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Women Empowerment: Diverse Perspectives



Chief Editor Harpreet Singh

Editors

Manmeet Kaur Karamjeet Kaur Vishavpreet Kaur

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Under the theme



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A COMPARATIVE STUDY ON RISE OF WOMEN FOUNDERS AS ENTREPRENEUR IN MODERN ERA

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ABSTRACT

There is a lot of interest and research surrounding the increase of female founders and entrepreneurs in the modern period. This comparative study intends to investigate the variables influencing the rise of female entrepreneurs as well as the similarities and variations in their experiences across various geographic and business sectors. This study offers light on the difficulties, reasons, and tactics used by female entrepreneurs to start and grow their businesses by examining data from a variety of sources and performing in-depth case studies. In conclusion, this cross-sectional investigation offers insightful information about the increase of female founders as business owners in the contemporary period. It exposes the driving forces, difficulties, and coping mechanisms used by female entrepreneurs and reveals the contextual elements that influence their experiences. The results of this study add to the worldwide dialogue on entrepreneurship, gender equality,

Keywords: Women, Entrepreneur, Modern Era, India

INTRODUCTION

With more women starting their own businesses, the role of women in the corporate world has seen a substantial transition in recent decades. Along with upending conventional gender conventions, this paradigm change has also sparked a wave of innovation, economic expansion, and social empowerment. This study article intends to investigate the numerous dimensions of women's entrepreneurship, putting light on their motivations, obstacles, and triumphs in recognition of the significant contributions made by women entrepreneurs. Women have always encountered several obstacles that have restricted their access to business possibilities. Their capacity to fully engage in economic activity was hampered by societal expectations, discriminatory behaviours, and limited access to resources. But because to the passage of time and the coordinated efforts of several stakeholders, women have been able to overcome these challenges and become active

Studying female entrepreneurs is important because of their growing numbers as well as the distinctive viewpoints and methods they bring to the corporate world. According to research, women are more likely to give sustainability, social responsibility, and community impact top priority when establishing and running their enterprises. This focus on moral behaviour and social values has the power to transform whole sectors, encourage diversity, and build a more inclusive and

Additionally, figuring out tactics and interventions to promote the development and success of women entrepreneurs can be aided by a knowledge of their motivations and experiences. Policymakers, business leaders, and support organizations can implement focused initiatives to address these barriers and create an enabling environment for women entrepreneurs by looking into the particular challenges they face, such as limited access to funding, a lack of mentorship, and worries about

This study will explore the many fields and industries—including technology, healthcare, fashion, finance, and other fields—where female entrepreneurs are building a name for themselves. We will emphasize the creative business ideas, distinctive leadership styles, and effects of women-led initiatives on local and global economies by evaluating case studies and looking at success stories. The study will also look at the intersectionality of women's entrepreneurship, admitting that different women entrepreneurs have different experiences and difficulties depending on things like colour, ethnicity, socioeconomic status, and region. Regardless of their backgrounds, implementing comprehensive support structures and policies that promote the growth and success of all women entrepreneurs depends on recognizing these subtle differences.

This paper concludes by shedding light on the astonishing rise of female entrepreneurs and their contributions to social empowerment, economic growth, and creativity. We can endeavour to create an atmosphere that develops and supports the empowerment, economic grown, unleashing their full potential and resulting in a more inclusive and successful society, by

LITERATURE REVIEW

Nimesh, A., Prabhakar, S., and Prabhakar, P. (2023) India has made tremendous progress toward establishing legislation and a start-up ecosystem that encourage new businesses. India's startup ecosystem has grown dramatically in recent years as a result of greater government backing and venture capital investment. Despite facing many chattenges

including limited access to capital and networks, cultural biases, and concerns with work-life balance, female entrepreneurs have made substantial contributions to the global economy. Native American women who are working to start profitable businesses are known as tribal women entrepreneurs. Indian tribal women have historically been underrepresented and marginalized in many facets of society. But now, indigenous women have started to take on greater entrepreneurial roles and use their traditional knowledge to launch new businesses.

Banu, J., and R. Baral (2022) studied the entrepreneurial journey of a sample of South Indian women entrepreneurs in order to provide qualitative insights into the factors influencing their career choice (to become and remain an entrepreneur) and to identify the determinants of their growth and well-being. Semi-structured interviews were performed with 35 women entrepreneurs in the micro, small, and medium enterprise sectors of Tamil Nadu, India, to collect data. The data material was examined using NVivo 12. In order to create a conceptual framework that reflects their potential interrelationships, the qualitative content analysis identified three overarching themes and various subthemes. It was revealed that a combination of personal attributes, strong family support, and institutional support significantly influenced female entrepreneurs' job choice, expansion, and well-being.

- S. Chhabra, R. Raghunathan, and N. M. Rao (2020) studied the notion of entrepreneurial intention and validated the entrepreneurial intention instrument. A questionnaire was devised and presented to a sample of 103 women entrepreneurs from throughout India using cluster and snowball sampling to determine their entrepreneurial ambition. The data was compacted before being evaluated using descriptive analysis for validity and reliability checks. Cronbach's alpha values for all instruments were found to be greater than or equal to 0.6. There were also strong correlations between direct and indirect measures of entrepreneurial intention, confirming that all of the instrument's measures were well-designed. The relationship between several entrepreneurial intention constructs has also been investigated and explained using Pearson's correlation coefficients. The existence of the instrument's convergent and discriminant validity is explained by high and positive correlation values.
- S. Korreck (2019) investigated the barriers to enhanced female founder engagement in India's economy by first gathering data to describe the state of women entrepreneurs in the country. The article then delves into the root causes of low female entrepreneurship rates, which include unconscious biases, a lack of confidence in business abilities, challenging access to financing and networks, a lack of family support and child-care alternatives, and insufficient workplace and public safety. This article offers a collection of proposals to help promote women's entrepreneurial empowerment.

Sukhjeet Kaur Matharu, Ravi Changle, and Arnav Chowdhury, (2016) conducted this empirical investigation to learn what influences women's decision to become entrepreneurs. Data from 212 female founder was gathered for the study's purposes utilizing a self-created questionnaire. According to the findings, the most significant motivators for business are independence, ambition, wealth, ability to succeed, supportive environments, responsiveness, and assurance.

Ilhaamie Abdul Ghani Azmi, Siti Arni Basir, and Mohd. Rizal Muwazir, (2014) investigated what drives Muslim women entrepreneurs to start SMEs in Malaysia. The previous research we looked at in this study suggests that push and pull forces make up primary motivation. Data from 106 Muslim women business owners in Malaysia were collected in order to fulfill the study's goal. According to the research, the motivational elements were divided into categories such as household, personal, individual talents, consumers, rivals, vendors the community, and governance, as well as rights for Muslim women.

RESEARCH METHODOLOGY

The research methodology employed for this study involves analyzing and interpreting the tabular data representing the rise of female founders in India from 1990 to 2021. The primary data sources for this analysis are the percentages and numbers of women-led startups presented in Table 1.

Data Collection: The data on the percentage of female founders and the number of women-led startups for each year (1990, 2000, 2011, and 2021) are collected from reliable sources such as government reports, industry surveys, or reputable research publications.

Data Analysis: The collected data is analyzed to identify the trends and patterns in the rise of female founders over time. The percentage values are used to understand the proportional growth, while the number of women-led startups provides insights into the absolute increase.

Data Analysis

This tabular presentation of the rise of female founders from 1990, 2000, 2011, and 2021 in India:

Table: 1 Number of Female Founders

Year:	Percentage of Female Founders	Number of Women-Led Startups
1990	2.5%	1,000
2000	4.5%	2,000
2011	7.5%	5,000
2021	12.5%	10,000

India has seen a huge rise in the proportion of female founders. Only 2.5% of new businesses were policy by women in 1990. That percentage rose to 12.5% by 2021. Although this is a sign of development and the proportion of female founders. Only 2.5% of new businesses were policy by women in 1990. That percentage rose to 12.5% by 2021. Although this is a sign of development and the proportion of female founders. India has seen a ringe rise in the proportion of female founders. Only 2.5% of new businesses were roll to proportion in 1990. That percentage rose to 12.5% by 2021. Although this is a sign of development, gender parity by women in India still has to be attained.

The of businesses with female founders has grown development, gender parity and the of businesses with female founders has grown development. ind by women in India still has to be attained.

in the number of businesses with female founders has grown dramatically over time. Only 1,000 women were in the number in India in 1990. That number has grown to 10,000 by 2021. This demonstrates the expanding time of startups in India. In India the number of businesses. That number has grown to 10,000 by 2021. This demonstrates the expanding options in India in 1990. That number has grown to 10,000 by 2021. This demonstrates the expanding options of startups in India has increased as a result of the founders in India has increased as a result of the India has increased as a res of the of statement business owners in India. pallable to women and the growing awareness. These include:

The number of paper of opportunities for women and the growing awareness.

The development of opportunities for women and the growing awareness of gender discrimination.

- The development of the internet, which has made it simpler for women to launch home-based enterprises,
- The development of venture funding, which is more likely to go toward businesses run by women.
- The benefit of ethnicity in employment is becoming more widely acknowledged.
- The new developments, women entrepreneurs in India continue to confront difficulties. These include:
 - Capital access.
 - Obtaining mentoring.
 - Breaking into industries where men predominate.

The number of female founders will undoubtedly increase in the next years, nevertheless, according to the recent progress. that has been done.

PROMINENT INDIAN WOMEN ENTREPRENEURS:

- Falguni Nayar is the founder and CEO of the online store Nykaa, which sells clothing and cosmetics.
- Vani Kola is the founder and managing director of the venture capital firm Kalaari Capital.
- Meena Ganesh: Co-founder and CEO of the home healthcare startup Portea Medical.
- The largest low-cost carrier in India, IndiGo Airlines, was founded and is currently chaired by Anuradha Mittal.
- Kiran Mazumdar-Shaw is the owner and chairman of the prestigious biotechnology business Biocon.
- . Amrita Pritam is an artist, author, and businesswoman.
- Kamaladevi Chattopadhyay: an environmental activist, businesswoman, and liberation warrior.

They are just few illustrations in India and there is still more to go overseas. The mindset of people has changes and altered the era of economy making it vast in itself.

CONCLUSION

Only if its women are given numerous possibilities will a country prosper. Women make up a significant portion of sorty. The right strategy for women's empowerment is to encourage entrepreneurship since empowered women are better squipped to escape the cycle of poverty and have more influence in the political, social, and economic realms.

Our country's progress is significantly influenced by entrepreneurship. Women business owners will contribute to a remains a progress is significantly influenced by entrepreneurship. Women to social and economic advancement of many progress in addition to male business owners. It is a powerful tool for the social and economic advancement of many progress in addition to male business owners. Agree and the ideal response to the rising employment of rural women. It is the ideal instrument for enabling women to tournbute to the family income while taking care of their own house and family and actually helps to produce employment for many indicate the same way for women to for many individuals within their own social structure. Therefore, starting a business is a better way for women to move the many individuals within their own social structure. Therefore, starting a business of women business owners. The the power themselves. The suggestions below can be made based on the opinions of women business owners. The management of the suggestions below can be made based on the opinions of women business owners. The management of the suggestions below can be made based on the opinions of women business owners. The management of the suggestions below can be made based on the opinions of women business owners. bresigned looked at the issues and difficulties that are now facing both loved ones and civilization. The key issues have len identified, and the women business owners have been given the necessary advice. The study acknowledges the delicages that are callenges that women entrepreneurs in India still face, including limited capital access, lack of mentoring, and barriers in the dominated fact. bale dominated industries. The limitations of the study, such as potential data limitations or factors not considered in the womanded industries. The limitations of the study, such as potential data limitations or ractors not construct of the study are also acknowledged. Based on the current progress, the study provides insights into the potential trajectory of the study provides in the study provides in the study of the study provides in the study of the study provides in the study of the study of the study provides in the study of the stu and are also acknowledged. Based on the current progress, the study provides insights into the potential distributions of the study, sales, the study provides insights into the potential distributions of the study, sales, and sales are also acknowledged. Based on the current progress, the study provides insights into the potential distributions of the study, sales, and sales are study provides insights into the potential distributions of the study, sales, and sales are study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights into the potential distributions of the study provides insights and the study provides insights are study provides insights and the study provides in the Avancements to achieve true gender parity. REFERENCES.

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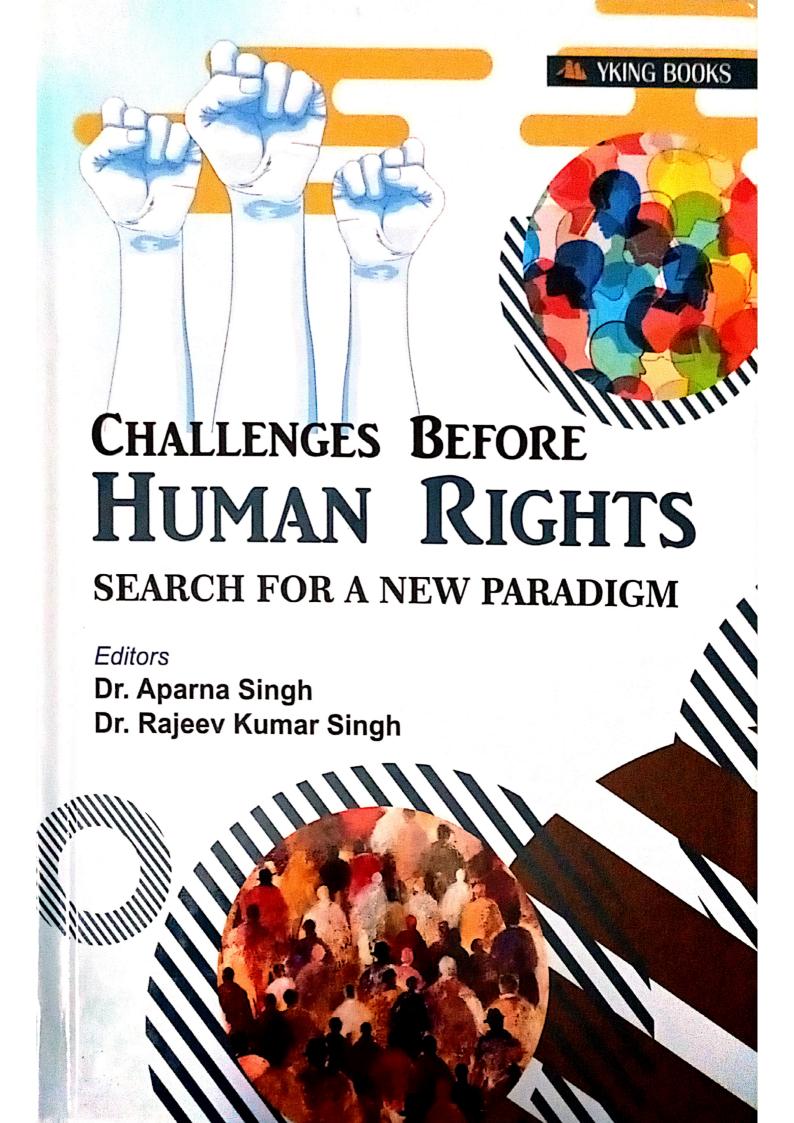
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Political Normlessness: A New Challenge to Human Rights

Dr. Rajeev Ranjan

Abstract

Uncertainty breeds normlessness in Indian politics. Normlessness in its effect is in contradiction of constitutionalism. Then it becomes necessary to find those aspects which are the factors of impatience. And also, which constitutional basic principles do they overthrow?

Through this study, an attempt has been made to explore the meaning of normlessness and examine the role of the ruling party, how they establish normlessness by misusing their political power, and at a time when it is challenging the basic tenets of the Constitution, is it not against the Human Rights of the people.

The ruling ideology is clouded by the nature of majoritarianism and acts like fundamentalists. The contemporary political situation in India, where the ruling party blames the opposition for every incident, problem and issue and the ruling government absolves itself of all responsibility regarding the welfare schemes of the common people. The government sitting in power cleverly fixed the responsibility of the opposition for every problem with the help of fake news and communal propaganda. Media is playing in the lap of power and fulfilling its political agenda.

After successfully shifting the accountability, the ruling party is creating heat in the minds of people and promoting anger, violence and hatred for their political gains. It is increasing day by day, making society a pressure cooker. In the event of referred normlessness, a situation of human rights violations arises in the context of frustration aggression theory. The increase in violence, anger, hatred can disregard the real demand for the rights and welfare of the common people. In this situation, there will undoubtedly be a lack of human rights in the society.

Keywords: Normlessness, Majoritarianism, Nehruvian, Fundamentalism, Communal, Frustration-aggression, Human rights.

Introduction

Uncertainty is an almost permanent nature of politics. Indian politics has also not remained untouched by this uncertainty. When the nature of politics becomes reciprocal to the nature of the Constitution of that nation, it is essential to question. There is a lot of space in the Indian constitution for every class and ideology. But despite this, if the faith of the people decreases in the constitutional system, then it is a matter of concern. Although it is not that when we got independence, we were the owner of limitless resources, due to the government's efforts after that, a lot of economic progress took place. But even after that, the difference between the rich and the poor, and between the means and ends, remained huge and this is very painful for the concept of justice. Three types of justice (Social, Economic and Political) are cur constitutional demands. To achieve these certain procedures have been laid down. The main objective of this writing is to explore the critical situation of Political Normlessness in India. For that, we must explain first what Normlessness is and after that what is Political Normlessness.

The Concept of Political Normlessness

Normlessness is the pro-crime situation, which is defined by Emile Durkheim and Robert K. Morton as Anomie Theory. According to him, any gap between the means and the end can create stress on the mental account of the person and his behaviour gets the status of Normlessness. This is a crime-prone situation, and this theory is known as the anomie theory in criminology.¹

The main argument of this writing is what would happen if there were any differences between political constitutional demands and the legal means to achieve them. Looking at the anomie principle (Normlessness), we must analyze the contemporary political situation, where differences in its means and end create the scope of the new study. Our main asset in a democracy is the political parties, either the ruling party or the opposition party, to fulfil the political constitutional demands. But along with practice these parties, especially the ruling party's agenda, create only political demography based on fabricated issues like Hindu-Rashtra, Hindu Nationalism, Pseudosecularism, Love Jihad, Mob Lynching, Hindu Nationalism, Ram Temple, Population Control, etc. They are politicizing people's faith and religious sentiments for power in democracy and trying to create a uniform political mindset. The ruling party is doing the same thing in the name of nationalism, and in the past, the previous ruling parties also did it in the name of secularism. But the issues remain unresolved. Both attack each other by accusing them of misappropriating these sacred concepts of nationalism and Secularism but side stepping the real issues of political constitutional demand. Because of these games of passing ball, Indian politics, as well as Indian People, are facing the situation of Normlessness. This is known as Political Normlessness.

Reason of Normlessness in Modern India

Political Normlessness is not the result of a day. It took many days to develop. The raw material of all factors of Political Normlessness even existed in the colonial period, but postcolonial development would be the focus of this study.

At the beginning of independent India, there were traces of certain factors responsible for Political Normlessness. In the Nehruvian era, there were some provisions, and some afford to reduce these factors. But after Nehru, our political practices were against the norms of the Constitution. At first, it was slow, but it suddenly increased in the 80s and 90s. There are the following factors of Political Normlessness which are the causes of gaps between political aim and political means of our Nation:

- The Lack of Scientificness²
- As well as the democratic education system

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- The Lack of reasonableness and rationality in Indian Society-
- Communication gap amongst different communities (Lack of dialogues)
- Communal Feeling and Hate for Other Groups
- · Lack of Non-Violence, Honesty, and Truth
- Failure of Previous Government
- Indian Media

In the Nehruvian era, elementary education was criticized by many critics; otherwise, the agenda of Educational India was on priority. Budget and resources may be the reasons why elementary education could not be given attention. Despite this, education in the Nehruvian era was very transformative and scientific. Many institutes of higher studies were established. But after Nehru, even during the reign of Mrs. Gandhi, the idea of scientific/ modern education was slowly losing its priority. The communal agenda was taking its place. The concept of soft Hindutva, as well as communalism, was introduced in the politics of the nation. Morarji Desai's first non-Congress government after the Emergency may have achieved many achievements, but this regime was fertile for communal politics. After that, the communal base of Indian politics was shifted to the new module. The concept of the Ram Janam Bhoomi Movement, Hindu Rashtra, Nationalism and Mandal-Kamandal were mixed in the political winds of that time. This was the period of Indian politics in which hatred dissolved like sugar in milk. Just as Hitler had targeted Jews in Germany, in India too, the communal politics were now making Muslims their victims. There is no doubt that the roots of communalism were present even in the colonial period. But it was to be abolished by the scientific and constitutionally established education after Independence. But it could not happen. Along with the political parties, the state governments and the media were also busy spreading the communal agenda. It would not be an exaggeration to say that the media is losing its credibility day-by-day.

One reason for political normlessness has been the previous governments. Because of the failure of the previous governments,

the majority Hindu ideology was also put in the dock with unquestionable values like secularism. But it is also true that the previous governments had failed to meet the basic needs of a constitutional democratic nation. This is the reason why the communal forces were successful in establishing themselves as the solution to the problem. The present government was able to tell in its election campaign that whatever the situation is in our country, it is because of the previous governments. And this is because it adopted the path of secularism and could not form a strong government. Then gradually the present government coined new definitions of social and human values and kept constitutional democratic values aside. Hate, violence, mob lynching, abuse, communalism, anti-humanism, dictatorship, and fascism are the new values of Majoritarianism.

Indian Citizen and Normlessness

The roots of communalism in India are very old. This can be seen in the early part of the 21st century. After Independence, communalism was marked as an immense problem. Therefore, through the Constitution, our main objective was to make the country a scientific, secular, socialist, democratic, and justice-loving society. This could be done only through good and scientific education. But this could not happen and gradually we started to deviate from our goal. The main philosophy of majoritarianism reflects the lack of democratic values, the birth of communal hatred, the predominance of unscientific thinking, etc. This ideology is full of violence and hatred. It is not easy to find out the reasons for the communal minds of people which are a major cause of political normlessness. Even after that, we can say lightly that some of the main factors affecting the psych-mass of people are as follows.

Media's Key Role in Creating Political Normlessness

The role of media in a democracy is very sensitive. On the one hand media without taking any funds from the government, like any private players, has become the fourth pillar of democracy to raise the basic questions of the public.

But in the present era, the capitalists have allied with the government. They are very fruitful to the government by controlling almost all the media houses.

Capitalists manage election funds to improve the image of the government in the media, while the governments give funds in the name of development for the benefit of these capitalists.

In a country like India where poverty and illiteracy prevail everywhere, people are not even able to understand their needs. The gross lack of knowledge of the public, and the media being official to the ruling government is a gift to the government, due to which the government while pretending to be majoritarian hides its actual character of authoritarianism.

According to the research of the Newslaundry Web portal, in the programme (DNA) of Sudhir Chowdhary of Zee News 28 were dedicated to communal issues, zero for unemployment and inflation out of 73.³ Navika Kumar of Times Now managed 29 communal topics out of 68 debates and only zero space was given to the issue of jobs.⁴ Same can be seen in the programme of the Arnab's Republic.

Newslaundry was different with mixed themes as reported by Prime Time with NDTV's Ravish Kumar. Of the total 77 shows, 23 were devoted to communalism, but the anchor, unlike his TV counterparts, did not pitch them on the issue of Hindu versus Muslim and warned viewers of the dangers of mixing politics with religion.⁵

There were eight shows on inflation, four on unemployment, and 39 shows on other topics including inequality, governance, India versus Hindutva, and "godi media" – a term coined by Ravish.⁶

Media is managed in many ways. Financially on one side capitalist forces own the media and talk about power in coordination with the government for their own benefit. Politically(second) the repressive machinery of the state tries to control journalists. So, the freelance journalists were facing multiple FIRs and actions from legal bodies.

As a result of that, the total conscious space of media has been changed, according to the discourse of the ruling party. In the daily TV debate, the issues are decided according to the benefit of the government.

If we talk about the role of media, then what should be the role of media in a democratic country? I believe according to the

principles of media it should be democratic. In his discussion, the basic rights of the people should be freedom, equality, justice, employment, etc.

In the year 2022, India slipped two places to rank 150 in the World Press Freedom Index of 180 countries compiled by Reporters Without Borders. It is an unflattering commentary on a country that often prides itself on vibrant and competitive media.

If there is any talk on the role of media, then it is reasonable to raise the question that what would be the media of a democratic country. I believe that according to the principles of journalism, it should be the representative of the people (Jan) and the people (Gan). In his discussion, the basic rights of the people should be freedom, equality, justice, and employment, etc. Overall, his character should be fulfilling democratic objectives. But on the contrary, if mainstream media is scrutinized, its character is found to be undemocratic, communal and crony capitalism, which has mainly murdered Indian constitutional values today. India's mainstream media devotes its entire primetime debates to nurture the Hindu-Muslim agenda on communalism and violent topics like Ukraine, Pakistan, China and more in any case that can be put Opposition in the docket. Problems like hate-speeches, unemployment, Inflation, education, labour code, privatization remain missing in their issues. Instead of standing in favour of the public, the media is often seen covering the flaws of the government and state consented capitalism, along with this, the character of media hurts the concept of human rights, and pushes the Nation into a state of normlessness, which gives rise to delinquent situation politically and non-politically.

The mechanism behind political normlessness is apparent. Media plays a major role. On one hand media is trying to keep people away from democratic and public issues by raising some undemocratic unnecessary issues, on the other hand we people are not getting remedies of their problems, and they are misled by media that cause of all problems not the ruling party but the opposition itself. In a democracy, the elected government should be responsible for every problem of the country. But the responsible ruling party passes its responsibility on the opposition. The public accepts this fact that the opposition is the root of all the problems, but the reality is something else. There are the three essentials of the Political Normlessness:

- Ignorance of the We the People
- Weak Opposition
- Somewhat obligation free ruling party.

Side-Effects of the Political Normlessness

In this situation the rule of law as well as the Human Rights of the We the People may be compromised. Good journalists are put behind bars. Asif Sultan, Siddique Kappan, Gautam Navlakha, Manan Dar, Sajjad Gul, Fahad Shah and Rupesh Kumar Singh are among the seven journalists imprisoned in India, according to CPJ (the Committee to Protect Journalists). Three of them have been in jail for more than a year. The media is often silent on the arrest of activist, professor and some other critics and dissent voice. The idea of journalism as a fourth pillar of democracy are regulated by Lapdogs Media. The perpetrators of government-backed ideology are not questioned by the media and administration. Many Gods' Man have also got bail in heinous crimes. Many are roaming free on parole even after conviction. Pardon was also given to many other people who are power-backed people.

The result of political normlessness would be helpful in building an elected autocracy. But in the present condition it is difficult to understand how the public will come out of the vacuum of normlessness.

Conclusion

Certain precautions are required to maintain the democratic modern state. In the study suggestions are given on three points first education, second Media and third election.

An education system must be able to protect the democraticconstitutional values of the We the People. An education is an outstanding tool to combat the situation of normlessness.

Media should be proper and unbiased. The fundamentals of journalism should be protected by regulating statutory bodies. Political propagation by media is not good for the health of democracy as well as protection of the basic rights.

Expensive elections are beyond the reach of common people. Inexpensive elections are a basic requirement of a democratic

state. Cheap elections are a way of involving the common people in their process. Otherwise, the entire democratic process remains under the control of the powerful people. They make their purpose and try to mislead the common people and try to create political normlessness.

Required education system, rational media and cheap election can minimise the normlessness in the political society. It will help to protect the Human Rights of the We the People especially for the vulnerable groups.

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CHAPTER 2

BIOREMEDIATION: A SNAPSHOT

Anjali Priyadarshini¹, Himanshu Sahu²

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CHAPTER 5

BIOREMEDIATION BY MICROORGANISMS

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Bio-Inspired Computing

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Abstract

The bio-inspired computing is a unique approach towards solving complex problem based on the solutions and ideas from the nature. Nature has a great tendency of self-optimization through evolution. Bio-inspired computing deals with computing with the same principals inspired from the humans and other organism's problem-solving skills. The bio-inspired computing is aimed to show the cognitive ability and inferential learning ability. Neuromorphic engineering is one such approach that uses verylarge-scale integration (VLSI) systems containing electronic analog circuits to mimic neuro-biological architectures present in the nervous system. Just as our brains can predict the view of an object when the object is being viewed from some other direction, the same can be done with the help of bio-inspired computers using the sets of eyes like sensors and a special processor that mimics the visual rendering of a human brain. One such approach of visual rendering is already represented by IBM's TrueNorth processors. Such immense level of computing requires the use of all disciplines of science. This chapter represents various bio-inspired optimized algorithms like Genetic Bee Colony (GBC) Algorithm, Fish Swarm Algorithm (FSA), Cat Swarm Optimization (CSO), Whale Optimization Algorithm (WOA), Artificial Algae Algorithm (AAA), Elephant Search Algorithm (ESA), Chicken Swarm Optimization Algorithm (CSOA), Moth flame optimization (MFO), and Grey Wolf Optimization (GWO) algorithm, etc. These algorithms are generally based on the metaheuristic's approaches. Further the upcoming advancement after learning from the nature, technologies coming up with more innovative ideas. The rapidly increasing technical world is grabbing ideas through different natural algorithms as discussed in this chapter. Mixing computing with natural and biological phenomena will club the understanding of our generation with nature and its events. The world is full of biology, once it combines with technology; it gives the perfect gift for computing future. Either switching from Artificial Intelligence (AI), Genetic Algorithm, Immune system, or itself the human life, this wide scope of concepts is totally going to evolve the lifestyle of people. In this chapter, we are going to understand the necessity of sandwiching computing around nature and its act of dealing.

Keywords: P-Systems, Optimizations, Algorithms, Bio-Inspired, Genetic Bee Colony (GBC), Algorithm, Cat Swarm Optimization (CSO), Artificial Algae Algorithm (AAA), Elephant Search,

Algorithm (ESA), Chicken Swarm Optimization (CSOA), Grey Wolf Optimization (GWO) Algorithm, Neuromorphic Engineering, Metaheuristics Approaches

Introduction

Nature is one of the most powerful things in this world. With such a fascinating algorithm that drove the whole universe. Everything in the universe is connected. From macro to micro. From the natural gravitational forces which keep everything in the universe intact to the small electrostatic forces that keep the atoms together which maintain the integrity of all the living things in this world. Another such fascinating thing is the intelligence that nature has given to the living things so that they can survive or be consumed by other animals to maintain the food chain. All the sensations that is the vision, audition, olfaction, gustation, tactition are the gifts that nature has given to the living beings. The data collected from these sensations is further processed via brain to recognize the activities in the surrounding environment. Here the complex neural circuit comes in play that delivers the information as well as also process them. Different organisms react differently to the same intensities of these sensations, which allows them to behave differently. There behaviour is well optimised by the nature for them to survive. Such well optimised behaviour can be mimicked and can be used in the real-life calculations where there is requirement of more than one solution for a particular task. Disease diagnosis and their treatment can be possible from such applications of bio-computing. For example, bacteria can be modified, becoming biocomputers capable of detecting and treating certain inflammatory diseases, including gut conditions such as Inflammatory Bowel Disease, or IBD. A portion of the bacteria's DNA is used to determine whether it has met a specific chemical (in this case, one that indicates the presence of IBD). Amazingly, this technique requires only an IF/THEN test, simple logic gates, and fewer than three bits of memory. An AND gate requires both inputs to be true for the logic statement to return true. In this example, when the chemical is present, two sensors for IBD activate the AND gate control region simultaneously, turning on a gene that instructs the cell to produce an enzyme called luciferase. Luciferase glows in the dark and exits the body through the faecal matter. The glow can be detected using a microscope, evidencing the presence or absence of IBD in an individual.

Bio-inspired computing is a research method aimed at solving problems using computer models based on the principles of biology and the natural world. Commonly seen as a philosophical approach, bio-inspired computing is used in several related fields of study within computing, rather than a field of study itself. Bio-inspired computing puts less focus on optimized, high-speed algorithm and more focus on tractability and dependability. Generally, the approach is ground-up, rather than taking a large foundation



CONSUMER BEHAVIOUR

Dr. Poonam Dr. Rajesh Verma





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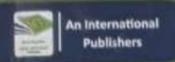


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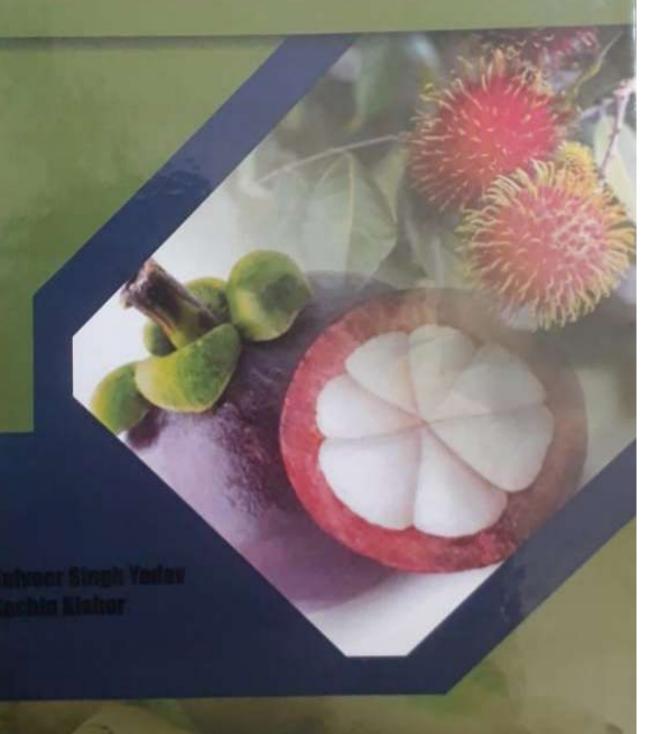


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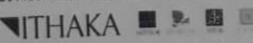


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About the Book

The book entitled "Minor Fruits in India" is a compilation of lesser known fruits found in India sourced from various domains. In this book comprising chapters based on cultivation and production with aims to popularise the minor fruits among the under graduate students, post-graduate students and research scholars of agriculture and horticulture area.



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REVERBERATIONS OF COVID-19 ON LIFESTYLE OF STUDENTS: A CASE STUDY OF SRM UNIVERSITY

Dr. Upendra Pratap Singh* and Sakshi Ahlawat**

ABSTRACT

COVID-19 has severely affected the lives of people in unprecedented ways. This systematic risk of COVID-19 has lives affected the lives of people irrespective of age, gender, social status, income, family etc. The current manuscript was undertaken to understand the impact of COVID-19 on lifestyles related constructs such as Diet, Sleep, Leisure time activities and productivity. A validated questionnaire was used to assess the extent to which lifestyle got affected during pandemic times of students of SRM University, Delhi NCR, Sonipat, Haryana using a Google Online survey platform. A total of 376 responses were collected from students of SRM University of different domains of various backgrounds and various living styles. Findings and Discussions has been segregated into four sections, section one comprises of impact of COVID-19 on physical activities of students, section two comprises of impact of COVID-19 on sleep of students, section three comprises of impact of COVID-19 on mental health of students and section four comprises of impact of COVID-19 on diet of students. Result concluded that COVID-19 has significant impact on the student's lifestyle. Manuscript also revealed that COVID-19 has also impacted the productivity of the students. Descriptive statistics like frequency, percentage, bar graph, pie chart has been used to present the data collected from the respondents.

Keywords: Lifestyle, Leisure Time Activities, Pandemic, Unprecedented Ways

INTRODUCTION

Nobody has never imagined that their faces, freedom to move around will get restricted by a virus known as Coronavirus or COVID-19. People are caged in their homes to protect themselves from this deadly virus which is affecting the lives of people massively. COVID-19 has not merely affected people physiologically but also psychologically. In this manuscript we intend to analyze the impact of lifestyle of students. Here, lifestyle comprises of diet, physical activities, mental health and sleep pattern of students. There has been significant impact on body weight and physical activities due to COVID-19. Not just sleep quantity but sleep quality has also been affected during the pandemic.

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LITERATURE REVIEW

COVID-19 has massively affected the obesity in people. People tend to increase their covid-19 has massively anceted to increase their weight during quarantine. A healthy diet and physical activity is a mandatory requirement weight during quarantine which would enhance the metabolic activity and also reduces the risk of during quarantine (Mattioli A.V., 2020). Also, there are many evidential challenges and the risk of during quarantine which which which during quarantine which which during quarantine which which during quarantine which which during quarantine also reduces the risk of cardiovascular burden (Mattioli A.V., 2020). Also, there are many evidential studies the risk of cardiovascular burden (Mattioli A.V., 2020). Also, there are many evidential studies that states cardiovascular burden (manufacture properties) and cardiovascular burden (manufacture properties) and people reported negative psychological effects during quarantine of COVID-19 such as that people reported regarding quarantine of COVID-19 such as post-traumatic stress symptoms, anxiety, and rage. Moreover there are many stressors which post-traumatic stress symptome, post-traumatic stress symptome, lack of resources or supplies during pandemic, makes the situation works the situation at constant staying home, fear of getting infected, duration inadequate information, frustration at constant staying home, fear of getting infected, duration inadequate information, and the partial staying nome, tear of getting infected, duration of quarantine played a huge role on psychological condition of the people during pandemic grooks, 2020). (S.K Brooks, 2020).

(S.K Brooks, 2012) stated that inactivity has great association with age, also mentioned that the desired in women is higher in comparison to men and this has increased in high Hallal P.C., 2012) states and great association with age, also mentioned that inactivity in women is higher in comparison to men and this has increased in higher income inactivity or more developed countries. Author also stated that more activity lovely inactivity in women is right to the land this has increased in higher income inactivity or more developed countries. Author also stated that more activity levels will help countries or more development and the burden of non-communicable disease. Lifestyle of people has been greatly in reducing the burder. Lifestyle of people has been greatly impacted by COVID-19 outbreak and its various measures of containment has also significantly and the people (Narayanan L., 2020). Experts said that lifestyle related an interpretable of people has been greatly impacted by COVID-19 outbreak and its various measures of containment has also significantly impacted by COVID 19 impacted by COVID 19 impacted the people (Narayanan L., 2020). Experts said that lifestyle related problems such impacted in weight and cardiometabolic risk could be modified and they also such impacted the people (and cardiometabolic risk could be modified and they also suggested as increase in weight and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and addressed at the time of COVID-19 to properly screened and the properly screened and addressed at the time of COVID-19 to properly screened and the properly screened and the properly screened and addressed at the time of COVID-19 to properly screened and the properly screened and the properly screened and the properly screened and the properly screened and addressed at the time of COVID-19 to properly screened and the properly screened as increase in weight it should be properly better the time of COVID-19 to prevent obesity and facilitate well-being of people during this pandemic (Bhutani S., 2020). As a construct, regular meal pattern is being associated as an individual eating patterns at the level of main regular meal breakfast, lunch, dinner etc or a meal of smaller size such as smaller. regular meal patterns at the level of main neal such as breakfast, lunch, dinner etc or a meal of smaller size such as snacks etc (Leech meal such as breaklasty range in the such as shaded of smaller size such as snacks etc (Leech RM., 2015). A general clinical recommendation by experts to reduce weight and minimize RM., 2015). A general consume nutritionally balanced small and frequently meals which metabolic odder good dietary features (Jon Schoenfeld B., 2015).

contains good that people adhering to certain dietary habits during pandemic such Certain experts believed and in a consuming regular main meal and having good quality as reducing the frequency as reducing the frequency as reducing the frequency good quality meals such as fresh vegetables etc. resulted into marginally enhanced metabolism and other teames during this pandemic (Narici M., 2020). meals such as the margine meals outcomes during this pandemic (Narici M., 2020).

Across the literature, it has been evidently found that a reduction in physical movement or Across the literature, it the state of the literature, it is a state of the literatu during COVID-19 times (Ammar A., 2020).

Some studies also suggested that, restraining the people to stay in their homes has increased some studies also suggested in the s boredom of staying home for such longer period of time. A decline in motivation or an hike in mood driven eating has played a important role in decline towards maintaining healthy eating (Recio-Román A., 2020).

Despite making lot of efforts by people to maintain physical activities at home through opting online courses like yoga or at home physical classes etc, people are not able to maintain their physical activity levels to a substantial levels as suggested (Di Renzo L., 2020). There are substantial studies which clearly states that people has restricted their social gatherings, interactions or participation into recreational or leisure activities which consequently resulted into rise in stress and anxiety levels. Studies has evidently directed towards the main reason

of people resistance of such social engagements because of fear of getting infected by the Respondents also stated in their response that main reasons for their anxiety the of people resistance of such social engagements of people resistance of such social engagements also stated in their response that main reasons for their anxiety the coronavirus. Respondents also stated in their response that main reasons for their anxiety the coronavirus. Respondents also stated in their response that main reasons for their anxiety the coronavirus. Respondents also stated in their response that main reasons for their anxiety the coronavirus. Respondents also stated in their response that main reasons for their anxiety and coronavirus. Respondents also stated in their response that main reasons for their anxiety and coronavirus. of people resistant of people resistant of their anxiety of their anxiety and coronavirus. Respondents also stated in their to people resistant of their anxiety of the coronavirus. Respondents also stated in their anxiety and stress are loneliness, financial loss, fear of getting infected, isolation etc. (Rehman U and stress are loneliness, financial loss, eating healthy meals has been observed in upper anxiety and stress are loneliness.) stress are loneliness, financial loss, real of gets of stress are loneliness, financial loss, real of gets of stress are loneliness, financial loss, real of gets of stress are loneliness, financial loss, real of gets of ge (Roy D., 2020). During COVID times, eating (Roy D., 2020). economic status who have substantial economic st activity has been reduced (Hossain M.M., 2020).

activity has been reduced (Plossant activity has been reduced (Plo Moreover, studies has found variation in Moreover, studies have been supported by the Moreover in Moreover, studies have been supported by the Moreover in Moreover, studies have been supported by the Moreover in Mo of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample. As studied property of major part of the sample and the sample property of major part of the sample property of major part of the sample property of major part of the sample property of the sample p to the risk of coronavirus infection (Ghosh A., 2020), (Ranjan P., 2020).

One of the important preventive measure to control the spread of the virus is to avoid negative One of the important preventive incusative incus impact on the human body (Pietrobelli A., 2020).

OBJECTIVES

To study the impact of COVID-19 on physical activities of students.

To study the impact of COVID-19 on sleep of students.

To study the impact of COVID-19 on mental health of students.

To study the impact of COVID-19 on diet of students.

METHODOLOGY

Opting a required methodology is vital for verification of the results of any research. After elevating the associated and important relevant work done in the literature, the next vital step is to discuss the research methodology. The case study of SRM University has been used in the study to see the impact of COVID-19 on students' lifestyle. The research proposition is a qualitative interpretation of impact of COVID-19 on students. The relevant data for the present study is collected by using the non-participant observation method i.e. from journals, books, magazines, online material, and company websites.

Findings And Discussions

Pandemic and Lifestyle: A Study on SRM University Students

A survey was conducted to analyse the impact of pandemic on lifestyle of students in SRM University. Four major domains were covered under lifestyle: physical health, mental health, sleep and diet. Data was collected from 376 students. Given below are the key findings of the study.

Table 1: Characteristics of the Sample

Variable	Categories	Absolute Frequency (Count)	Relative Frequency (Percentage)
Gender	Boys	241	64 %
	Girls	145	36 %
Region	Urban	295	78.5 %
	Rural	81	21.5 %
ested Positive for Corona	Yes	71	81.1 %
	No	305	18.9 %

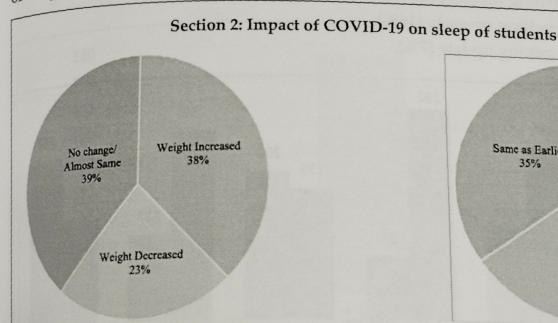
Section 1: Frequency of Physical Activities

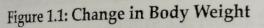
Name of Physical Activities	Never	Rarely	Sometimes	Often	Regularly
Cycling	(36.4)	72 (19.1)	104 (27.7)	35 (9.3)	28
Running/Outdoor	57 (15.2)	63 (16.8)	126 (33.5)	70 (18.6)	60
Gymnasium	169 (44.9)	58 (15.4)	54 (14.4)	44 (11.7)	(16.0)
Yoga/ Meditation	92 (24.5)	82 (21.8)	104 (27.7)	50 (13.3)	(13.6)
Aerobic/ Dance	181 (48.1)	68 (18.1)	69 (18.4)	37 (9.8)	(12.8) 21 (5.6)

Note: Figures in parentheses gives the row percentage.

Change in Body Weight

An obvious finding from the study was that those who went through at least one of the physical An obvious activities either maintained or decreased their weight. However, those who didn't opt for any of the physical activity experienced a significant increase in their weight.





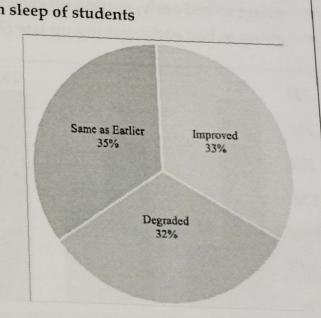


Figure 2.1: Change in Quality of Sleep during Pandemic as Compared to Earlier

Quantity of sleep (measured in number of hours) increased for approximately half of students (49%) and the quality of sleep remained same for one-third of the students, improved for one-third of the students and degraded for one-third of the students as compared to before pandemic.

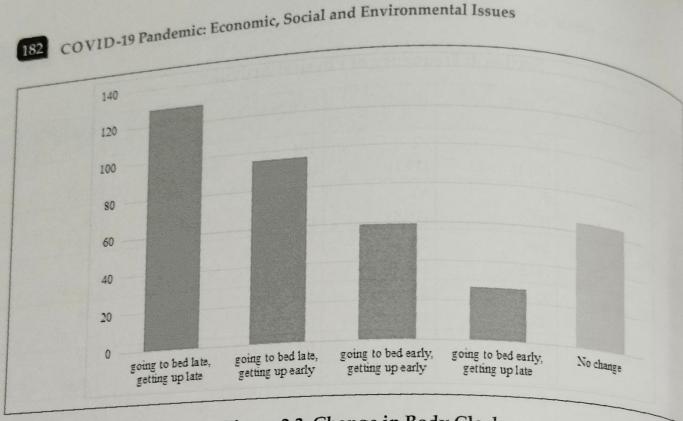


Figure 2.3: Change in Body Clock

More than four-fifth of the students experienced a change in their body clock:

- going to bed late, getting up late (34%),
- going to bed late, getting up early (25%),
- going to bed early, getting up early (16%),
- going to bed early, getting up late (7%).

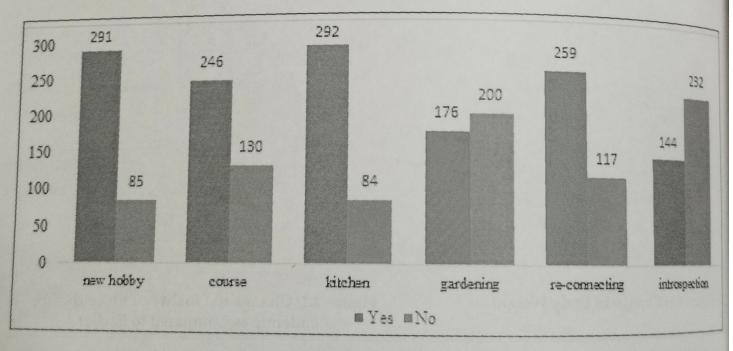


Figure 2.4: Leisure-time Activities

More than 90 % of the students were engaged with at least one of the following domains:

Explored new hobby

- Took an Online Course Learnt something new in Kitchen
- Did Gardening
- Reconnected with Friends Did journaling/ introspection/ SWOT Analysis

Section 3: Impact of COVID-19 on mental health of students Section 3: Impact of the students been during the pandemic (on a scale of 10)?

How have the different moods of the students been during the pandemic (on a scale of 10)?

Mood/ Emotions	Median Value
Peaceful	7
Нарру	6
Caring	8
Satisfied	6
Stressed	6
Anxious	5
Depressed	3
Frustrated	5
Bored	6

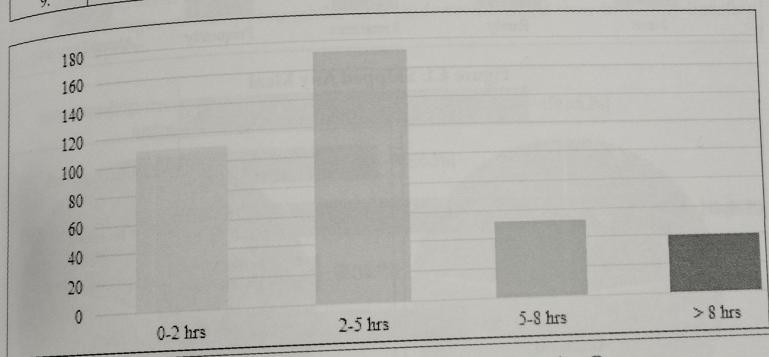


Figure 3.2: Hours Spent on social media/ OTT/ Video Game

A significant difference was found between boys and girls on three out of nine parameters on mood/emotions; which were: 'caring', 'depressed' and 'frustrated' at 10 per cent level of significance. Those who were tested positive for corona were found to be less satisfied and more anxious than those who were not.

An obvious finding from the study was that the quality of sleep degraded for those who was 2.5 how and Modal category for the hours spent on social media/OTT/Video game was 2.5 how and Modal category for the hours spent on social media/OTT/Video game was 2.5 how and Modal category for the hours spent of students An obvious finding from the study was that the quality of the finding from the study was the study was the finding from the study was the finding from the study was the study Section 4: Impact of COVID-19 on Diet of students

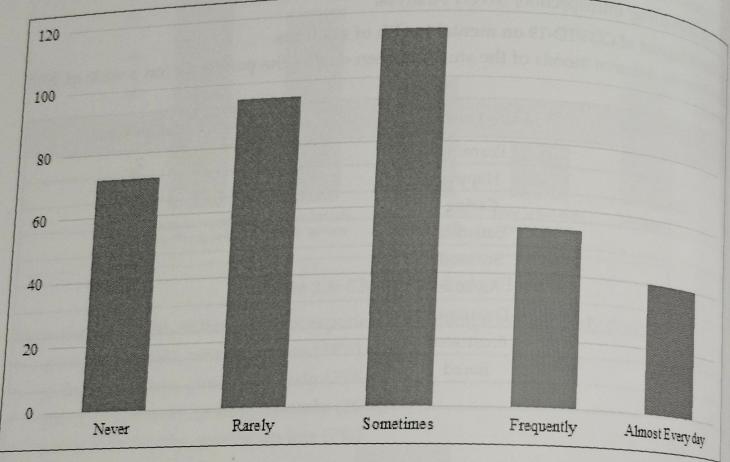
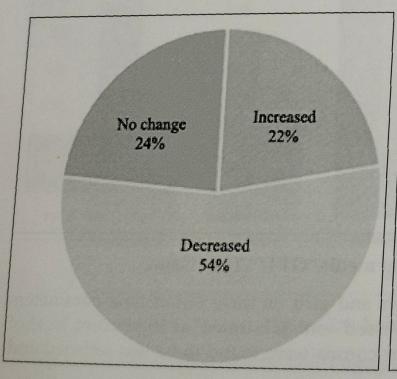


Figure 4.1: Skipped Any Meal



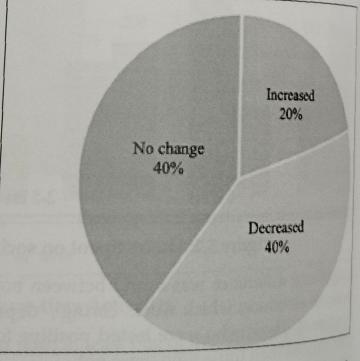


Figure:4.2 Junk/Fast Food

Figure: 4.3 Sugar-Sweetened Beverages

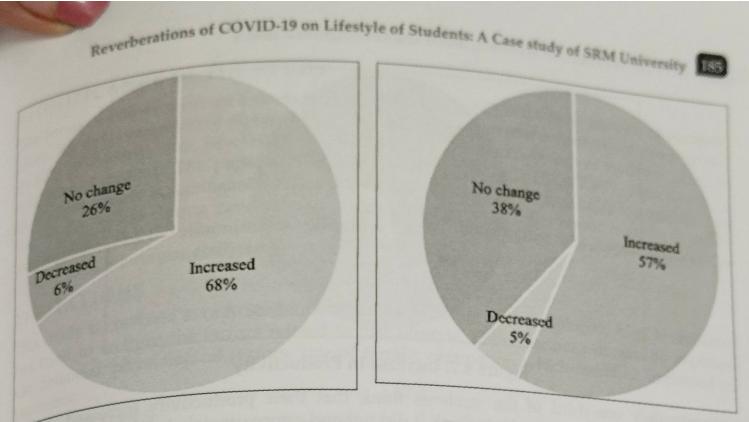


Figure: 4.4 Immunity-Boosting Foods

Figure 4.5: Eating tips From Media

It was found that students became more cautious of their dietary plan. Around half of the students never missed or rarely missed any of the meals.

54% students decreased their junk/fast-food consumption, 40% students decreased their sugar-sweetened beverages consumption; while, 68% students increased their immunity-boosting foods consumption.

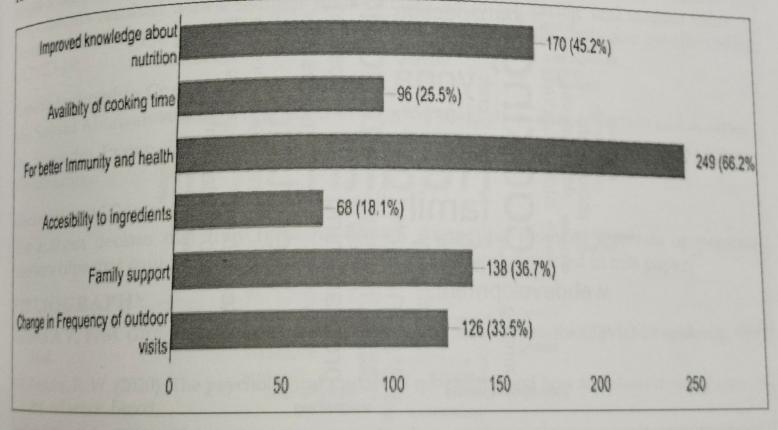


Figure 4.6: Reasons for Change in Dietary Plan

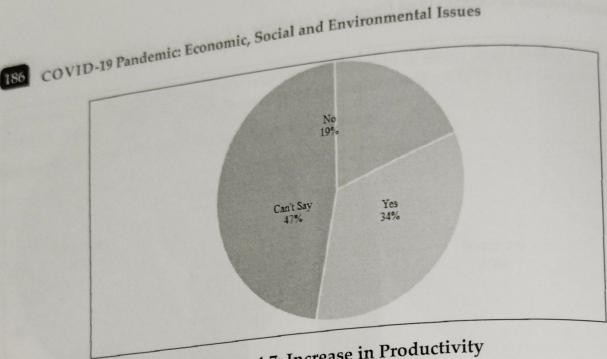


Figure 4.7: Increase in Productivity

Approximately one-third of the students think it did not and approximately half of the students think it did not and approximately half of them to Approximately one-third of the students think it did not and approximately half of them were not pandemic, one-fifth of the students think it did not and approximately half of them were not pandemic, one-fifth of the students think it did not and approximately half of them were not sure if their productivity really increased.

Students were also to mention any new domain that they explored during pandemic. Given Students were also to mental and below is the word cloud of the same. Greater the size of the text, higher the frequency.

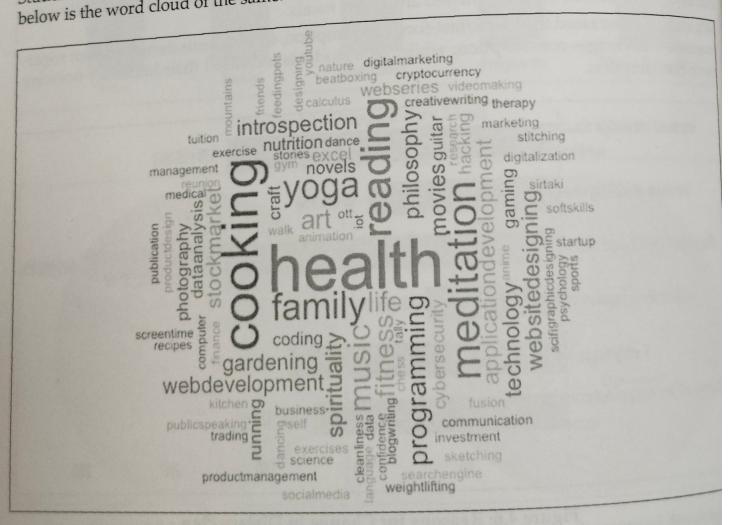


Figure 14: Word Cloud of the Domains Explored

SIGNIFICANCE OF THE STUDY

The focus of this manuscript intends to study the impact of COVID-19 on lifestyle of students. The focus of this filtance of dietary behavior, sleeping pattern that constitutes of quantity and there, lifestyle comprises of dietary behavior, sleeping pattern that constitutes of quantity and Here, lifestyle compact of students both, psychological health by judging various moods of students and quality of students. This paper also intends to cover the impact of COVID 10 quality of students. This paper also intends to cover the impact of COVID-19 on productivity activities of students. Study is significant for the purpose of analyzing the various other factors affecting of students. Study is an analyzing the various other factors affecting of students. Study is of students in student the lives of people to the minimization of negative impact of COVID-19. The methodology can be making regarding the minimization of negative impact of COVID-19. The methodology can be further used for similar analysis.

LIMITATIONS

This study is confined to only students, other respondents can be explored. Also, manuscript This study is control of the factors related to just lifestyle. Other factors can also be explored has tried to analyze the factors, size of family, occupation which has tried to alta, and also be explored like financial, physiological factors, size of family, occupation which could be impacted by pandemic.

CONCLUSIONS

This study intends to study the impact of COVID-19 on student lifestyle. Results displayed This study are pandemic has significant impact on body weight of students with 38% students said their weight has been increased during the pandemic whereas 39% students revealed that there is no change in their body weight. Likewise, sleeping behavior that includes both quality and quantity of sleep has been impacted to great extent with 33% respondents revealed that their sleep quality has got degraded during the pandemic and 49% respondents revealed that their sleep quantity has got increased during this time. Moreover, COVID-19 has shown significant impact on psychological behavior of respondents in terms of their moods on a scale of 10, respondents resulted with a median value of eight for mood 'caring' and median value of three for mood 'depression'. Data also revealed that diet and productivity also got affected by COVID-19.

Credit Authorship Contribution Statement

Ms. Sakshi Ahlawat: Writing - original draft, Conceptualization, data collection and analysis Dr. Upendra Pratap Singh: Writing - Review & editing, Data analysis and methodology, Visualization.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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