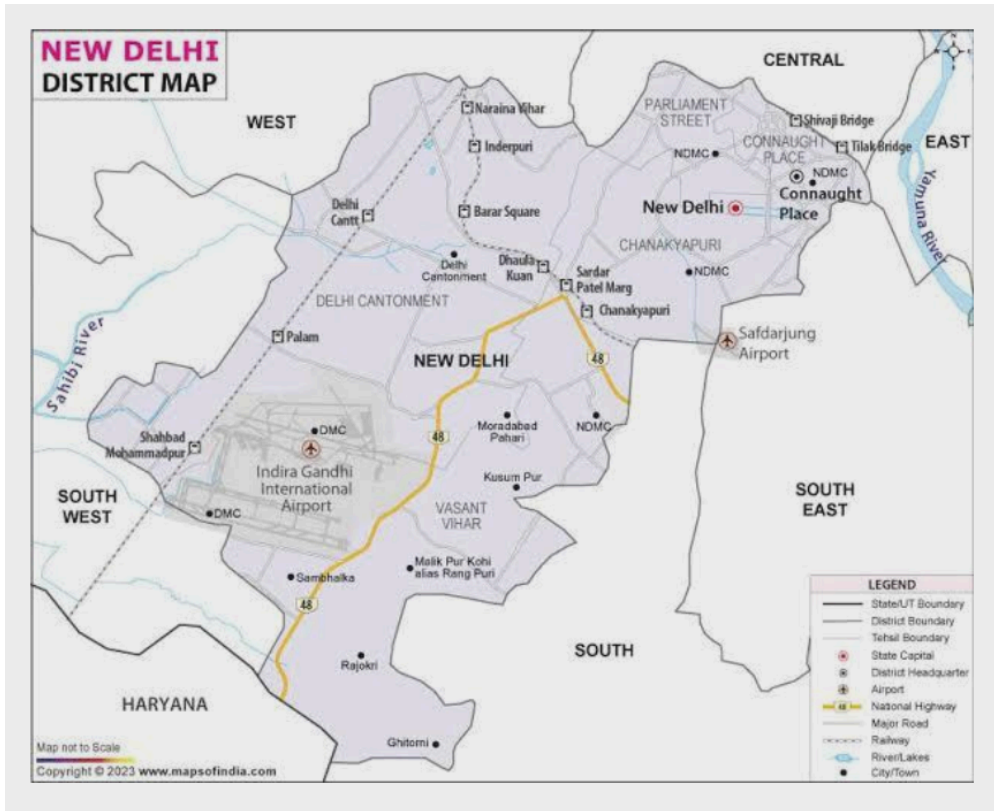
Fieldwork video links:

https://drive.google.com/file/d/11peRSfLBcRc1ppa_sCOxR8XkK2o3S8O_/view?usp=drivesdk

https://drive.google.com/file/d/1nxHrRdwsmSvRRdQnDsg99lkSJacgKw29/view?usp=drivesdk

RESEARCH COMPENDIUM

RESEARCH COMPENDIUM

Shining Light on Mental Health

Authors: Amitoj Kaur, Anjali Antil, Anshul, Nikita Choudhary, Pratiksha Ingle, Ritika Choudhary, Sharanya Thakur, Sneha Gogoi, Tanushree Rajkumari,Tripti Jain

Introduction

Mental health refers to a person's emotional, psychological, and social well-being. It involves the ability to manage stress, relate to others, and make decisions. Mental health, explored in novels and books, is a complex aspect of human experience. Authors use characters and stories to show how our thoughts, feelings, and actions connect with mental well-being. Novels act like mirrors, reflecting society's views on mental health, and windows, giving us a look into personal struggles.

In "The Great Gatsby," Jay Gatsby's pursuit of success highlights how pressure and unreachable goals can affect mental health. Sylvia Plath's "The Bell Jar" dives into a woman's struggles with societal expectations and self-identity, offering a close look at mental health challenges. Modern books like Celeste Ng's "Everything I Never Told You" tackle family dynamics and societal expectations impacting mental well-being. Even in fantasy, J.K. Rowling's "Harry Potter" series, through Luna Lovegood, teaches us about self-acceptance and finding strength in vulnerability.

These stories, as mirrors and windows, help us understand mental health's diverse facets. By reading about characters' minds, we gain insights into societal influences and personal resilience. Novels remind us of the intricate link between external pressures and internal struggles, urging compassion for the complexities of mental health.

Our project explored how social relationships impact mental health across various groups: adults, queer individuals, seniors, teenagers, and disabled persons. This diverse selection allowed us to understand the unique social and mental well-being dynamics within each group.

RESEARCH COMPENDIUM

Alongside this, we conducted a general survey, broadening our understanding of mental health across the entire population. By studying specific demographics alongside a general view, our project aimed to uncover how societal norms affect mental health universally and within specific groups, enriching our understanding of this critical relationship.

Rationale

The study of mental health is imperative to counter pervasive stigma, particularly in regions like India, where fear of judgment hinders help-seeking. Sociological perspectives, such as symbolic interactionism and conflict theory, underscore societal influences on mental health perceptions. Recognition and education play a vital role in dismantling stigma, enabling improved support from caregivers and society. Mental health awareness is crucial for fostering a healthier, judgment-free environment, emphasizing its impact on social relations. Notably, public figures like Kerry Washington advocate destigmatizing mental health, likening it to caring for one's brain and heart. Emile Durkheim's pioneering study on suicide correlates rates across European countries with social characteristics, establishing a sociological lens on mental health. Overall, education and understanding are key to empowering individuals to support those dealing with mental health challenges effectively.

Statement of the Problem

In India, continued ignorance and lack of awareness on 'mental health' shaped various people's attitudes, orientation, behaviour and approaches to mental health. Individuals dealing with mental health disorders do not obtain effective treatment due to a lack of proper knowledge, the taboo affiliated with it, a lack of qualified experts, insufficient financing, and a low priority given in the national budget. With the promoted 'normal' understanding of mental health issues and a strong social stigma surrounding mental illness, India resulted in consisting of a large population suffering from untreated mental disorders. According to the World Health Organization, 5.6 crore Indians suffer from depression and 3.8 crore from anxiety disorders. Nearly 14% of India's population required active

to provide clients with prompt mental health support in terms of acceptance and assistance.

Methodology

For this project, we are adopting three different methodologies of sociological research.

The first one being the "Survey method" consisting of a structured set of questions that are administered to individuals or groups, and the responses are typically collected in a standardized format.

Our second method is the "Interview method", which is basically a method of data collection that involves a structured conversation between a researcher and a participant or interviewee. Interviews can be either structured (with predefined questions) or unstructured (more open ended).

Finally, we have the "Questionnaire method", where we will prepare a set of carefully written relevant questions designed to elicit specific data or opinions. With these methods combined in our research, we aim to collect high-quality, meaningful data for the project.

Literature Review

This literature review explores the sociological perspective on mental health, focusing on the various factors that influence mental health outcomes and how society shapes individuals' psychological experiences. Social determinants of mental health include social class, race and ethnicity, and social support networks. Social class is a central theme in research, as studies have consistently shown that individuals in lower socioeconomic groups are at a higher risk of experiencing mental health issues. Race and ethnicity play a significant role in mental health outcomes, with discrimination, racism, and cultural factors affecting mental health differently among different racial and ethnic groups.

Social support and policies are crucial for maintaining good mental health, Strategies to reduce mental health stigma include education campaigns and community-based interventions.

Educational and work environments can be sources of both stress and support.

RESEARCH COMPENDIUM

Social movements and advocacy efforts have been instrumental in raising awareness about mental health issues and promoting policy changes.

Cultural factors, such as collectivism vs. individualism, can significantly impact mental health, affecting the expression of mental distress, help-seeking behaviours, and the acceptance of mental health interventions.

Findings and Data Analysis

For this particular project on the topic, "Shining light on Mental Health", we tried to explore the various aspects of mental health related issues faced by 5 (five) specific social groups with utmost relevance regarding the topic. The categories on which we have gathered suitable data, using the three important research methods of- Survey, Interview and Questionnaire, are as follows-
A) Teenagers and Young Adults
B) Adults
C) Older generations
D) Differently abled
E) Queer Community
F) General

The Process

We used the Survey method in general, and focused on gathering the appropriate data through Questionnaires and Interviews. These are the data collected on each category-

A) TEENAGERS AND YOUNG ADULTS (Interview method)
➢ *Response analysis:*

The mental health survey conducted among teenagers yielded insightful findings. We interviewed a total of 6 individuals from different socio-economic backgrounds, having individual priorities listed by each of them. Regarding mental health, a notable trend found in almost all of them was the prevalence of stress, with academic pressures and social expectations identified as major contributors, for most. Anxiety and depression emerged as significant concerns, affecting a substantial portion of the surveyed population. Moreover, a concerning number of teenagers reported feeling isolated or experiencing bullying, emphasizing the impact of social dynamics on mental well-being.

B) ADULTS (Questionnaire method)
➢ *Response analysis:*

For this particular category, we have collected the responses of 6 adults between the age group of 20-60 years. 50% of them were having 20-30 years of age, while 16.7% each of the age group between 30-40, 40-50 and 50-60 years. 83% were male, while female constitute only 16.7% of the targeted population.

The Adult respondents, most of them married and settled with proper employment, were found to be either fully satisfied or moderately satisfied with their life. While, some have fair mental health others suffer from poor health and lack emotional support. While, some of them sought professional mental help while others have been not able to seek good professional help.

C) OLDER GENERATIONS (Interview method)

For this category, We have interviewed 6 senior citizens. Who are between the age group of 65-90. After taking the interview of these people, We have analysed that they sometimes find it hard to concentrate, which makes them worried. Even though they rely on their family support, they might feel like they're causing trouble for them. They worry because they can't always focus well, and that makes them feel like they're a burden on their family.

D) DIFFERENTLY ABLED (Interview method)

In this special category, we have interviewed 6 individuals who are physically disabled, and belong to the age group between 18-19 years. All of them are currently studying and have expressed their struggles and difficulty regarding various mental health issues.

After analysing the interview, we got to the conclusion that almost everybody has experienced mental health challenges. They consider their own disability to be their biggest barrier or challenge assessing mental health services. But not all these were aware of mental health services and resources available for them. The biggest support for them is their family and they believe that society gives them sympathy and not empathy.

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E) Queer Community (Questionnaire method)

Mental health and wellness, specifically within the Queer Community or the LGBTQIA+ Community, is largely affected and has become a concerning matter needed to be discussed. We have collected the responses of 6 individuals, reportedly belonging to the Queer Community. All the respondents agreed that the pressure of the issue is concerning, although the challenge of mental health issues is widespread yet varied based on different parameters for every struggle faced by each individual.

The idea of what is 'normally accepted' and 'expected' was found to be directly or indirectly impacting how they face the society and socializes accordingly. The problem of 'minority stress', where they struggle for a sense of belongingness and lack of community support, often resulting from lack of understanding and awareness within the society, is predominant, often making them subjected to various judgements (even from people of their own age).

So therefore, we can notice how various socially accepted norms and values can sometimes be so immensely pressurizing for most of the individuals in this particular community that it often affects their mental health spectrum, running from mental wellness to mental illness. And these temperaments in turn greatly influence these people in such a way that some may choose to indulge in excessive socialization like parties, clubs and many other social activities which help them indulge more socially; while on the other hand, one might be compelled to withdraw into themselves and try to avoid any form of social confrontation in general.

F) General (Questionnaire method):

We conducted a genral open for all survey in which we were able to drive to the following points-

1. Females are more mentally healthy and balanced. Where they were asked to rate there own mental health.

2. 60% people from age 12-20 rated there mental health below 6 and 40% rated above 6.

3. 21% people from age 21-35 rated there mental health below 6 and 0% rated above 6.

4. 8% people from age 36-45 rated there mental health below 6 and 10% rated above 6.

5. 8% people from age 46-55 rated there mental health below 6 and 10% rated above 6.

6. 0% people from age 60 and above rated there mental health below 6 and 30% rated above 6.

7. We asked our responder another question in which we asked then to tell their mood frequency-
   - *Calm and Peaceful*
Both females and males were calm and peaceful most of the times.
   - *Energetic*
Both females and males were energetic most of the times.
   - *Gloomy*
Females told us that they felt gloomy also most of the time. Where males felt once in a while.
   - *Angry*
Females told us that they felt angry also most of the time. Where males felt once in a while.

Conclusion

The study delved into diverse aspects impacting individuals' mental well- being across various demographics. A prevailing issue surfaced: the pervasive absence of emotional support, profoundly affecting mental health among the surveyed groups. Financial constraints compounded these challenges, amplifying the complexity of their mental health struggles.

Concerningly, indicators of suicidal thoughts emerged within the groups, underscoring the gravity of their mental health issues. Enforced societal norms imposed significant pressures, shaping the mental landscapes of those surveyed. Notably, certain subsets experienced minority stress, highlighting the toll of societal expectations on mental health.

Despite the importance of familial support, a disparity was evident between mere sympathy and genuine societal empathy toward individuals facing mental health challenges.

Educationally, overwhelming pressure led to feelings of worthlessness, especially among students. Additionally, difficulties in focus and concentration posed significant hurdles to mental well-being.

Interestingly, despite familial support, some felt burdensome within their families, showcasing intricate family dynamics' impact on mental health. These comprehensive findings underscore the intertwined web of factors affecting mental health across diverse demographics, revealing the complexities individuals navigate within societal frameworks.

The findings call for widespread awareness campaigns addressing mental health issues. Establishing mental health services fostering intergenerational connections could support various age groups. Promoting cultural understanding and empathy-driven responses to mental health struggles are crucial. Balancing guidance and acknowledgment and creating safe zones for open dialogue on mental health are imperative steps forward.

In essence, these findings spotlight the multifaceted influences on mental health. They advocate for tailored interventions addressing the nuanced needs of diverse communities and emphasize the imperative for a compassionate and understanding approach toward mental health issues within society.

Many people get confused about mental health and mental illness. This happens because not everyone understands the difference between the two. Mental health is all about how you feel, think, and handle life's challenges. It includes things like stress management and maintaining good relationships. On the other hand, mental illness refers to specific conditions that can affect your thoughts, emotions, and behavior.

The mix-up comes from a lack of awareness and the stigma attached to mental health topics. Society has long held mistaken beliefs, often fueled by media portrayals, and this makes it challenging for people to grasp the distinctions. The stigma surrounding mental illness makes it a sensitive subject, leading to misunderstandings or avoidance of discussions about mental health in general.

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Cross -Cultural Adaptation:
An Analysis of Institutional Support among Undergrads

Authors: Anamika Kumawat, Anisha Das, Anushka, Komal Kumari, P Monika, Raeesa Parveen, Riya Kumari, Riya Ranjan, Sikha Kumari, Shruti Kumar

Introduction

The globalized nature of education has led to an increasingly diverse student population in higher education institutions. As universities attract students from various cultural backgrounds, understanding the process of cross-cultural adaptation among undergraduates has become crucial.

'Cross-Cultural Adaptation' in the context of institutional support among undergraduates refers to the process through which students from diverse cultural backgrounds adjust to and effectively function within a university environment that comprises various cultural norms, values, and practices. This adaptation is influenced by the assistance, resources, and programs provided by educational institutions to help students navigate and succeed in multicultural situations during their undergraduate education.

Even though universities have more people from different cultures, there's scarce research on how these institutions aid students in adapting to diverse cultures. This study focuses on understanding how institutional support helps undergraduates adapt to varied cultural situations.

Examples: learning greetings of the new culture, learning language and phrases of the new culture, learning dress codes for the new culture, learning how to access goods and services in the new culture, etc.

Significance of the Study

Understanding the dynamics of cross-cultural adaptation and the impact of institutional support is vital for universities aiming to create inclusive and supportive environments. The findings of this study could inform institutions' policies and initiatives to better cater to the needs of culturally diverse student populations, ultimately enhancing their academic success and overall well-being.

According to Micheal Winkelm , Cultural shock is a disorientation and multifaceted experience resulting from numerous stressors occurring in contact with a different culture. The multicultural nature of the society creates daily cross cultural conflict and immersion to the individuals especially with the increasing rate of inter-state migration in India for higher education .As our society is becoming increasingly multicultural the degree of cultural shock experienced by the Individuals varies. Thus there is a need for cross cultural adaptation for students who face this issue. Cross cultural adaptation is defined as ' the dynamic process by which individuals upon relocating to new unfamiliar or changed cultural environments establish and maintain relatively stable, reciprocal and functional relationships with those environment'. (Kim 2001).

"Culture shock" is a normal process of adapting to a new culture. It is a time when a person becomes aware of the differences and/or conflicts in values and customs between their home culture and the new culture they are in. Common feelings may be anxiety, confusion, homesickness, and/or anger.

There are 4 Stages of Culture Shock-
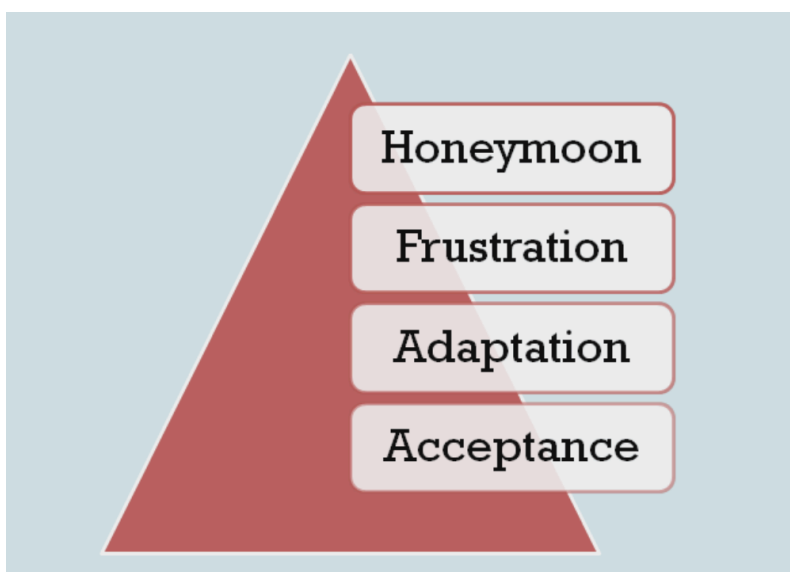
Honeymoon Stage

In the Honeymoon Stage, individuals entering a new culture are initially captivated by the novelty of their surroundings, perceiving it as an exciting adventure. This phase is particularly pronounced in those on short-term stays, where the entire experience can be defined by this initial enthusiasm. However, for those planning a longer-term relocation, the Honeymoon Stage eventually wanes, surprising some who may have expected it to endure.

Frustration Stage

As the Honeymoon Stage gives way to the Frustration Stage, the initial joy dissipates, and individuals may experience heightened irritation and disorientation. Fatigue sets in, stemming from difficulties in comprehending local behaviours, conversations, and ways of doing things. The presence of a language barrier intensifies the struggle, making simple tasks more challenging. Symptoms like frustration, irritability, homesickness, depression, feeling lost, and fatigue become apparent. The inability to effectively communicate becomes a central source of frustration, potentially leading some to contemplate withdrawal.

For instance, international students in the United States may grapple with anger and anxiety, prompting withdrawal from new social connections. Eating and sleeping disorders may manifest during this stage, and the idea of returning home prematurely may be contemplated.

Adaptation Stage

The Adaptation Stage marks a gradual adjustment to the new environment. The intense frustration from the previous stage begins to subside as individuals become more acclimated. While not necessarily understanding all cultural cues, people gain familiarity, making interpretation easier. This phase is characterized by a developing sense of comfort and a reduction in the challenges posed by the unfamiliar culture.

Acceptance Stage

In the Acceptance Stage or recovery phase, individuals achieve a more profound sense of comfort and enjoyment in their new home. Beliefs and attitudes toward the surroundings improve, fostering increased self-confidence and a return of their sense of humor. The obstacles and misunderstandings from the Frustration Stage are typically resolved, leading to a more relaxed and content state. Growth

occurs during this phase, with individuals often adapting their behaviours and adopting manners from the new culture.

In the Acceptance Stage of culture shock, individuals may not fully comprehend the new culture, beliefs, and attitudes. However, they realize that exhaustive understanding isn't essential for thriving. This phase signifies a holistic integration into the new cultural context, where embracing differences becomes more important than achieving complete comprehension.

Rationale

Since there is an increasing rate of student migration within India for higher education, undergraduate students are prone to face cultural shock and try to adapt to the subculture or unfamiliar culture. Thus there is a need to analyse the various aspects of institutional support provided by their respective institutions for cross cultural adaptation, there by reducing their interpersonal stress and cross cultural conflict which might impede and retard their performance and comprehensive growth.

Statement of the Problem

The problems to be addressed through this study is the lack of institutional support among the undergraduate students of India from diverse backgrounds to overcome cultural shock and cross cultural adaptation. The aim is to point out the topicality and importance of the issues of acculturation of migrant students in the 21st century. India works as institutional support system.

Research Methodology

The research methodology outlined aims to delve into the relationship between institutional support and cross-cultural adaptation among university students. This study employed a descriptive method by choosing mixed-methods approach which allows for a comprehensive exploration of this complex relationship. The quantitative aspect involves designing a survey to quantitatively measure both institutional support and cross-cultural adaptation. This survey will be distributed electronically or in-person among a diverse group of university students, with analysis involving descriptive statistics and correlation methods to uncover potential relationships. In tandem, the qualitative facet involves conducting semi-structured interviews. These interviews will delve deeper into cross-cultural adaptation experiences using open-ended questions.

RESEARCH COMPENDIUM

The integration of findings is a pivotal aspect, prioritizing participant consent, confidentiality, and privacy throughout the process. The quantitative outcomes will be presented through tables, highlighting correlations and patterns identified from the survey responses. Concurrently, qualitative findings will be described using excerpts from the interviews, supporting the emergence of themes relevant to cross-cultural adaptation experiences.

At the end, summarizing the main research discoveries while discussing their implications for university policies. It will also address any limitations encountered during the study, propose future research directions, and recommend improvements for institutional support. Finally, all findings will be compiled into a comprehensive formal research report, providing a holistic understanding of the relationship between institutional support and cross-cultural adaptation among university students.

Literature Review

There has been little systematic research to assess the relative effectiveness of a variety of theories explaining cultural shock (Furnham and Bochner, 1986). Nevertheless, Furnham and Bochner have assessed the ability of various theories to account for both subtle and complicated differences in response to different groups to cultural shock.

They suggest that several theories account for a variety of factors including locus of control, expectation, negative life events, social support and social skills approach.

Black and Mendenhall (1990) reviewed evidence of the effectiveness of a social learning approach to cross cultural adaptation. Needed are systematic evaluations of cultural shock training programs to determine the factor that are most important for different types of individuals and situations as well.

Helping people to become aware of the importance of cultural differences requires support and encouragement at the educational institution level. It is important to provide knowledge and understanding of cultural differences during the teaching and learning process of each professional course so that students can apply their cultural skills and knowledge to their actual work or academic situations. This approach is considered to develop students' cultural intelligence

for professional purposes.

Reese and Beckwith suggested that the cultural competence of health organizations has an effect on the cultural competence of health service personnel. Once health organizations pay attention to cultural competence, health service personnel will also recognize the importance of cultural differences.

Data Analysis

A survey was conducted among the undergraduate students which seeks understand their experience of cross-cultural adaption through institutional support. Questions were framed in a such way that the participants can easily reflect and retrospect on their own personal experiences to answer. Thus, on a whole the survey aims to look upon the frame of reference of the individual (here, the undergrads) who undergoes cultural shock and tries to overcome it.

Findings of the survey includes the following deductions: Although the students are aware about, what cultural shock and cross-cultural adaptation is, they fail to recognise and acknowledge the changes taking place in their behaviour and attitude while responding to the new environment. Even if recognised, it is rarely addressed until there are serious and drastic behavioural changes.

Around 85.7% of the undergrads find the new environment different.
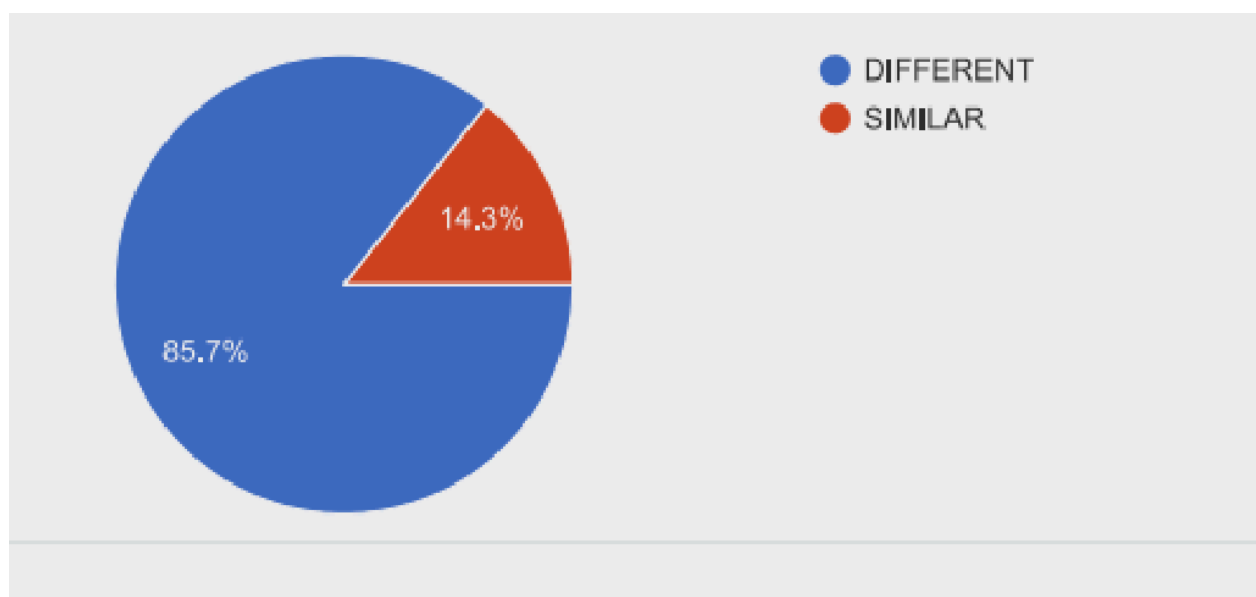
When asked to choose an emoji to best represent their emotions and feelings towards the new environment, 47.6% of the participants chose a neutral face indicating uncertainty or concern, 28.6% of them went with the grinning face denoting cheerfulness and extreme happiness, 19% of them chose confused face conveying bewilderment and the rest of the participants preferred the disappointed face depicting unhappiness and disappointment.
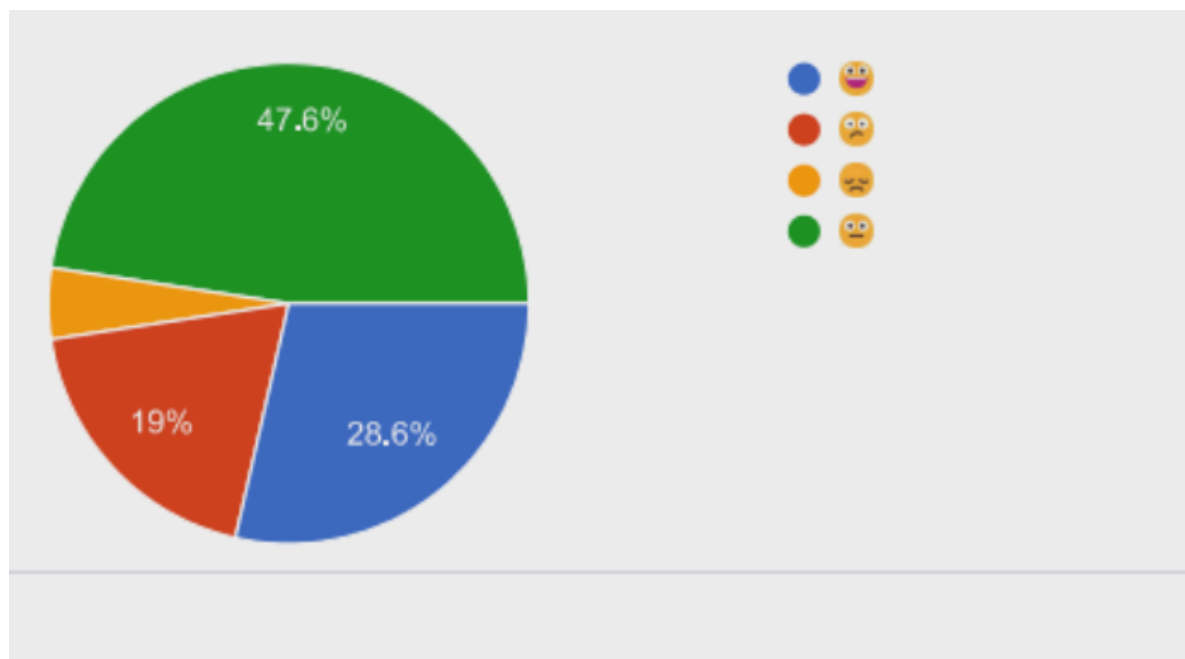
In addition to this it is important to note that while rating the new environment in a scale of 1 to 10 where, the scale moves from very unpleasant to very pleasant, the respondents picked 5 the most that stands for pleasant. Thus, from these set of analysis it is explicit that although the environment is different the undergrads possessed a moderate stance with respect to the new environment.
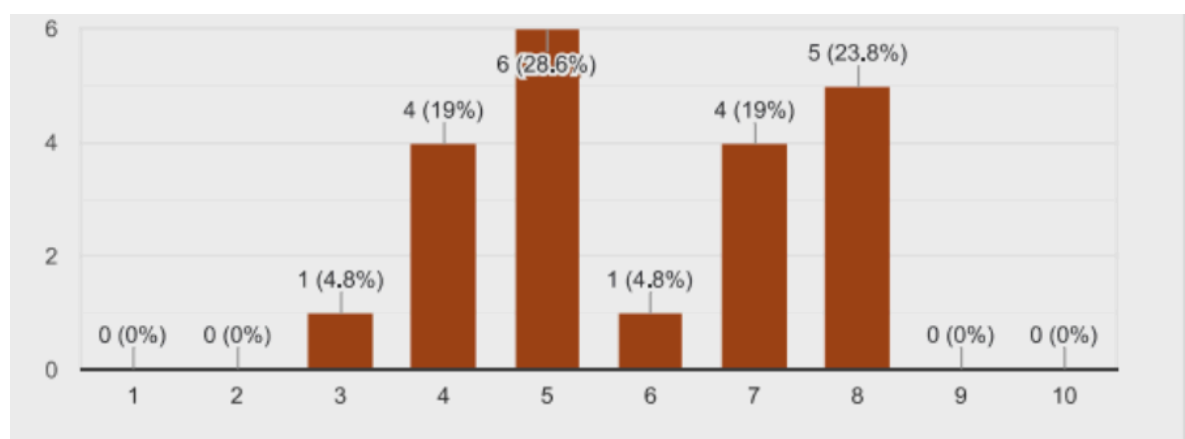
However, it is interesting to discover that most of the undergrads find cross-cultural adaptation positive, justifying that it leads to exploration of a new culture. At the same time students who responded positive were aware of the negative aspects as well primarily resting their discussion on personal barriers. Among the barriers the most popular one was climate unsuitability with 33.3%, yet 38.1% of the responded to all of these which includes; language barriers, financial strain, climate unsuitability and divergent dietary habits. In tackling these barriers and overcoming the cultural shock, it is presumed that individuals might become stressed and anxious.
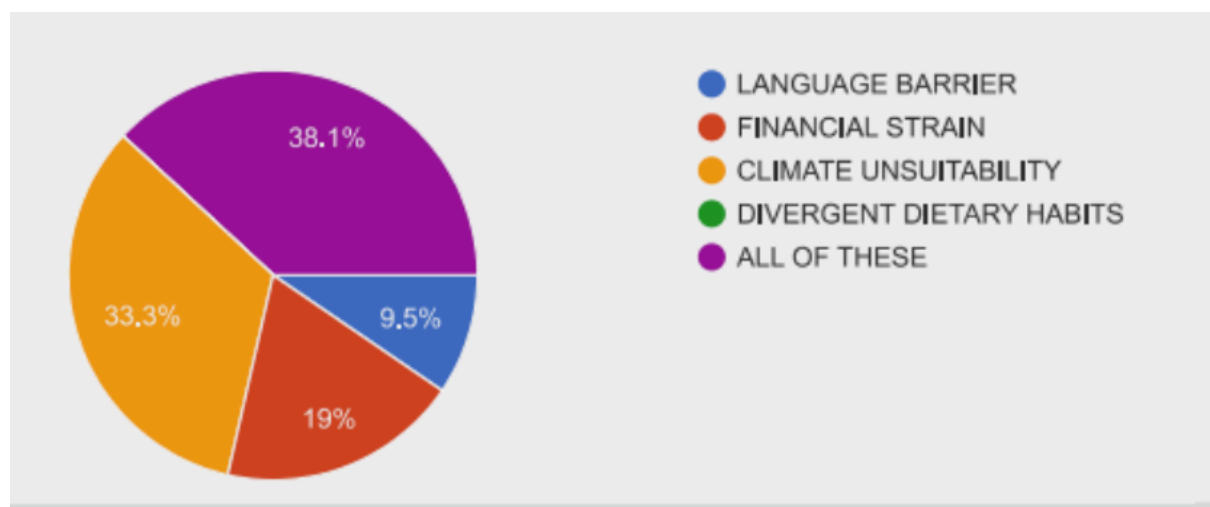
When posed with the question of whether did they ever feel stressed or anxious, 57.1% of the participants admitted yes whereas 28.6% of them where unsure of what they are going through and thus responded with may be.

Further, moving on to the aspect of institutional support, question where structured in a way to check the awareness among the undergrads about the support systems provided by their institutions and if they are accessible, useful and effective.

Though 81% participants answered that their organisation provides institutional support only 47.6% of them found that they are accessible and have attended them. In a rating on a scale of 1-10 depicting the beneficiality of these sessions and activities 27.8% of them found it useful (5) and 16.7% for 6, 7 and 8 denoting the increasing degree of usefulness.
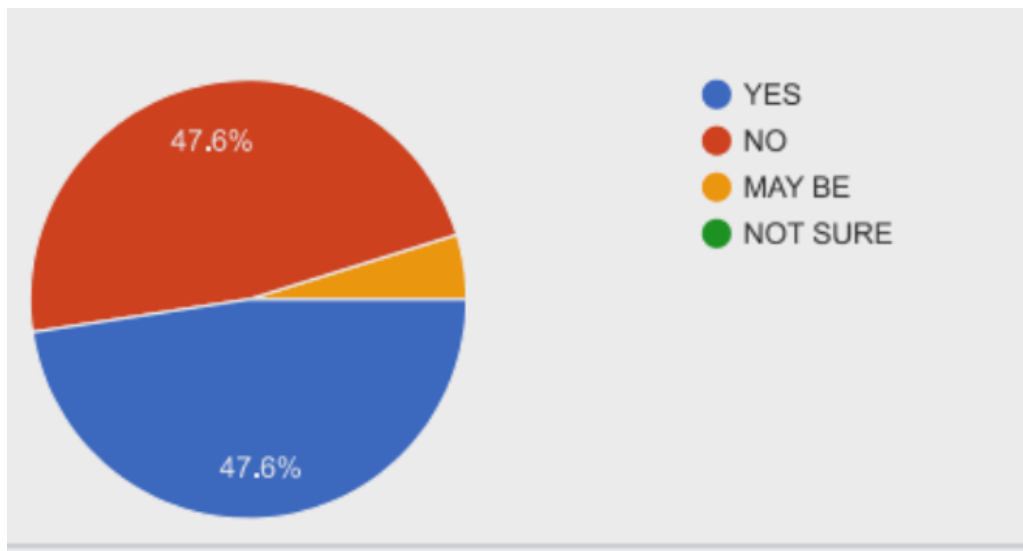
Therefore, it is clearly evident that yet institutions provides support for the students through various forms of sessions and activities, the degree of students who are actually availing them is not up to the mark. Institution is not always the first choice of students when it comes to seeking help, various factors can contribute to this gap such as trust issues, lack of proper guidance for approaching the support systems and degree of institutionalization.

Conclusion

In a nutshell participants were asked to pour in their suggestions for improving the relationship between institutions and undergrads for overcoming cultural shock and adapting to the new environment. They suggested the following-

1. Provide comprehensive orientation programs: Institutions can offer orientation programs that cover not only practical matters like housing and transportation but also cultural norms, customs, and traditions of the new environment.

2. Language support: Offering language courses or language exchange programs can help individuals overcome language barriers and feel more confident in their new cultural setting.

3. Cultural sensitivity training: Institutions can provide training sessions or workshops to raise awareness about cultural differences and promote understanding and respect among individuals from different backgrounds.

4. Peer support networks: Establishing peer support networks or buddy systems can help newcomers connect with locals or other individuals who have already gone through the process of cross-cultural adaptation.

5. Inclusive social activities: Organizing inclusive social activities that celebrate diversity and encourage interaction among individuals from different cultures can foster a sense of belonging and community.

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Appendix

CROSS CULTURAL ADAPTATION

THIS SURVEY INTENDS TO GATHER INFORMATION FOR ACADEMIC PURPOSE ON HOW INSTITUTIONAL SUPPORT HELPS OVERCOME CROSS CULTURAL ADAPTATION AMONG UNDERGRADS.

1. NAME

_____

2. GENDER

Mark only one oval.

◯ MALE

◯ FEMALE

◯ PREFER NOT TO SAY

◯ Other: _____

3.   1] WHAT DO YOU UNDERSTAND BY CROSS CULTURAL ADAPTATION?

_____

4.   2] YEAR OF STUDY

Mark only one oval.

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

5.   3] FIELD OF STUDY

Mark only one oval.

- ◯ ARTS
- ◯ SCIENCE
- ◯ COMMERCE

6.   4] ARE YOU A INTERNAL MIGRANT STUDENT?(WITHIN INDIA)

Mark only one oval.

- ◯ YES
- ◯ NO

7.   5] WHAT IS YOUR NATIVE STATE?

_____

RESEARCH COMPENDIUM

8. 6] WHERE DO YOU LIVE IN THE NEW PLACE?

Mark only one oval.

- ◯ UNIVERSITY/COLLEGE HOSTEL
- ◯ PRIVATE FLATS
- ◯ PAYING GUEST
- ◯ Other: _____

9. 7] HOW LONG HAVE YOU BEEN IN THIS NEW PLACE?

Mark only one oval.

- ◯ 1-6 months
- ◯ 6-12 months
- ◯ 1 year
- ◯ 2 years
- ◯ 3 years
- ◯ more than 3 years

10. 8] HOW DO YOU FIND THE NEW CULTURE OF THE PLACE?

Mark only one oval.

- ◯ DIFFERENT
- ◯ SIMILAR

RESEARCH COMPENDIUM

11. 9] WHAT IS OPINION ON WHETHER CROSS CULTURAL ADAPTATION IS
     POSITIVE OR NEGATIVE?

     _____

     _____

     _____

     _____

     _____

12. 10] WHAT IS THE MOST INTRIGUING THING HAVE YOU FACED IN THE NEW
     PLACE?

     Mark only one oval.

     ( ) LANGUAGE BARRIER

     ( ) FINANCIAL STRAIN

     ( ) CLIMATE UNSUITABILITY

     ( ) DIVERGENT DIETARY HABITS

     ( ) ALL OF THESE

13. 11] HOW DO YOU REACT TO THE CHANGES IN THE NEW PLACE?

     Mark only one oval.

     ( ) 😃

     ( ) 😟

     ( ) 😣

     ( ) 😐

RESEARCH COMPENDIUM

14. 12] RATE THE NEW PLACE ON A SCALE OF 1-10.(AS PER YOUR EXPERIENCE)

WHERE THE SCALE RANGES FROM
VERY UNPLEASANT(1)
PLEASANT(5)
VERY PLEASANT(10)

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
VER	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	⬭	VERY PLEASANT

15. 13] HAVE YOU EVER EXPERIENCED STRESS OR ANXIETY OWING TO THE NEW PLACE

Mark only one oval.

- ⬭ YES
- ⬭ NO
- ⬭ MAY BE
- ⬭ NOT SURE

16. 14] DOES YOUR INSTITUION PROVIDE INSTITUTIONAL SUPPORT FOR OVERCOMING CULTURAL SHOCK?
EXAMPLE: COUNSELLING SESSIONS,SEMINARS,GROUP ACTIVITIES, CULTURAL FESTS, CLUBS,SOCIAL GROUPS,SPORTS TEAM AND ARTISTIC OR THEATRICAL PRODUCTIONS FOR DEVELOPING SOCIAL RELATIONS.

Mark only one oval.

- ⬭ YES
- ⬭ NO

RESEARCH COMPENDIUM

17. 15] HAVE YOU ATTENDED ANY SUCH SESSIONS

   Mark only one oval.

   ○ YES

   ○ NO

   ○ MAY BE

   ○ NOT SURE

18. 16] ARE THESE SESSIONS/ACTIVITIES READILY ACCESSIBILE TO ALL THE STUDENTS

   Mark only one oval.

   ○ YES

   ○ NO

   ○ NOT SURE

19. 17] WAS IT BENEFICIAL ? RATE THE SESSION /ACTIVITY ON SCALE OF 1 TO 10.

   WHERE THE SCALE RANGES FROM
   NOT USEFUL-1
   USEFUL-5
   VERY USEFUL-10

   Mark only one oval.

	1	2	3	4	5	6	7	8	9	10	
NOT	○	○	○	○	○	○	○	○	○	○	VERY USEFUL

RESEARCH COMPENDIUM

20.　18] DO YOU HAVE ANY SUGGESTIONS FOR THE INSTITUTIONS TO IMPROVE THEIR EFFORTS IN AIDING CROSS CULTURAL ADAPTATION

_____

_____

_____

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Pink Ticket Scheme:
A Gateway to Women Empowerment

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Hypothesis

The launch of Pink Ticket Scheme in the Delhi Transport Corporation has lead to better women participation in social and economic sphere as a symbol of women empowerment.

Introduction

Transportation is a pivotal tool for development. India has the second largest road network in the world. Throwing light on the National Capital Territory Delhi, it has a roadway network of around 28,508 km including 388 km of National Highways.. Major road-based public transport facilities are provided by DTC buses, auto rickshaws, taxis and cycle-rickshaws. When it comes to women, most of whom are often dependent on their financial expenses or are considered to have a limited pool compared to their male counterparts, expenditure on transportation often bars them from social participation or negatively affects their net disposable income. It was then on 29 October 2019 when the Delhi Government commenced the free female traveling in public buses. It strives to ensure safety and security of Female passengers in buses which in turn would lead to women empowerment and greater participation rate. In response to that, Delhi Government launched 'PINK TICKET SCHEME' to ensure free commute in DTC Buses for women which is visioned to be proven as an essential tool of women empowerment in Delhi.

Background

Set in the backdrop of the Assembly Poll of the year 2015, when the current ruling party of Delhi was proclaiming its manifestoes, the pink ticket scheme found its mention in the voice of the promise making politicians. Even earlier when the party acquired the chief ministerial office in 2013, the scheme was uttered then as well. But due to political turmoil, there was an ongoing tumult in its positional stability. Finally the scheme came into fruition in 2019, a few months ahead of the Assembly poll of 2020.

And thus the Delhi model became the first in its kind to promote free mobility of women on such a large scale. Later on various other states and their respective Governments have followed its trails in their policy formulation. For instance, the Karnataka Government, Tamil Nadu Government etc. This scheme was launched on the auspicious occasion of 'BHAI DOOJ' adding to the delight of the women mass.

Rationale

Studies across the globe have shown a correlation between violence against women and women's workforce participation. Of the major Indian cities, Delhi recorded the least female workforce participation rate of 10.6 per cent as against male participation rate of 53.1 per cent as per the Census of India and National Sample Survey Organization statistics of 2011. The lack of financial stability deprives a woman from accessing various career opportunities. Ladies from the poor section of society find other means of transport to be quite unaffordable and hence end up constraining themselves which leads to lower participation in the workforce. Along with this the other stimuli which fostered us to do research in this topic is women's safety. When women face any kind of violence or harassment in public transport, its impact is amplified and directly affects their economic and social access. The issue of safety and mobility for women in public transport has gained much media attention and importance in Delhi after the December 2012 brutal rape and death of a young woman while traveling in a bus with her male friend. The incident, known as the Nirbhaya case, gave rise to nationwide public outcry that resulted in various responses from the government, police, judiciary and civil society groups.. There have been cases where women are harassed and even sexually assaulted leading to increasing crime rate against them. This restricts women from free mobility and which in turn reduces their contribution in the progress of the nation. To ensure sustainable urban

development, it is imperative to understand and integrate women and girls' travel patterns and address their needs and concerns in urban transport. Delhi is reportedly the first city in the world to offer free public transport specifically to women, with the scheme focusing on female safety and empowerment. Through our project we will try to throw light on how this pink ticket scheme and Marshall Deployment in public transport has eased the path for women in Delhi. Safer women in the outer world along with being economically stable is what makes womankind an empowered mass.

Statement of the Problem

India's women workforce participation rate stands at 23% and of the capitals at 11% below the national average. One of the major reasons is the restricted travel of women due to societal and economic roles.

 SOCIAL

The percentage of bus marshals, who are unarmed and uniformed, trained Individuals for providing a safe environment in public buses has gone to 100% through the adoption of this scheme. Along with this the increasing number of women drivers, conductors and bus marshals can be seen in the city. Surveillance through CCTV cameras, constant touch with the command center and live tracking of the buses, have incurred a sense of security in women passengers. Since the launch of the pink pass scheme more than 25 crores women have traveled in Delhi public bus service for free. Thus, there has been a prominent rise in female ridership indicating greater social participation of women.

 ECONOMIC

Improved coverage of the workplace due to affordable travel would result in improved participation of women in different economic sectors that are currently dominated by men, further promoting gender inclusivity across sectors, leading to economic well being of the settlement and the residents. Providing free public transport to women of the capital city through pink passes, making the travel affordable and safer can appeal to women to pursue different economic and educational opportunities as well as opening the path of restricted travel. It is apparent that if women undertake these additional employment opportunities, it will have a positive impact on the female labor participation rate of the economy. Increased ridership and travel demand for other purposes like shopping and leisure will result in an increased demand for commodities and consumption of

goods.

Methodology

The research tools used in the project include identification of key issues, data collection, data interpretation to analyze the specific issues and suggesting the solutions at the end. It was conducted using a mixed-methods approach, combining quantitative and qualitative data. The quantitative data was collected through a survey asking them about their transportation habits, challenges, and preferences. The qualitative data was collected through interviews of focus groups to get their in-depth perspectives on the issue. We have strived to adopt a realistic and objective approach to do the research and have kept the observations structured and quantifiable. The methods are listed as follows:

Personal Interviews

The interview with commuters regarding the Pink Ticket Scheme in DTC buses unveiled a spectrum of responses, shining light on awareness levels, satisfaction and perceived impacts. Sadly, commendable portion of the mass exhibited limited awareness regarding the scheme. This suggests that there is a need for intensified promotional efforts. On one hand, positive sentiments centered on its affordability and the financial relief it offered, particularly to the daily commuters but on the other hand, some participants noted challenges in accessing the information about the scheme's terms and conditions, calling for clearer communication channels. The impact of the Pink Ticket scheme on daily commuting experiences was a point of interest. Commuters, who had availed themselves, applauded its contribution to reduced travel expenses. On the contrary, a subvert of interviews highlighted concerns regarding the scheme's implementation. They also revealed the positive aspect of women empowerment. Commuters emphasized that the initiative contributes to reducing gender inequality by providing affordable and safe transportation. Many expressed a sense of increased mobility, acknowledgement, increasing women participation in economic activities. The scheme was praised for fostering a more inclusive and empowering environment, signaling progress towards gender equality and improved status of women in society. In addition to this, participants focused on the importance of simplified guidelines accessible to diverse audience. Improving the regularity and frequency of buses along with seamless interaction with the scheme are pivotal for maximizing its efficiency.

Participant Observation

Many of our group members are daily commuting by the public transport buses and hence have a first-hand experience of the same. This helped us to get a sketch of how being a beneficiary of the aforementioned scheme feels to them. Their observation included both positive as well as certain gray aspects of this matter. For some exemption of commute cost has led to quite a considerable rise in the net disposable income and money in hand for the student crowd. As said rightly 'a penny saved is a penny earned', this saving or implicit earning is providing girls an extra boost to spend it in the market space.

While we confronted a few co-passengers for whom traveling around at free cost just by virtue of being a woman often is not a matter to boast about. For them, such freebies targeted at them lowers down the general image of women in society causing the men to look down upon them as weak, economically marginalized and feeble class.

Surveys

In order to know the reaction of the masses and to derive an authentic opinion regarding the scheme, we have conducted a ground level survey. With the aim to focus on wide coverage and higher objectivity we have surveyed many people regarding the same.

We found that a maximum of them regularly availed the bus services either for the educational or employment purpose.. Through the survey we got to know that the share of women commuters has increased since the free bus scheme was introduced. Most women support the idea of inducting more women bus drivers and conductors. Being in a diverse cultural, societal, and economical role, the travel pattern of males and females differ a lot. Women tend to merge multiple trips to accomplish different purposes in a chained trip and, thus, have a perception of safety associated with it. Mobility has a direct impact on the growth of women. Factors like high connectivity, safe traveling, and availability of infrastructure encourage women to go out and opt for public transportation. This helps them to pursue their jobs, become financially strong and independent. Significant reduction in travel expenditure due to the scheme in bus users are observed, especially in the lower-income group where a female non-user of the bus system is spending almost 15% of the earning on transport as compared to female users for whom the expenditure on transport after the scheme comes out

to be zero. However, there were some negative experiences as well which were shared by the respondents which included the instances when women were ignored by the bus drivers, buses were irregular and were subjected to derogatory comments by the male counter parts. Looking at both the aspects as expressed by the respondents, it can be said that overall, 80% of the respondents appraised this scheme and said that it was indeed a way which would ensure a better and safe women mobility and labor force participation.

Primary Data

All the data collected by our team members will constitute the primary data.

RESPONDENT	OCCUPATION	RESPONSES
SAMPLE 1	HOUSEWIFE	They are quite satisfied with this Scheme. Now, they no longer have to frequently ask for money from their husbands. Thus leading to greater social participation.
SAMPLE 2	STUDENT	Many students have a restricted monthly budget and commute cost comprised a major share of it. Free travel will result them in having a greater portion of money to spend on books or other amenities
SAMPLE 3	OFFICE GOING	They also feel that it is a good step, but showering freebies targeted at women can degrade their social image
SAMPLE 4	HOUSE HELP	They had a limited earning from their job and often in due course of their work they had to travel a lot. The mentioned scheme led to their economic well being as well as reduced their average time of travel

Secondary Data

In order to develop a holistic perspective regarding the cause, we have come across many articles, research reports, and the government's annual reports regarding the effectiveness of the scheme. In the due course of study we came across data according to the transport department, which stated that the combined DTC and DIMTS average daily ridership was 36 lakhs, hitting as high as 40 lakhs daily in a few months. It also stated that it fostered women traveling and contributed to around 32% of the total number of passengers traveling in a month. Across these years, since the beginning of free travel for women in October 2019, the pink ticket ridership has grown from 25% in 2020-21 and 28% in 2021-22 to nearly 33% in 2022-23 so far, said the officials. In 2019-20, Delhi buses had ridership of more than 160 crores. Due to covid, in the years 2020 and 2021, it dropped to 71 crores in 2020-21, slightly recovering to 93 crores in 2021-22. Since April 2022, it has reached nearly 125 crores, almost 75% of the pre-covid numbers," said the transport department in a statement. Thus, the government and other data aided us a lot in proving our points supported by the adequate statistical data.

Literature Review

Published by: The Hindustan Times. On 18 May, 2023
This article deals with the problem of women being ignored in the bus stops where drivers deliberately do not stop the bus since the traveling is free of cost. The Chief Minister and the transport and law minister of Delhi have made sure that such behavior of the drivers will not be tolerated and proper investigation will be taking place since they have been identified.
These efforts by the government have ensured happiness to many sisters and mothers out there, who expressed it by saying "brother and son" to the CM. Making Delhi a safer place needs both government
and citizens' support.

Published by: The times of India
On August 20, 2020
Source - HT correspondents, TOI
The article talks about the discussion over the enhancement of women drivers in the public transport buses. HT reported on Aug 10 the inefficiency of DTC to add other women drivers after V Saritha became the first woman to join the service in 2015.

Delhi Transport minister held a meeting with officials of his department and NGO Azad foundation to discuss ways to enhance this number of women driver in public transport buses.CM tweeted "Delhi government is committed to empowerment and rise of women. "DTC said the prime reason for this unequal participation is very few women have license to drive heavy vehicle which is mandatory for the job. Delhi government is ready to take the required step in this direction and to correct the Data accessed by HT which showed that a total of 28949 employees of DTC as on Aug 9 28149 (97.2%) were male.

Published By: THE HINDU
Published On: November 13, 2019
Source: www.thehindu.com
This article throws light on different faces of women in Delhi traveling in DTC buses. The scheme came into effect from Oct 29 when the city was celebrating "BHAI DOOJ" .The motive of the government behind this initiative was to ensure women's safety and increase their role in the Capital's economy.
The first out of few women being interviewed was a 45 year old widow named Shammo, a resident of Pul Prahladpur, who had put her two children in an orphanage near Daryaganj. She said, "Earlier, it cost me around ₹100 to reach Daryaganj on buses or the metro. These were times when I would skip coming to meet my children on Sundays worrying about travel expenses. But that's not a problem anymore". Another working woman from Faridabad named Nandi Devi who had to travel to Pragati Maidan everyday for work said that the scheme has helped her save ₹1000 a month. She also said, " It's a very good move for working women like us but I don't know how long we can avail this privilege ".Another DU student shared her view as in she is not worried about the future right now and she is " AT PEACE" for not worrying about her safety by the presence of Marshals in the bus.

Published by: Hindustan Times
Date: May 10, 2021
Time: 7:22 PM
It highlights the growing trend of free mobility as a means of empowering women in India. The article explores how increased access to transportation can enhance women's independence, expand their opportunities, and contribute to their overall empowerment. It emphasizes the importance of removing barriers and creating a safe and inclusive environment for women to freely move around.

RESEARCH COMPENDIUM

Published in Delhi Government's website

Date: October 30, 2019

When the government came into power in 2015, women's safety and crimes against women in Delhi was one of the major concerns of voters. The participation rate of women in Delhi's labor force is a mere 11%, compared to the national average of 27%. A major reason behind this abysmally low number is lack of access to affordable and safe public transport. Gender based discrimination is a historic and systemic reality. To achieve our dream of equality and equity for all women, we need to take drastic measures that empower women and bring them into our larger economy in bigger numbers. Mobility is a big factor in one's ability to participate in the economy. This move will make it possible for women to access jobs and opportunities that up until now, they were unable to. The other side of this argument often is, 'women are making amazing achievements, why then do they need free rides'. This is to imply that since some women have made amazing achievements that means no woman is discriminated against, and all women have equal access to opportunities. The logical fallacy of this argument is apparent as soon as you break it down. We will take this more seriously when women achieving amazing things are not just a small collection of heartening stories, but an everyday reality. This can only be possible with equality of access. This move makes mobility much easier for all women in Delhi, thus getting them all closer to making those amazing achievements. Drawing extract from the statistical columns of National daily. It can be stated that the numerical increase in female ridership is quite evident. Surveys show that between the March to July of the launch year, the majority of the riders in the cluster buses were women. It has thrown the light on the issue of women being ignored by the bus drivers which has led to inconvenience, but the government has carried out proper investigation and made sure that the drivers involved are punished so that this does not happen again. 'THE HINDU' has shown a very bright side of recruitment policies in transport services. There was a report which stated that there has been an increase in the number of women drivers in the bus services which in turn has led to women employment as well as empowerment. This scheme ensured women a safe and secure ride, this captured a major section in the government's website as well as that of many reputed newspapers like Dainik Bhaskar, etc.

Analysis

After conducting a sample survey and interviewing them as the course of the research, a number of dimensions were put forward. Every scheme of the

Government comes with its own implication. It can be in the social sphere, economic sphere or in the arena of constructing the image of the governing body in the public mind. On analyzing the impact of the scheme along the lines of Economic Dimensions.

Economics

People have witnessed a significant fall in their transportation expenses. A large section of our respondents avail this services on a daily basis for the purpose of either education or employment. It has been observed that people avail this service even without being aware of its name but there constitute a section that is fully aware of the scheme. People belonging to economically weaker section travel through pink ticket scheme in DTC buses regularly. Since digitalization has deepened its roots, people from economically weaker sections often get trapped in digital illiteracy. The rise in their net disposable income is leading to the broadening of the financial pool of women, resulting in them to be more active in market spaces. But, it was seen that the opinion regarding its outreach varied even within its targeted mass also. When talking about reforms for betterment, the richer section is of the opinion that efficiency can be increased by increasing the frequency of buses which can be done by charging nominal fees. On the other hand, the poor section advocates increasing the frequency of buses but without changing any fees. Women from elite backgrounds believe that this scheme distorts the women's dignity by portraying them as a financially dependent section whereas the lower class women think it to be an opportunity to be financially stronger

Social
According to research and interviews, people who have heard about the pink ticket scheme think of it as an important and effective way of reducing inequality in society. Public transport is typically meant for use by all sections of the society, but what keeps the women apart from the finances is also patriarchy. A man from the same family can take an even cheaper mode of transit, like electric rickshaws or gram sevas, the same are downright and unsafe for women from the same family. "When you reduce the financial burden on women, you reduce the financial burden on a household". India's economy is derailing rapidly and the first people to get affected by this financial crunch would be women. Given such statements, it's not easy for the government to formulate a plan which could

redress the grievances of all sections of society. But at least the pink ticket scheme could help improve the situation of women who constantly face inequalities or discrimination over their male counterparts. Pink ticket scheme is appreciated by many of the households in breaking the patriarchal norms and other such myths of women not traveling over late nights or not traveling over long distances and reducing to some extent the financial burden faced by many of the poor households of the country. Some people who heard other people calling this move as perpetuating inequalities and giving these rights only to women and not men, ended up saying that for men and women who don't travel by local buses and have issues with women being given free public transport here's a piece of advice, please look beyond your privileges. For others it's high time to acknowledge that absence of women in public spaces is not because they don't want to be there, it's imperative for the state to acknowledge structural, economic and gendered inequalities, and this is a step in that direction. And they also ended up saying that the government is not only the authority which is responsible for this, we as educated and sensible beings are also responsible for giving them their due. Most of the people think that the presence of Bus Marshalls has generated a sense of security in them and has made a difference, but some also added that difference may or may not be significant. It was also agreed that it is not provided to be effective because the officer might not really be aware of all happenings inside the bus because he usually stands in a corner. People also believe that it is helping in increasing women empowerment to a great extent as even deprived and subjugated women are now able to step out and travel to their work easily and safely. What we ended up concluding is that this scheme is not about a free bus ride; rather it's about the freedom to travel. We need to look at this scheme at a macro level, Look at the bigger picture. As our mobility increases, it will lead us to explore more opportunities and that will be created through empowerment. There are some short-term measures and some long-term ones. This might seem like a short-term measure, but it is a promising scheme with long-term benefits. It carries within itself the promise of changing women's access and mobility. The path to reformation and emancipation isn't linear. It is time we put both our politics and our privileges aside and come together for our tribe. Let's create a space where no one can blame Nirbhaya for traveling late at night because it's a norm and not an exception.

RESEARCH COMPENDIUM

Conclusion

With hindsight, it can be concluded that in a direct vision, The Pink Ticket Schemes resulting in free bus mobility for Women in Delhi, is explicitly leading to economic well being, rise in cash in hand and showing a healthy crest graph in the social participation rate of women.

But as seen through the minds of few that though such schemes are made keeping in mind the image of women as economically unstable and feeble but, implicitly they result in the construction of sketch of women as a subject to be looked down upon to in the longer run by broadening the lines of gender and social divide in the mind of the general population.

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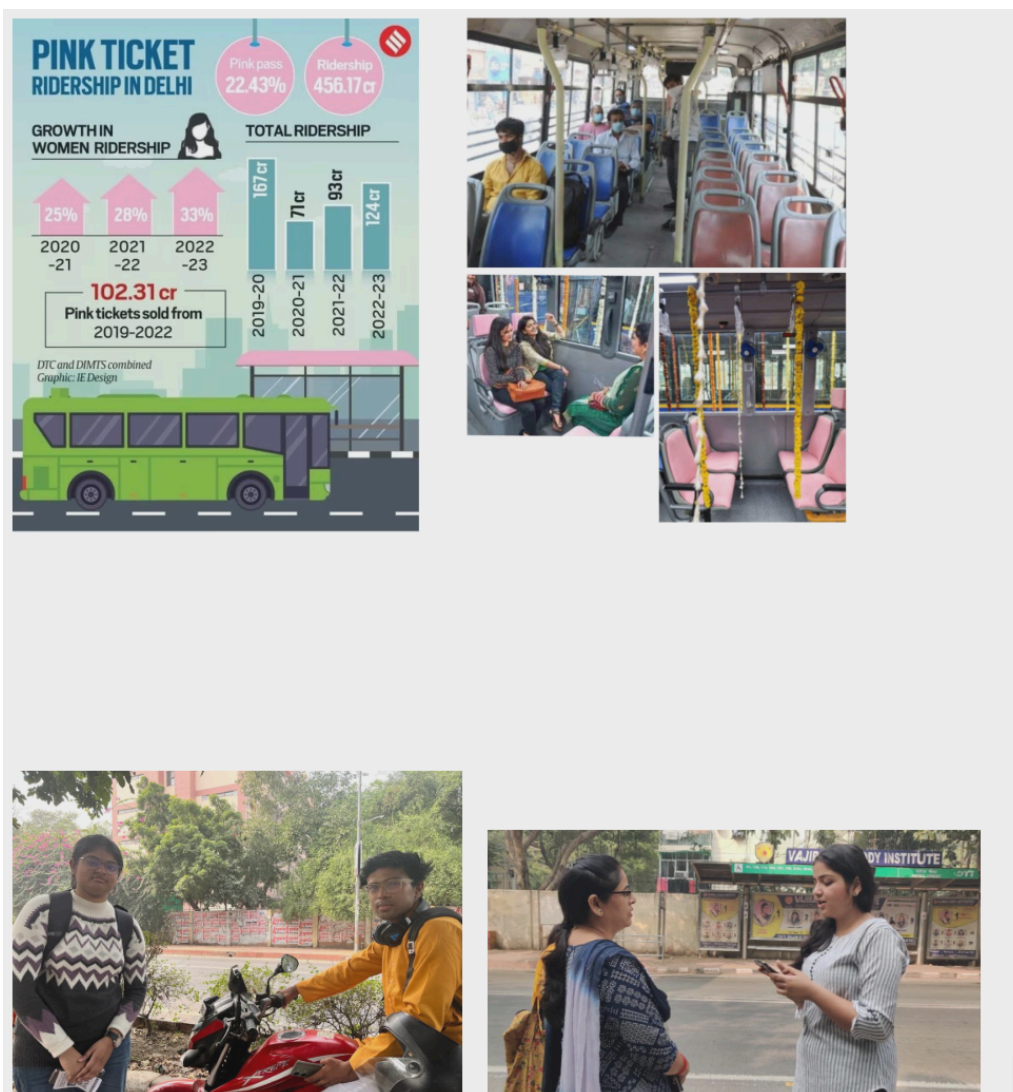
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https://curlytales.com/delhi-govt-to-launch-a-premium-bus-service-may-not-include-pink-ticket-single-pass-scheme/

Appendix 1
This section consists of all the images and photographs captured during the field work.

Appendix 2

This section consists of all the videos and clips taken during the field work.
For viewing the videos, refer to this link :

https://drive.google.com/file/d/1weQd_xPfKj127WDYCxvvCFpK8ahQ95ah/view?usp=drivesdk
https://drive.google.com/file/d/1wh29UZ136OX8_i7Mjni7mqKTKd6SMFEW/view?usp=drivesdk
https://drive.google.com/file/d/1wjUUmtjRQgL2AyRYBU3npu7tKof5RF5H/view?usp=drivesdk

Appendix 3

This section consists of all the questions that were asked during the survey and the interview. These were divided into economic and social aspects.

Questions focusing on Economic aspect:

1. Have you noticed any changes in your transportation expenses since the introduction of the pink ticket scheme in DTC buses?

2. How often do you use DTC buses, and has the pink ticket scheme made it more affordable for you to use public transportation?

3. Are you aware of the benefits and discounts offered under the pink ticket scheme, and have you availed of them?

4. Has the pink ticket scheme had a positive impact on your monthly budget or disposable income?

5. Have you observed any changes in the overall cost of living in the city due to the pink ticket scheme, particularly in terms of the reduced transportation costs?

6. Do you believe the pink ticket scheme has made public transportation more accessible to people from different economic backgrounds?

7. Are there any challenges or limitations you've encountered in using the pink ticket scheme, and do these affect your economic well-being?

8. Have you noticed any changes in the availability and convenience of DTC buses since the launch of the pink ticket scheme, and how has this affected your daily commute?9. Are there any suggestions or improvements you would like to see in the pink ticket scheme to better serve the economic needs of the residents?

10. Overall, how would you describe the impact of the pink ticket scheme on your financial situation and the economic conditions of the community in general?

Questions focusing on social aspect;

1. What is your name?

2. Are you native to Delhi? Or from elsewhere?

3. What is the purpose and route of your commute?

4. Are you aware of the exemption of ticket fees in Bus through DTC Pink ticket Scheme?

5. What is your opinion about the scheme?

6. Do you think it is going to be an effective policy to do away with Women Inequality?

7. Since, there is a bus Marshall posted, do you really think it is adding to women safety in Delhi roads?

Appendix 4

RESPONDENT' CONSENT FORM

I, _____ (name of the respondent), Age : ____, Gender : ____
Occupation _____ hereby agree to participate in the research project
Entitled "Pink Ticket Scheme in DTC: A gateway to Women Empowerment"

My participation is Voluntary. The project brief has been satisfactorily explained to me. And I have no issue in recording, published or using my responses as its data.

_____   _____
Signature of Participant   Date

Social Isolation:
Beyond the Crowd

Authors: Devanshi, Vishruti,Yakshi Nakwal, Sania, Rishika Gupta, Anjali Kashyap, Suvashini Chakma, Shatakshi Rakesh, Phir Mawikim Pangkhua, Elihroni O Patton

Introduction

This project aims to address the issue of social isolation through multifaceted approach, focusing on its causes, consequences, and potential solutions. Across all the generations of the Indian society - teenagers, middle- aged or the elderly, there seems to be a rise in social confinement or social isolation. This is leading to adverse health consequences such as impaired executive function, accelerated cognitive decline, depression, poor sleep quality, terrible cardiovascular movement and impaired immunity at every stage of life.

Social isolation is caused by multiple factors in an individual's life and there is no single event causing it which makes it difficult to avoid and address. Social connection is a fundamental human need, as essential to survive as food, water or shelter. Throughout history, our ability to rely on one another has been crucial to survival. Now, even in modern times, we human beings are biologically wired for social connection. Our brains have adapted to expect proximity to others. Our distant ancestors relied on others to help them meet their basic needs. Living in isolation, or outside the group, means having to fulfill the many difficult demands of survival on one's own. This requires far more effort and reduces one's chances of survival. Despite current advancements that now allow us to live without engaging with others (e.g., food delivery, automation, remote entertainment), our biological need to connect remains. In India, this trend is dangerously picking up. Earlier, India has a strong social structure at its place. Joint families, strong bonding with neighbours and relatives, Leisure time activities which strengthen the bond even stronger, grand and joint celebration of various festivals, visiting relatives in vacations and living there for a week or two, and many other practices

were at place which creates an environment where 'loneliness' could hardly be thinkable. Sadly, the things have changed in last few decades. Forget about social structure, even family unit has collapsed. Nuclear family is the new reality. People are intentionally getting socially isolated and then gradually developing 'loneliness' as an output. Not only the particular age groups, but the marginalized groups such as the LGBTQ and the migrated population also feel the lack of inclusiveness in the society and hence feel isolated.

Rationale

The rapid growth in cases of social isolation is widely concerning. According to WHO, high-quality social connections are essential to our mental and physical health and our well-being and the effect of social isolation and loneliness on mortality is comparable to that of other well-established risk factors such as smoking, obesity, and physical inactivity.

This research will focus on enlightening the causes and consequences of social isolation and how deeply it has affected the Indian Society.

Statement of the Problem

This study aims to explain the factors and the related misdemeanors that may lead to the emergence of social isolation.

<u>What?</u> Social Isolation or loneliness that is being experienced within the society.
<u>Why?</u> Because in recent years there has been a rapid increase in such cases.
<u>Who?</u> People across all the generations, from teenagers to senior citizens are experiencing this loneliness.
<u>How?</u> By conducting a survey among people with the objective of finding out the causes of rapidly growing social isolation.

Methodology

A cross sectional study will be conducted using a closed questionnaire method. The survey will be taken by people across every age group, roughly to divide as the teenagers, the adults and the senior citizens. The responses of the survey will then be analysed in depth to find out the causes of social isolation in the modern world.

Literature Review

Social Isolation or Social Exclusion is a widely concerning problem. The describes the absence of social contact and can lead to loneliness. It is a state of being cut off from normal social networks, which can be triggered by factors such as loss of mobility, unemployment, or health issues. Isolation can involve staying at home for lengthy periods of time, having no access to services or community involvement, and little or no communication with friends, family, and acquaintances.

This research paper has used the following articles or research works as a source for secondary data:

Older adults' perceived sense of social exclusion from the digital world
- Published by the University of Zurich in 2019
- This research paper discusses how the digital world is becoming the reason for the exclusion of senior citizens from the society.

Social Networks and Social Isolation
- Journal of Management, Pragya Publications, Volume 2, 2011 by Oren Gil-Or
- The purpose of this study was to examine the relationship between the level of social connections in the real world and the use of the online social networks which is also replacing real life interactions with families and friends for many users (Kraut et al., 1998) and resulting in social isolation. Results of the current study support the assumption of the connection between the level of social connection and usage intensity of social network.

The impact of social media use on social isolation and mentalhealth among young adults
- Published by the California State University, San Bernardino
- This quantitative study examines whether social isolation serves as a mediator between the relationship of social media use and mental health. The study defines young adults as individuals between 18 to 39 years of age.

These research works justify the content of the analysis of this research paper. It parallels the causes, reasons and justifications of Social Isolation.

Data Analysis

A survey was conducted in the form of an open questionnaire. 57 individuals-regardless of their age, gender or ethnicity took up the survey. The questions were shaped with the objective to find out the causes of Social Isolation. The responses collected reflect the notion of majority where some choices turned out to be preponderous.

Results show that 29.8% of people believe that the reason for the surge in social isolation cases is due to social media platforms or virtualization while 24.6% of people criticized the reducing number of families. The use of social networks has become very popular in recent years. These virtual social networks substitute real life social connections and cause loneliness while relieving feelings of loneliness. Ironic is that social media was developed in order to build stronger and larger relations in the society, but the impact is turning out to be just the opposite. It has started to put an end to face-to-face interactions. People who are addicted to the internet are more lonely and socially isolated than those who are not addicted to the internet, according to Saadati et al., in their 2021 article published in the SSM – Population Health Journal. This could be due to the fact that internet addicts spend an excessive amount of time online, and they neglect their social connections with friends and family. On the other side, the increasing number of nuclear families seems to be concerning. Urbanization has brought in expeditious changing world trends from dispersed rural settlements to denser urban centers. Higher frequent economic activities have attracted a large in-flow of job seekers, migrant laborers, and foreign investors to urban centers, furthering the complexity. Contrary to beliefs, urban demography has not brought people together; instead, it has created a new concern, Urban Isolation. In a neighbourhood full of nuclear families, everyone lives in its own cocoon, away and apart from all the others except at agreed socializing times in controlled settings, such as church services, birthday parties or neighbourhood garage sales. Within its four walls each family house harbors secrets from the community, and shields vulnerable people from the view of those who might care enough to offer help. It enforces solitude outside the tight family unit and sometimes within it as well. Therefore, what may be considered as development at urban level may be as a drawback for social relations and society.

28.1% of people find lack of time as the barrier in creating social relations. Demanding schedules can leave little to no time for meaningful connections with

others. This can leave busy people feeling isolated and lonely. Those around them can also sometimes feel rejected or angry with the person's lack of availability. Relationships require time and effort from all participating parties. Being pulled in multiple directions by their obligations can leave individuals feeling stressed and unable to engage fully with others. This makes it difficult to support and nurture healthy relationships with the people they care about most. Unexpectedly, the same ratio of felt that they aren't being included. The reason for this discrimination may be the differences in class or the culture, which is widely evident in a country like India.

Furthermore, 56.1% people concurred to the fact that social exclusion is a threat to an individual's health. Social relationships beneficially affect health, not only because of their supportiveness, but also because of the social control that others exercise over a person, especially by encouraging health-promoting behaviors such as adequate sleep, diet, exercise, and compliance with medical regimes or by discouraging health-damaging behaviors such as smoking, excessive eating, alcohol consumption, or drug abuse. Social isolation and loneliness have been linked to increased risk for: heart disease and stroke, type 2 diabetes, depression and anxiety, addiction, suicidality and self-harm, dementia, and earlier death. The biology of loneliness can accelerate the buildup of plaque in arteries, help cancer cells grow and spread, and promote inflammation in the brain leading to Alzheimer's disease. Loneliness promotes several different types of wear and tear on the body. Social isolation and loneliness are increasingly being recognised as a priority public health problem and policy issue across all age groups. During the course of the UN Decade of Healthy Ageing (2021-2030), the Demographic Change and Healthy Ageing Unit will be addressing social isolation and loneliness as one of the themes that cuts across the four main action areas of the Decade. The Demographic Change and Healthy Ageing Unit is also part of the Secretariat for the WHO Commission on Social Connection (2024–2026), separately established to bring together world-class Commissioners towards recognising and resourcing social connection as a global public health priority. Technology is pervasive in all areas of our lives. In recent years, we have seen the digitalization of everyday life on the back of high levels of technical innovation and the diffusion of information and communication technology. Certain segments of the population (such as older adults) often lack direct or easy access to this new technology. As a result, older adults are at risk of feeling excluded from the digital world. 71.9% of respondents agreed to this. Access to information requires access

to the internet, those without access to or familiarity with the internet are therefore excluded from such information. Furthermore, a growing number of service providers such as banks, post offices, and transport companies offer certain services exclusively online, or charge an extra fee for offline services. A cumulative, self-propelling spiral of isolation whereby the digitally rich continue to become included and the digitally poor continue to become isolated within a culture where more of society's business and culture is conducted through technology. Clear links exist between digital exclusion and social exclusion or isolation.

In the 21st century, the LGBTQ+ community have started to get recognition. However, the members still face discrimination by the society. LGBTQ people are significantly more susceptible to mental health issues due to discrimination and inequalities. For those LGBTQ people moving back into unsafe spaces where they have to either go "back in the closet" or remain silent about their sexuality, the loss of being able to socialise with supportive queer friends and allies is very concerning. LGBTQ youth who are unable to talk to anyone about their sexuality suffer social isolation, a concept that comprises four sub-dimensions, including lack of social support, no contact with the LGBTQ community, social withdrawal, and victimization. 70.2% believe that the community is highly vulnerable to become a victim of social isolation. Social isolation does not mean that we don't have people around us, but it means that we don't have meaningful social connections. According to a study by the head of us public health service, Dr Video Murthy, loneliness is as detrimental to your health as smoking 15 packs of cigarette a day.

In a certain sense parallel to the individualization of western societies, welfare states developed in the second half of the twentieth century, mainly in Western Europe. Differences may indeed exist between the Scandinavian countries, England and the Netherlands, and southern Europe, but every- where a more or less extensive system of public social benefits has been established that has made people less dependent on members of the community than they used to be (Esping-Andersen, 1990). All kinds of societal institutions now fulfil a role in people's social lives, as a result of which informal contacts between individuals have been partially formalized (for example, in health care). In recent decades, many personal contacts have been replaced with institutional associations.

These developments offer more freedom and possibilities for self- determination, but also require new skills. The disappearance of widespread social patterns and structures not only presents possibilities for emancipation, development and self-government but also entails great insecurities. In this context, Beck (1986) speaks of risks of individualization, risks that are more person-bound than the class-bound inequalities of other times. Whereas traditions and its related rules guided actions, these days people have to find their own way and choose from the many possibilities available. Not everyone is equally equipped to do this (Knorr-Cetina, 2001; Orbach, 1998). While for some people the new situation produces more freedom and a wealth and variety of contacts, others feel lost in the midst of large- scale associations and the superficiality of contact patterns hence individual freedom and vulnerability end up very close together. This is even more the case in recent decades, now that in Western European welfare stares the social benefits system is undergoing a process of austerity, and cuts in professional care and welfare facilities are a necessity. On the basis of the above-mentioned theoretical assumptions we may assume that increasing numbers of people are unable to keep themselves going and build a network of meaningful contacts around them. At the same time government policy has made a greater appeal to people's ability to cope independently, thus increasing the importance of good informal social networks and informal social support.

Conclusion

In conclusion, social isolation and loneliness are complex and multifaceted phenomena that have significant implications for health and well-being. They are influenced by diverse factors, such as the social, economic, and cultural context, the individual's attributes and needs, and the quality and quantity of their social relationships. The developments of the modern era can be held responsible for this situation. Rapid urbanization and digitalization are pushing people into this void. The senior citizens are suffering in their old age when they require the most attention. The ever - going discrimination severs the problem. Therefore, it is important to adopt a holistic and person- centered approach to understand and address the causes and consequences of social isolation and loneliness and to design and deliver interventions that are tailored to the specific needs and preferences of the target population.

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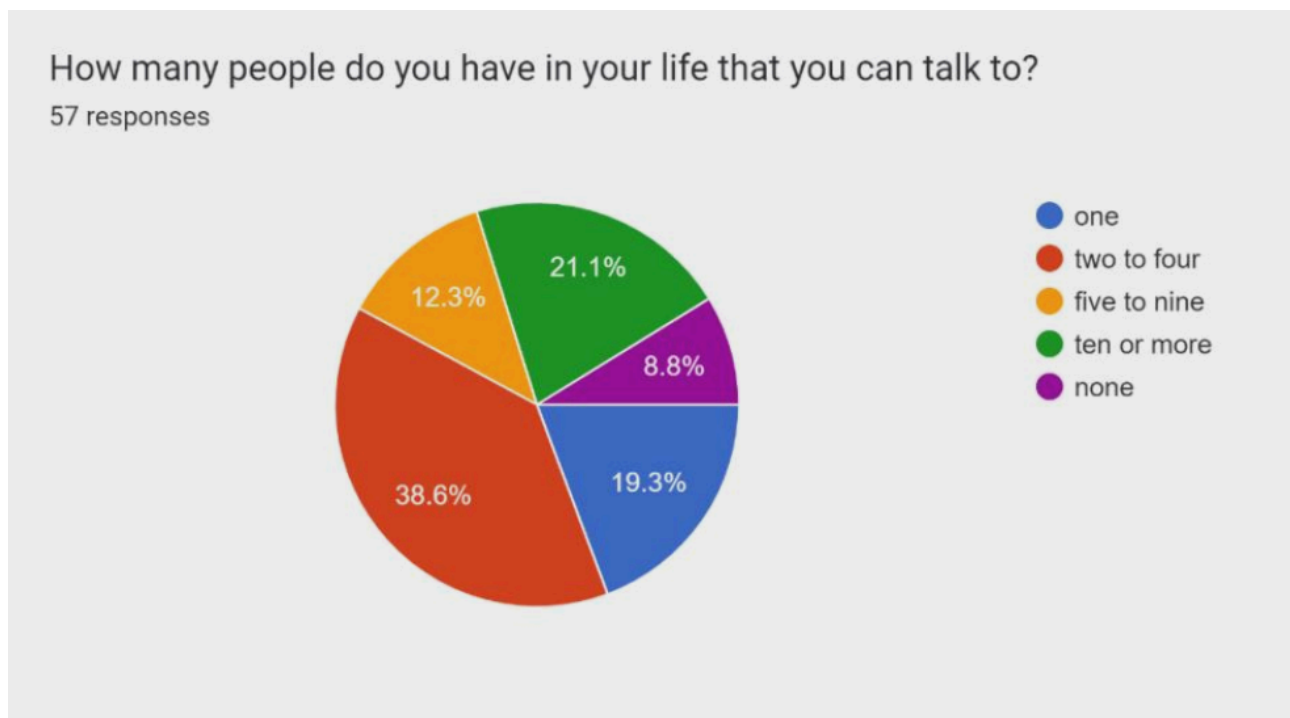
Seifert,Alexander;Hofer Matthias; Rössel,Jörg. "Older Adults' Perceived Sense of Social Exclusion from the Digital World",2019 Masoom, Muhammad. " Social Isolation : A Conceptual Analysis ",2016.

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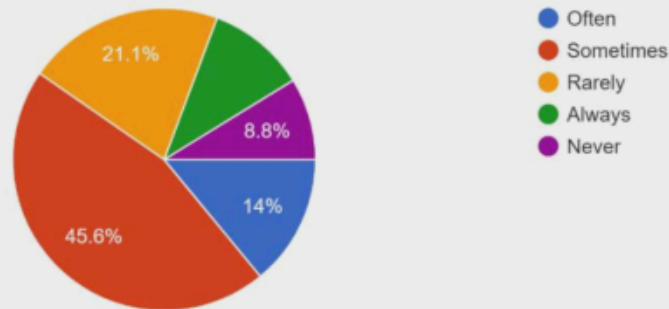Pellerin Brigitte ; " Focus on the Nuclear Family has Caused More Harm than Good?",2019.

Appendix
The following survey in the form of an open questionnaire created the basis for this research paper.
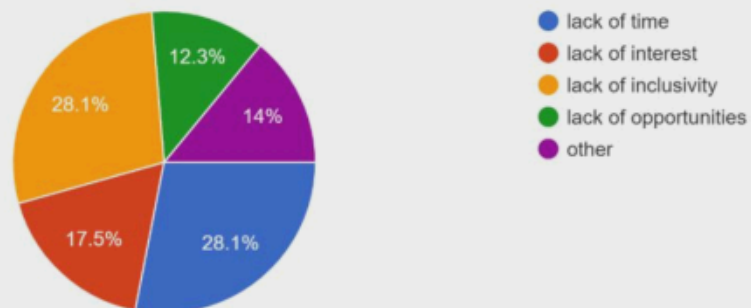

How many people do you have in your life that you can talk to?
57 responses

- one — 19.3%
- two to four — 38.6%
- five to nine — 12.3%
- ten or more — 21.1%
- none — 8.8%

How often do you feel lonely or isolated from others ?

57 responses

- Often
- Sometimes
- Rarely
- Always
- Never

21.1%
8.8%
14%
45.6%

According to you, what barrier prevents you from creating social contacts?

57 responses

- lack of time
- lack of interest
- lack of inclusivity
- lack of opportunities
- other

12.3%
28.1%
14%
17.5%
28.1%

What do you think is the reason for growing social isolation?

57 responses

- lack of moral values
- lack of time in this rapidly developing society
- reduced size of families
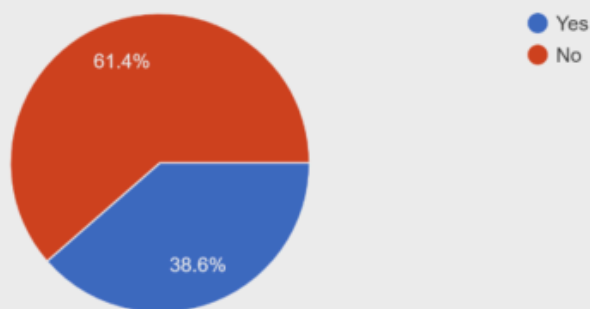- virtual social platforms
- mental health issues

29.8%
10.5%
24.6%
17.5%
17.5%
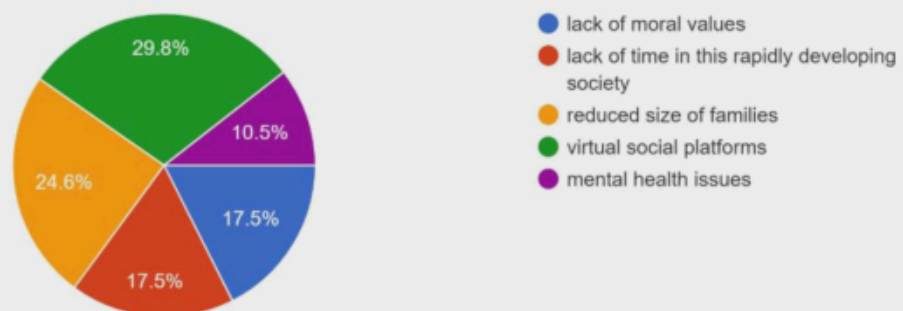
How often do you participate social activities, such as clubs, celebrations, groups or hobbies?

57 responses

- more than once a week
- once a week
- once a month
- less than once a month
- never

14%
29.8%
10.5%
17.5%
28.1%
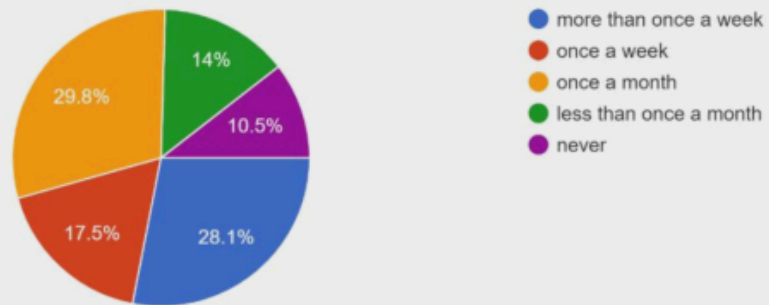
Do you live in a joint family or with your grandparents?

57 responses

- Yes
- No

61.4%
38.6%

Do you feel that social exclusion is a threat to health?

57 responses

- Yes
- No

43.9%
56.1%
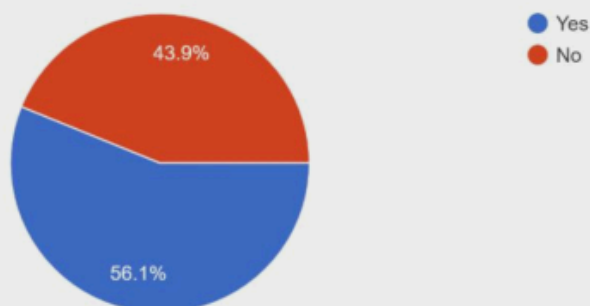
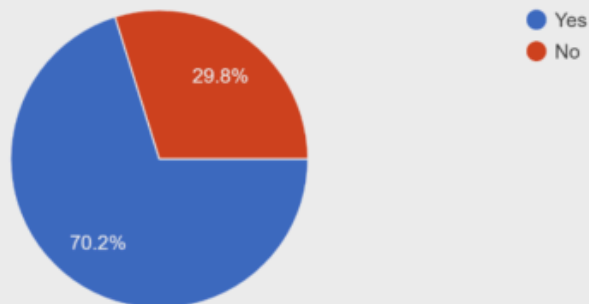Have you witnessed a case of social isolation around you or experienced it yourself?

57 responses

- Yes
- No

26.3%

73.7%
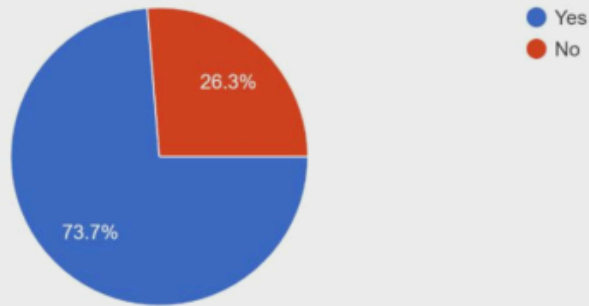
Do you feel that advancing technology and a new digital way of living is contributing to this issue?

57 responses

- Yes
- No

28.1%

71.9%
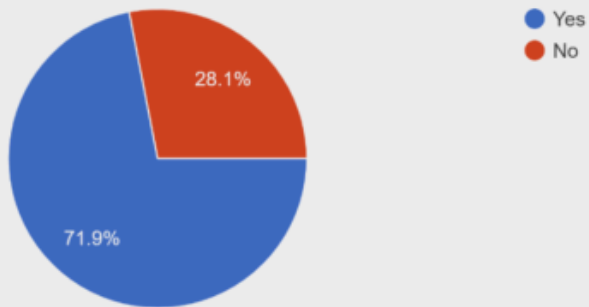
Do you agree that the LGBTQ+ community is highly vulnerable to become a victim of social isolation?

57 responses

- Yes
- No

29.8%

70.2%

Analysing Majnu-ka-Tilla
As a Space of Cohesion

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Introduction

Since time immemorial people have migrated from one place to another. The word diaspora itself is used to refer to populations that have been dispersed from an original geographic centre or from within political borders by another group of people. This results in a shared belief, thought to return to one's original place that is no longer accessible for them. Within these groups there is a consciousness of shared culture and ethnic background. The Tibetan diaspora of India is one such example of forced migration. The concept of Tibetan Refugee came into being in 1949 with the Chinese domination into the region. This was followed by a mass exodus of Tibetan refugees to India. Nehru, the then Prime Minister of India, granted asylum and rehabilitated them in Refugee Camps in various parts of the country. However, a number of these refugees settled in New Aruna Nagar in New Delhi, now popularly called as 'Majnu ka Tilla'. This Tibetan colony developed on the banks of river Yamuna, North of Delhi. The colony is divided into 12 blocks comprising about 350 permanent houses along with many tenants and outstation students. An elected governing body of seven members is directly elected by the people for a term of three years.

Through numerous investigations, documentation, comparative studies and analysis of causes etc., there has been an attempt to understand how people in the Manju Ka Tila area have an understanding about their identity. How is the understanding between the elders and younger people about their identity different from being people who saw the atrocities being performed which caused them to move away from their original geographic centre and the latter who have been born in a country that is not their own host country. As communities who have been displaced from their native places they start to make a living from the

knowledge they already have. One knows more about one culture and traditions much more than anything else. This knowledge helps in the recognition and marketisation of their culture which is made known to others. These can be seen in a way some markets function. What may have been as the only source of livelihood for the older generation may not be true for the youths now. Many young Tibetans come to Delhi after their primary schooling for bachelor's, graduate, and post- graduate education, for work, in art, in blue collar and white collar jobs, and for participation in Tibetan activism and politics etc., while the older generation mainly consist of business owners. The elders know the ways of marketing and the importance it has played.

If seen from a sociological point of view, markets as social institutions are constructed in a manner which is culturally specific. There are groups who belong to a specific social community and start businesses along the lines of their heritage. Likewise the Tibetan diaspora in India of whom some are settled in the Manju Ka Tila area also conduct businesses that are culturally specific. These markets have been a source of knowledge about how a community conducts businesses and also promotes their culture in a manner appropriate to them. Presently, the area has become famous for eateries and other clothing outlets, catering especially to the nearby Delhi University student community. These outlets are run by the families living there and provide an 'authentic Tibetan experience'. For the people living there, Tibetan cuisine and culture has become their lifestyle as well as source of livelihood. They use subtle symbolic gestures to maintain their Tibetan identity, in terms of naming their places like Little Lhasa, or putting Tibetan flags outside their shops, as also selling small Yak soft toys and Tibetan delicacies. At the same time,the marketisation/employment threat is deeply dividing the Tibetan community. It compels traditionalist groups to advocate various degrees of ethnocultural isolationism, seeking to maintain ethnic authenticity through non-mixing, and ostracising those who pragmatically engage with mainstream society.

As we move ahead with the project there will be a greater recognition of the changes that have taken place over the past decades in this community which has long since been going through changes that may have changed their patterns of living, the traditional ideas and may even be more about what is of more significance now.

RATIONALE

Recently, there has been an upsurge in talks on the economic success of Majnu-Ka-Tilla or New Aruna Nagar by the media. With all its quaint cafés, restaurants and shops, it has set up a blueprint for successful entrepreneurial activities. Situated in North Delhi, this place in question has become a major attraction for students of Delhi University, North Campus. It has also tapped the curiosities of outsiders owing to social media platforms which depict the place as a hub of amusements. What's more, all these economic advances are made by the Tibetan diaspora residing there. It's interesting to note that while they are pursuing their economic activities which are usually assumed to be guided by self-interest and an individualistic outlook they live with members of their community and community feeling generally resists self-interest, laying emphasis on sharing resources. Therefore, in order to understand this incongruity, the researchers decided to take up this direction of enquiry. This research was also chosen to see whether the businesses they've set up as entrepreneurs dilutes their existence as a community marked by a sense of belongingness. Besides, having read existing literature on the topic, there was an inclination among the researchers to further the understanding of the nuanced economic growth of this community in India. All in all, these reasons have decidedly informed the research.

STATEMENT OF THE PROBLEM

Our hypothesis is as follows:

Running enterprises at Majnu-Ka-Tilla by the Tibetan community has enhanced their social cohesion.

AIMS : How behaviour and social relations are affected by social institutions is one of the classic questions of sociological theory.

The research explores Durkheim's concept of "social solidarity", with the objective of understanding if running enterprises at Majnu ka Tilla enhances the already existing social cohesion that binds Tibetans together, because of their shared, mutual needs as a community and adds another dimension to their identity marked by a sense of belongingness, and thus, becomes another source of "we feeling", strengthening their shared identity, earlier as refugees, and now also as entrepreneurs.

This project, with its emphasis on the market as a social institution, aims to explore how in the course of running stalls, restaurants and shops in the market, the Tibetan residents at Majnu Ka Tilla by a degree of cooperation and adding another element to their sense of community feeling, wherein they may no longer always have common experiences, but commonly shared values still persist, with each enterprise contributing to the functioning of the market and it's expansion.

METHODOLOGY

Method

Ethnography has been used in the study. Ethnography aims to: immerse in the natural setting of an entire social community to observe and experience their everyday life and culture. This subsequently, helped the researchers to make certain valuable insights during the field research.

This study also utilises in-depth interview. This style of interview aims to obtain a more detailed and rich understanding of the topic of interest. This way the researchers got an understanding of the participant's narrative or perspective in relation to the study.

Environment

The environment of this study is the Majnu-ka-Tilla market. Majnu-ka-Tilla lies between National Highway 9 and the banks of the

Yamuna river, up in North Delhi. In commemoration of a Persian Sufi Mystic Abdullah—also known as Majnu—this Tibetan colony was named after him. This commercial center of the Tibetan diasporic community in India retains landmark from its beginning in 1960 when Nehru granted asylum to Tibetan refugees in the aftermath of the 1959 uprising. It was a settlement camp inhabited by the first wave of refugees which subsequently expanded and developed into a flourishing business community.

Informants

The informants of this study are those small businessmen in Majnu-ka-Tilla market. The researcher will select 10 small businessmen. In selecting of the said informants, the researchers set the inclusion and exclusion criteria. Inclusion criteria: (1) Informants must be 18 years and above. Exclusion criteria: (1) Informants below 18 years. The selected participants have been selected through random sampling.

Instruments

The researchers are the main instrument of this study with the interview guide.

Data Gathering Procedures

To collect the data, the researchers prepared interview guides which eventually helped in managing the data. But before data gathering happened, the researchers asked the informants for their consent, so that the informants were aware of the goal of the study. To transcribe and properly collect the data, the researchers used audio recording to record the key informants' responses.

LITERATURE REVIEW

To identify the gaps in the existing literature regarding this topic, we went through various books and journal articles to gain various insights.

Refugees are a formidable social category in the modern world. We have a profusion of scientific and creative literature inscribed to their predicaments, be it cultural, economic and emotional. And most of these delineations aim at shedding light on the detachment, deprivation, cultural erosion among other variables, which corrode the stable patterns of group living. The case of the Tibetan community residing in the Indian territory does present us with instances of loosening solidarity and new aspirations and goals among the members (owing to the changes heralded by modernity). And at the same time it inhumes our common sense that changes in society will dismantle social structures or have only negative implications for the groups affiliated to said structures. When met with drastic and unpredictable change, in most cases people either resist or acclimate. In the case of the Tibetan community of Aruna Nagar Colony, they pull out all the stops to do neither of these. They constantly try to redefine what changes mean to them. Sometimes they shape their circumstances according to the demands and are successful in profiting from the newness. Sometimes there's the obvious sense of confrontation. Thus, we find two broad perspectives on the same in the existing literature.

The exodus of the Tibetan migrants began in the 1950s in the wake of the Tibet-China crisis. It's been almost 70 years since they took asylum in India , so it's safe to say that they are very much part of the Indian fabric culturally and economically. All the changes India has withstood also affect them. There has been a sea change in the way the Tibetan community functions today evidenced by their departure from parochial ways that give precedence to religion. Both The newer generations born and raised in India and the older ones have accepted the failure of religion to solve secular problems of the modern world. Albeit their affinity with what they've inherited remains, they have come to understand their cultural realities with more rationality and pragmatism. Their ideologies have found liberal and cosmopolitan platforms and due to this, their institutions are also undergoing changes. What once was a norm has become a choice. Traditionally, in the Tibetan community, having a joint family was preferred. But surveys conducted by researchers have pointed to the fact that in refugee communities, nuclear family units are actually in legion and not the extended family. Polygamy is no longer prevalent and monogamy has become the obvious replacement (Saklani, 1978). In these new settings, women are also becoming active participants in the keep of the community. Modernity has empowered them

to make able entrepreneurs out of themselves. The youth of Tibetan society have emerged as a social category. Older forms of stratification within the community have lessened. They have become open and achievement-oriented. They have also become increasingly secular in outlook. Politically, they've developed a predilection for concepts like democracy, socialism and nationalism, and of course they want to be militarily strong (Saklani, 1978). Last but not the least, the most significant change that has happened is the emergence of the middle class within the community due to education and entrepreneurial inclinations.

India itself is made of plenty of cultures. Plus, in recent times western influences have been incredibly potent. Against the background of all these outside muscles, the question of "Tibetaness" is bound to arise. The fear of loss of culture is bound to prevail. But to everyone's surprise, this concern is being expressed strongly by the youth or the second generation and not the older ones. Established in 1961, the Central Tibetan school administration with a seat in New Delhi has implanted the importance of preservation and assertion of Tibetan identity but in doing so, they have eliminated the prospect of integration with the rest of the country. The Tibetan community especially the youth feel the need to fight shy of Indians to preserve their identity (Shih, 2013). Being born in a host country as a refugee naturally creates a sense of separation and detachment from their roots. On top of that, if cultural exchanges were to be welcomed, the mainstream society would engulf their ways of living. This is the sentiment shared by most inhabitants of the settlement and hence their reticence to partake in dialogue with what lies beyond the crammed walls of Aruna Nagar Colony. As mentioned earlier, they are a community that chooses to do what's best for its sustenance. They are willing to adapt to new economic situations where they let people from other backgrounds enter spaces that are sacred and monumental to their very existence. But they remain undisposed to the idea of India's syncretic culture. Today the Tibetan society has emerged as a sliver of all that is good about modernity and tradition. In some ways, they've lost their Tibetan identity to forces of modernity but in many ways they have retained their old ways through new means.

On the other end of this spectrum, lies broadly the perspective that does not view commercialisation and the maintenance of an ethnic identity as opposing entities (Zenz, 2013). There are certain features an ethnic group may hold to qualify it as such which are seen as only expanding with the growth of a community based entrepreneurial enterprise. These characteristics may include a feeling of belongingness, use of "self" and "other" while thinking of/ conversing about other communities, various common symbols of representation and so on (Urvashi, 2018). In cases as such their ethnic identity becomes an essential marker of their

social self as well as a way to earn a living. They showcase this in how they live and dress but also in how they conduct their business.The Tibetan identity of the community is often on display in the Majnu-Ka-Tilla from the way the shopkeepers decorate their stalls with Tibetan flags to the very items they sell. Instead of falling into the preyful trap of commercial competitiveness, there is a growth of "oneness" in the community on the ever growing grounds of commonality which now include their mode of livelihood. It is seen that there is an overlap of different spheres of their lives as while their identity becomes more commercial, simultaneously the business is rooted into increasingly social values.

This is seen as Adrian Zenz in his book " 'Tibetanness' under Threat? " cites from Herberer's (2007) study of Nuoso entrepreneurs in southern Sichuan:
 "…demonstrates how ethnic entrepreneurship can actively promote minority cultural expressions. Of the larger entrepreneurs, 80 percent of his informants had built and furnished homes based on 'traditional' Nuoso styles. Several of the more wealthy entrepreneurs collected and displayed Nuoso texts, amulets and other cultural artifacts, and considered themselves to be "carriers and protectors of important traditional cultural elements" (p. 199). Many of Heberer's informants prided themselves on wearing ethnic dress and using traditional eating utensils. Inviting bimo (priests) to perform spiritual rituals was common practice. Heberer points out that rather than dissipating ethnic ties in favor of a preoccupation with self-centred gain, entrepreneurship is strengthening the sense of ethnic identity and community as businesses are embedded in a moral economy of social relations and responsibilities:

Because the entrepreneurs see themselves as both clan members and as members of an (imagined) Nuosu entrepreneurial community, the ethnic group becomes a social space in which they expect solidarity, and ethnic solidarity among entrepreneurs reinforces ethnic identity. (p. 167).
 Heberer concludes that success in business has strong positive implications for the selfconfidence of his informants, suggesting that "economic development, along with education, is seen as the only way for the Nuoso to assert themselves and develop as an ethnic community…"
(p. 208)."
 Over the years, the Tibetan society of Delhi has been subject to many unfamiliar and unfavorable developments and decisions made by the powers that be. Yet they stand strong in the face of any new circumstance and flourish as a community all because of the success of their entrepreneurial interests. By

RESEARCH COMPENDIUM

international as well as local standards, they've done a phenomenal job of justifying and prolonging grants of their stay by being economically helpful to the host country. Since the 1970s, New Aruna Nagar has been acting like a business mammoth. Commercialization has seeped into vestiges of homes nostalgic for times when things were simpler. Economically, they are mightily open minded and willing to open up doors that were previously closed. This obviously has been a gradual development. Back in the day, Majnu-ka-tila was nothing but a morsel of unpredictability and impoverishment, burying hopes and dreams. There were houses of tarpaulin. There was no electricity or sanitation. And running water was still a luxury. But things started to change as soon as they got involved in small businesses of garments like sweaters. Later they expanded their entrepreneurial choices. From budget stands selling clothes to the multiplicity of dinners to the commodification of handicraft, Majnu-ka-tila gives us a kaleidoscopic view generated by the economic activities undertaken by the community. They've risen up the economic ladder and achieved the ranks of middle class with middle class values. And although these middle class values do come in conflict with pre existing religiouscentric sentiments sometimes, it hasn't impacted the overall growth of the community. In Buddhist culture, there's the concept of Madhyamika or Middle Path that lays emphasis on synthesis and peaceful coexistence of incongruous and irreconcilable values. It seems the residents of Aruna Nagar have been consistently preaching and practicing Madhyamika (Saklani, 1978). All in all, we can say they are a successful business community and a symbol of growth in the modern world.

DATA ANALYSIS

A visit to Majnu-Ka-Tilla (Aruna Nagar Colony) was held on October 26, 2023 with the aim to conduct a round of interviews and record observations. There were five participants in total, four males and 1 female. Before proceeding with the interviews, their consent was obtained for recording the responses. All the respondents have been residing in the colony for over a decade. The first respondent, a departmental store owner, asserted that most of his friends are based in Dharamshala, one of the largest Tibetan settlements in India. When asked if the business was operating well, he noted that the business witnessed a slight setback, particularly after the lockdown and hoped that the government would initiate efforts for the upliftment of the dilapidated corners of the area. With regard to celebrating festivals collectively, the responses reflected a common tendency to gather and celebrate the fifteen day festival of Losar within the colony, in the company of those inhabiting it, followed by a visit to the monastery. Indian festivals celebrated by them include diwali and holi, also within the

confines of the colony. This corresponds with the concept of "in-group", how members of the community maintain social cohesion by celebrating festivals and rituals that bind them together. The owners of enterprises do not engage in much conversation with each other while running their businesses, the interaction being confined largely between buyers and sellers. A respondent, when enquired about the emergence of new commercial enterprises run by non-Tibetans in Majnu-Ka-Tilla, asserted, "These cafés are opening up in large numbers, but they are not contributing to the economy, they may be taken up for leisure. There is no diversification amongst them, almost all of them selling similar products, providing similar services." Additionally, he expressed the need to maintain the essence of Majnu-Ka-Tilla as essentially a Tibetan market, characterized by and promoting Tibetan identity and culture in the form of cuisine, souvenirs, traditional attires. In his view, a sense of solidarity instilled by the collective promotion of this Tibetan identity would contribute to the functioning of the market functions as a unit, where each enterprise would contribute to the sustenance of the market as a whole. One may employ the concept of "organic analogy" to understand this view shared by the respondent, comparing the market to a living organism, operating as a system of parts, where each part performs a function for the maintenance of the whole.

On 17th November, the researchers visited Aruna Nagar Colony for another round of interviews. There were five participants in total; Three female participants and two male. Most of the participants have lived there for more than a decade. Before the commencement of the interviews, their consent was taken and they were made to sign a consent form. Firstly, the participants were asked whether they interacted with people from outside for reasons other than business. All of them answered in the affirmative. Personal interactions usually take place between them and the world outside via festivals like Diwali, Holi and Losar. When asked to give insight into the Tibetan new year or Losar which is celebrated during the end of February or

March in the colony, one of the interviewees noted this : "We have a traditional dance here. If you want to join the dance, you can. If you just want to observe, you can. There are no restrictions". As the researchers walked past a food stall, they noticed a man offering a confection to a Tibetan woman. Also, some of them said that they liked going out on occasions, so there are many instances of interaction but on the whole, they prefer staying inside the colony according to a female interviewee. This brings us to the next question. When asked who organizes cultural events, all the participants said it's the entire community who takes the responsibility of such events, indicating a strong sense of community. This

community feeling is also indicated by the Tibetan flags put up by Tibetan occupants outside their homes, stores and restaurants. When we enquired about this regularity, one of the interviewees said these flags are their tradition. He added, "We are far from home, so we need to stay integrated like that". Finally, the researchers asked them whether they intend to pass on their enterprises to their children. To this, most of them said yes indicating that they would like the community-based entrepreneurial activities to continue.

To sustain these entrepreneurial activities, there are signs of an interaction of the Tibetan entrepreneurs with the mainstream and non-Tibetan cultures in the form of Korean food items like kimchi being sold, Wongdhen Café with a Halloween-themed decoration to expand their target consumers and reach out to more people, Sumo Restaurant offering Japanese, Chinese and Thai food, in addition to Tibetan cuisine, or something as apparently insignificant as Indian rap songs being played in a restaurant exclusively selling Tibetan food items or a roadside stall decorated with Tibetan flags but selling the American hot dog. This may be interpreted as a way in which markers of Tibetan identity merge with aspects of cultures other than their own as a means to expand their ventures, attract more customers by appealing to their preferences and adapting to popular trends, how their identity as Tibetans intertwines with their identity as entrepreneurs.

 A few observations noted in the course of the visit included the presence of posters bearing a picture of Dalai Lama on the walls of the market, symbolizing the reverence Tibetans collectively hold for the figure and placement of Tibetan flags at the entrance of shops, signifying good luck and auspiciousness, boards with "Welcome" engraved in both English and Tibetan language and the Nor Yak Café having the Tibetan yak as it's symbol - little ways in which Tibetans try to sustain their cultural symbols, meanings and practices. Another way by which they attempt to do so is by selling Tibetan souvenirs, little yak artefacts, beads bearing religious significance and handmade Tibetan jewelry. As the researchers walked past a clothing showroom by the name 'Mapcha', it was observed that instead of hiring a western model, the clothes sold by them were endorsed by a Tibetan model, which may be perceived as one way of asserting Tibetan identity. A couple of times, the researchers spotted posters reading "Free Tibet" and "Students for a Free Tibet" in both English and Tibetan language, reflecting the collective desire of Tibetans for an independent nation, free from subjugation, perhaps another sign of a sense of "we feeling", shared aspirations and demands that bind the residents together.

All things considered, the Tibetan community has emerged as a big entrepreneurial force in India but the interface between them and the world

outside remains restrained. However, their fidelity to the community they belong to has shown consistency. How social relations are impacted by the functioning of social institutions is a crucial area of analysis in sociological theory. The observations recorded take us back to the question with which we commenced the research - "Does the identity of Tibetan residents as entrepreneurs overpowers their sense of belongingness as a community, and the result is a declining social cohesion, or does it serve as another source of shared identity, not only as refugees, but also entrepreneurs?" One may assert that by running enterprises such as stalls, restaurants within the market, the Tibetan refugees are characterized by a new form of solidarity, one that includes a degree of cooperation as well as competition, and adds another element to their sense of community feeling, wherein they may not have common experiences, but commonly shared values and beliefs in cultural traditions persist, binding the community together by a collective consciousness and at the same time, contributing to the functioning of the market.

CONCLUSION

In conclusion, the visits to Majnu-Ka-Tilla shed light on the intricate dynamics within the Tibetan community, particularly in the context of entrepreneurship and cultural preservation. The first visit highlighted the community's inclination towards celebrating festivals and maintaining a strong Tibetan identity within the confines of the colony. The participants expressed a desire for the government's involvement in uplifting the area.

 The second visit delved deeper into personal interactions, cultural events, and the passing down of enterprises to future generations. The sense of community was evident as all participants indicated that cultural events were organized collectively, showcasing a strong communal bond. The presence of Tibetan flags, reverence for the Dalai Lama, and aspirations for a free Tibet emphasized their commitment to preserving their cultural identity. Despite signs of interaction with mainstream and non-Tibetan cultures through entrepreneurial activities, such as the inclusion of Korean, Japanese, Chinese, and Thai cuisines, the core identity of the Tibetan community remained resilient. The observed fusion of Tibetan symbols with aspects of other cultures seemed strategic for business expansion rather than dilution of their identity.

 The community's entrepreneurial ventures, while adapting to diverse consumer preferences, contribute to sustaining their shared values and traditions. The market operates as a system, akin to an "organic analogy," where each enterprise plays a role in maintaining the whole. This suggests that entrepreneurship, far

from overshadowing their sense of belonging, adds another layer to their collective identity, reinforcing their shared values.

In essence, the Tibetan community in Majnu-Ka-Tilla emerges as a dynamic entrepreneurial force while simultaneously upholding a profound sense of cultural solidarity. The observations underline the nuanced interplay between economic pursuits and cultural preservation, demonstrating that, in this unique context, entrepreneurship serves as a catalyst for community cohesion rather than a source of division.

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