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DIGITAL TRANSFORMATION IN EDUCATION

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ABSTRACT

Education is designed to respond to the continuous changing needs of society. Education systems are encountering challenges and changes everywhere. In India, education is currently undergoing extensive reform. India has also stepped into such processes where the traditional system of teaching and learning is supplemented with new methodology of teaching with the help of technology upgradation. An effort to make use of technology in education has already been began and with the rise of information technology, it has made intense, immediate transformation in all sectors of education including open and distance education. Education is changing with the advent of new interactive online learning technologies and multimedia electronic libraries which is helping in improving the sharing of knowledge and educational practices.

The process of digital transformation involves the utilization of digital technologies to create new services or modify existing ones in order to satisfy the ever-evolving demands of the modern world. This research paper delves into digital transformation in higher education is a critical process that involves the integration of digital technologies and innovative strategies to enhance teaching, learning, administration, and the overall student experience. It aims to address and enhance efficiency and accessibility while catering to the changing demands and anticipations of students and other stakeholders.

Keywords: Digital Transformation, Education, E-learning, Digital Skill, Effective teaching -learning.

INTRODUCTION

Education is undergoing a profound and far-reaching transformation, thanks to the integration of digital technologies into every aspect of the learning process. The revolution, known as “digital transformation in education”, is reshaping how students learn, teacher instruct and educational institutions operates. From the use of online learning platforms to the adoption of artificial intelligence in personalized learning, the digital revolution is redefining the educational landscape.

Digital transformation in education aims to leverage technology to make learning more accessible, engaging and effective. Traditional classrooms are no longer the sole hubs of knowledge dissemination, instead, virtual classroom, e-books, interactive simulations and data analytics are becoming integral parts of the modern educational experience.

The transformation has been accelerated by the events of the 21st century, such as COVID-19 pandemic, which forced educators and institutions quickly adapt to online and hybrid learning models. While these challenges highlighted the importance of digital readiness in education, they also opened up new opportunities for innovation and improvement.

In this context, it's crucial to explore the various facets of digital transformation in education, including the integration of technology, online learning, data-driven decision-making, and the challenge and benefits it brings. This paper aims deeper exploration of how technology is revolutionizing education and the implications it has for students, teachers and education sector as a whole.

The paper also focuses on how with the change in time teaching is also changing. Teachers are held to a number of expectations to meet such as: teachers are evaluated by their ability to have students pass standardized tests, teaching students to solve intricate problems that necessitate knowledge across multiple subjects and also are expected to meet the individual needs of all students in order to help them reach their full potential. Therefore, technology can indeed assist to meet some of these expectations and facilitate successful teaching and learning. Research has demonstrated that technology can accommodate different learning style and is also an effective motivator for students with specific learning needs and when collaborative-team-learning is implemented with the use of technology, it appears to yield better results in progression of students learning and teaching as well. Thus, digital transformation in education is driven by a commitment to delivering high-quality education, improving institutional efficiency, and ensuring that graduates are well-prepared for the demands of the modern workforce. It involves ongoing collaboration among faculty, students and other professionals to create a dynamic and responsive educational environment.

TECHNOLOGICAL DEVELOPMENTS AND ITS IMPACT ON EDUCATION

Technology is bound to rule our present and our future. Technology has influenced and has been influencing our lives in many different ways. Over the years, technological advancements have had a significant impact on how classes are taken and lessons are taught. The impact of technology on education has made the classroom became more dynamic, information become more accessible through a more diverse types of media and the amount of information one could find is also seemingly immense. The traditional chalk board setting has now evolved into digital projectors, interactive board. Books that have been once burdened us for their volume and weight can now be digitally compressed into a convenient storage device. The physical library has now taken the place of e-book facility. Traditional teachers have become virtual instructors now.

What was once an impossible task of teaching a person in a distant land without actually going there became possible because of the advent of computer and internet?

Retrieving and finding of information related to subject or concepts concerned, now, have become easier than before. It has become insignificant because finding the information used to take many hours or even many days and was such a laborious task but in present day, one can retrieve data or subject information with a click of button. The developments in the uses and designs of technology and its applications have changed how students learn, rapidly. For instance, computer-based tools serves as a powerful mechanism for communicating, applying and learning science and mathematics or other subjects in schools, university as well as their homes. There are many tools such as *Kahoot*, *Quizzes*, *Edpuzzle*, and *Google Classroom* etc. that provides students and teachers with flexible teaching-learning settings, lending themselves to a wide variety of activities across the grade level and throughout the curriculum. Thus, we can say that it provides insight into the transformative potential of digital technology in the realm of education.

There are many innovations that has taken place with the advent of numerous tools and technology in educational field. For instance, blended learning that combines traditional classroom instruction with online resources, providing flexibility to teachers and students and improve access to education, in remote areas. Similarly, in flipped classroom, students learn new content at home through videos or online resources and then use class time for discussion, collaboration and problem-solving. This approach fosters active learning and deeper understanding. There are number of technologies that enable digital transformation in education for example, Artificial Intelligence, AI-enabled Chatbots and Augmented and Virtual reality.

WHY DIGITAL TRANSFORMATION IN EDUCATION IS NEEDED?

The severe need of digital transformation in education had been magnified with the occurrence of COVID-19. This pandemic has thrived many people to learn the ICT skill to remain in their job and teachers are not left far behind. Digital technologies, has prompted an explosion in remote working and remote learning. Hence, the education system worked efficiently and effectively.

Moreover, digital transformation in education is needed for several reasons:

- 1. Improved Access to Education:** digital technologies can break down geographical barriers and provide access to education for people in remote or unserved areas. Online courses, virtual classroom and e-learning platforms allow students to access educational resources and interact with instructors and peers from anywhere in the world.
- 2. Enhanced Engagement:** digital resources, such as interactive media, gamified learning modules and virtual simulations, can make learning more engaging and enjoyable. This can motivate students to be more actively involved in their studies.
- 3. Personalized Learning:** Digital tools enable personalized learning experience, where students can progress at their own pace and receive tailored content based on their individual strength and weaknesses. This helps to address diverse learning needs and preferences.
- 4. Cost Efficiency:** Digital transformation can reduce costs associated with physical infrastructure, printed materials and travel, making education more affordable and accessible. It can also lead to resource sharing and collaboration among educational institutions.
- 5. Flexibility and Convenience:** online learning allows for flexibility in terms of when and where students can access educational content. This is especially beneficial for working professionals or individual with busy schedules. Open and distance learning is such an example.

6. **Data-Driven Decision Making:** Educational institutions can use data analytics to track student performance and gather insights into areas that need improvement. This data-driven approach can inform curriculum design, teaching methods and student support services.
7. **Collaboration, Communication and Life Long Learning:** digital transformation supports the idea of lifelong learning as individuals can continually update their skills and knowledge throughout their careers. This is essential in a rapidly changing job market. Digital tools also, enable better communication and collaboration among students, educators and institutions. They facilitate the sharing of resources, ideas and best practices.
8. **Accessibility:** digital transformation can make education more accessible to individuals with disabilities through the use of assistive technologies, adaptive learning platforms and digital content that can be customized to accommodate different needs.
9. **Integration of Emerging Technologies:** education needs to prepare students for a future that will be increasingly shaped by emerging technologies. Digital transformation allows educators to integrate these technologies into the curriculum, ensuring that students are well-prepared for the modern workforce.

Overall, digital transformation in education is essential for modernizing and improving the quality, accessibility and relevance of education in a rapidly evolving world. It has the potential to empower learners, enhance the teaching and learning experience, and address many of the challenge facing the education sector today.

TECHNOLOGY USE IN CLASSROOM

Educational technology is a broad term that may refer to many kinds of technology that might be discovered in the classroom. Many of us believes that educational technology only consist using computers, televisions and other electronic tools however, use of technology in classroom means the use of full array of instruments accessible to improve a student's knowledge of the subject in front of them. The various tools of technology may refer to interactive electronic whiteboards, calculators, overhead projector, computers, audio recordings, DVD cameras and more. The computer along with the internet has influenced nearly every part of our culture. Hence, computers inside the classroom are essential to prepare children to operate in today's world. There are various types of technology that is being used in the traditional classrooms such as:

- **Computers in the classroom:** with the use of computer in the classroom, teachers are able to demonstrate a new lesson, present new material, illustrate how to use new programs and show new websites. Computers can provide instant and correct answers of quizzes and it is non-judgmental and patient as human beings are not, hence, it helps students to have optimistic mindsets. Teachers can post homework assignments, results and works of students as well.
- **Use of Networks:** Networks are systems that connect two or more computers to each other and computer networking is immensely being used in education across the world. These networks allow students and teachers to communicate with peers or with each other in different locations. These networks allow computers to send and receive information and also provide opportunity for collaborative learning and greater exposure of global perspective.
- **Satellite Technology:** Distance learning is a form of education where one not need to be present there physically, rather, with the use of various technology teaching and learning are facilitated. Distance learning programs are supported in many states and these programs focus on using satellite technologies to instruct children in remote areas. Two way audio and video signals has made learning and giving instructions more interactive as both sides can hear and see.
- **Podcasts and blogs:** podcast is a new invention that is used in classroom today. Podcasts are simply audio recordings stored in MP3 files so listeners listen it using internet and an app. Podcasting has the ability to advance student's education beyond the classroom. It may improve the quality of learning and serves as a great tool for developing literacy, sharpen student's vocabulary, editing, writing, presentation and speaking skills. Blogs also allow reflection on their thoughts, writing for purpose and adhering to internet protocol.

LIMITATIONS AND CHALLENGES OF DIGITAL TRANSFORMATION IN EDUCATION

Despite many benefits, when teachers or learners use technology as a critical part of learning-teaching process, they face a set of challenges:

- **Technology obsolescence:** technology evolves rapidly and educational institutions may struggle to keep up with the latest tools and platforms. This can lead to challenge in maintaining and updating digital infrastructure.

- **Digital divide:** one of the most significant challenge is the digital divide, which refers to the gap in access to technology and the internet. Many students, particularly in underserved communities, lack the necessary devices and internet connectivity to participate fully in digital learning. This inequality in access can exacerbate educational disparities.
- **Teacher training:** educators need to be proficient in using digital tools and teaching through technology. The training of teachers and ongoing professional development can be a challenge, as it requires time and resources.
- **Lack of human interaction:** digital learning can be isolating, as it often lacks the in-person social interactions that are a crucial part of the traditional learning experience. Building interpersonal skills and fostering a sense of community can be more challenging in a digital environment.
- **Resistance to change:** when it comes to digital transformation often faces resistance from various stakeholders, including educators, administrators and parents, who may be apprehensive about the changes and their impact on traditional teaching methods. Some may fear that technology may replace them, however, it is essential to persuade that these technology would never replace them, instead, it will help ease the burden for preparing interactive and informative lesson, materials and activities that is engaging.
- **Cost and infrastructure:** implementing digital transformation in education requires a significant financial investment in technology, software and infrastructure. Many educational institutions, especially those with limited resources, may struggle to fund and maintain these digital initiatives.
- **Privacy and data security:** the use of digital tools in education involves the collection and storage of sensitive student data. Ensuring the privacy and security of this data is a major concern, as data breaches and privacy violations can have serious consequences.
- **Overreliance on technology:** there is a risk of overreliance on technology in education, to the detriment of other essential skills and aspects of learning, such as critical thinking, problem-solving and creativity.

CONCLUSION

In conclusion, digital transformation in education is undeniably a transformative force that holds great promise for the future of learning. As we have explained in this paper, the integration of technology into educational practices has the potential to enhance accessibility, personalization and effectiveness. Digital transformation when done thoughtfully has the power to foster a more inclusive, adaptable and innovative education system. By embracing technology as a complimentary, tool rather than a replacement for traditional learning, we can strike a balance that retains the value of human interaction while leveraging the advantages of digital resources.

However, it is crucial to recognize that this journey is not without its challenges. The digital divide, financial constraints, concern about data privacy and comprehensive teacher training all stands as formidable barriers to the widespread adoption of digital education.

Nonetheless, it is essential to acknowledge that these challenges are not insurmountable. The transformative potential of digital education can be harnessed through concerted efforts and thoughtful strategies. To address the digital divide, policymakers, educators and stakeholders must work together to ensure equitable access to technology and the internet for all learners. Adequate investment in infrastructure, professional development training, privacy regulations and robust security measures must be implemented. As the educational landscape continues to evolve, the focus should remain on the ultimate goal of education: to empower individuals with knowledge, skills and the ability to think critically. With the help of technology we can shape a future where learner has access to high-quality education that prepares them to thrive in an increasingly digital world.

REFERENCES

- Thamarasseri, Dr. Ismail. *“Approaches to Educational Technology”*. ICT Skills in Education.SwayamMooc. Pp-1
- Thamarasseri, Dr. Ismail. *“Technological Developments and its Impact on Education”*. ICT Skills in Education.SwayamMooc. Pp-2-3
- <https://www.bartleby.com/essay/How-Can-Modern-Technology>

HAPPINESS AND PSYCHOLOGY

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ABSTRACT

Happiness is a mental or emotional state of well-being characterized by positive or pleasant emotions ranging from contentment to intense joy. Happiness as a concept seems to be readily embraced by the majority of people and appears to be more valued than the pursuit of money, moral goodness or going to heaven. Philosophers and religious thinkers often define happiness in terms of living a good life, or flourishing, rather than simply as an emotion. Happy people are healthy people. Happy people live longer and enjoy a greater quality of life. They function at a higher level, utilizing their personal strengths, skills, and abilities to contribute to their own wellbeing as well as that of others and society. Wellbeing is a contented state of being happy and healthy and prosperous. Psychological well-being refers to how people evaluate their lives. These evaluations may be in the form of cognitions or in the form of affect. The cognitive part is an information based appraisal of one's life that is when a person gives conscious evaluative judgments about one's satisfaction with life as a whole. People from around the world tend to have a similar concept of happiness and can recognize happiness in others. As a result, the specific emotion of happiness is often included as one of a small number of basic emotions that cannot be broken down into more fundamental emotions and that may combine to form other, more complex emotions (in fact, it is sometimes the only positive emotion that is considered to be basic). Thus, happiness is an important concept for researchers who study emotions. Most people evaluate their life as either good or bad, so they are normally able to offer judgments. People invariably experience moods and emotions which have a positive effect or a negative effect. We can define psychological well-being in terms of internal experience of the respondent and their own perception of their lives. People have a level of subjective well-being even if they do not often consciously think about it, and the psychological system offers virtually a constant evaluation of what is happening to the person.

Keywords: *happiness, psychology, types of psychology, happiness and positive psychology, and India in happiness index.*

INTRODUCTION:

Happiness is a mental or emotional state of well-being characterized by positive or pleasant emotions ranging from contentment to intense joy. Happiness as a concept seems to be readily embraced by the majority of people and appears to be more valued than the pursuit of money, moral goodness or going to heaven. Philosophers and religious thinkers often define happiness in terms of living a good life, or flourishing, rather than simply as an emotion. Happy people are healthy people. Happy people live longer and enjoy a greater quality of life. They function at a higher level, utilizing their personal strengths, skills, and abilities to contribute to their own wellbeing as well as that of others and society. People from around the world tend to have a similar concept of happiness and can recognize happiness in others. As a result, the specific emotion of happiness is often included as one of a small number of basic emotions that cannot be broken down into more fundamental emotions and that may combine to form other, more complex emotions (in fact, it is sometimes the only positive emotion that is considered to be basic). Thus, happiness is an important concept for researchers who study emotions.

Happiness:

An entire field of research has developed around the more inclusive concept of subjective well-being, which is characterized by a broad collection of happiness-related phenomena rather than a specific momentary emotion. As one might expect, people who are happy in this way tend to experience frequent positive emotions and infrequent negative emotions. This broader form of happiness is not purely emotional, however: it also has a cognitive component. When happy people are asked to think back on the conditions and events in their lives, they tend to evaluate these conditions and events positively. Thus, happy people report being satisfied with their lives and the various domains in their lives.

Interestingly, these different components of happiness do not always co-occur within the same person. It is possible that someone could experience a great deal of negative emotions yet still acknowledge that the conditions of his or her life are good ones. For example, someone who works with the poor, the sick, or the destitute may experience frequent negative emotions but may also feel satisfied with life because the work is worthwhile. Similarly, people who spend lots of time engaging in hedonistic pleasures may experience frequent momentary positive emotions, but they may also feel that life is empty and meaningless. Subjective well-being researchers are interested in the various factors that influence these distinct components.

Psychology:

Psychology is the scientific study of the mind and behavior. Psychologists are actively involved in studying and understanding mental processes, brain functions, and behavior. The field of psychology is considered a "Hub Science" with strong connections to the medical sciences, social sciences, and education (Boyack, Klavans, & Borner, 2005).

Types of psychology:

Behavioral Neuroscience/psychology deals with factors influencing plasticity of brain and behavior through development and into adulthood, stress and the brain, endocrine and immune regulation of brain and behavior and the neurobiology of cognitive control

Clinical Psychology deals with the treatment of mood and personality disorders using cognitive behavioral therapies, biobehavioral responses to cancer diagnosis and treatment, Testing and dissemination of psychological treatments for cancer patients, Psychological and behavioral adaptation to chronic health problems, Effects of exercise on psychological and cognitive functioning, Mindfulness and cognitive functioning in older adults

Cognitive Psychology is associated with, experimental, brain imaging, and model-based approaches to perception, memory, decision making, action, and language, modeling decision processing in memory, perception, numeracy, how our visual systems create our stable perception of the world, how we control our attention in complex tasks, how the auditory system solves the challenges of understanding spoken language.

Decision Science works as how cognitive, affective, and social processes influence judgment and choice, how numeracy (numeric ability) affects real-world decisions, how the brain represents subjective values and beliefs, how to improve self-control, how information is interpreted and integrated in decision making, modeling decision making in aging and cognitive decline

Developmental Psychology is associated with the learning and developmental change in cognition, behavior, and the brain, genetic and environmental influences on brain and behavior development of memory, categorization, and reasoning development of numerical cognition and mathematical thinking how children learn language and use it to understand their world how children grow beyond the superficial in their social and moral understanding how children grow beyond the superficial in their social and moral understanding.

Intellectual and Developmental Disabilities describes how to improve health and well-being in children and adults with intellectual disabilities, autism spectrum disorders, and other neurodevelopment disorders, how to best support family members of people with disabilities, how to impact the outcome and course of intellectual disability, autism spectrum disorder, and related neurodevelopment disorders, how to develop psychological instruments that measure core and associated features of intellectual disability, autism spectrum disorder, and other neurodevelopment disorders, how to treat behavior and emotional problems in children and adults who have intellectual disability, autism spectrum disorder, and related neurodevelopment disorders.

Quantitative Psychology is developing, evaluating and applying new quantitative methods for the analysis of psychological data, the application of statistical models to real world problems, and Bayesian models of human cognition.

Social Psychology deals with automatic and deliberative attitudes: influences on information processing, judgment, and behavior, increasing women's participation in STEM disciplines, how motivations in social interactions shape relationships, beliefs, well-being, and health, what motivates social behavior, effects of the immune system and common anti-inflammatory drugs (e.g. Tylenol) on emotions, decisions, and social behavior, and how similarity in brain activity across people underlies similarity in thoughts, attitudes and beliefs.

Happiness and positive Psychology:

Happiness, in psychology, a state of emotional well-being that a person experiences either in a narrow sense, when good things happen in a specific moment, or more broadly, as a positive evaluation of one's life and accomplishments overall—that is, subjective well-being. Happiness can be distinguished both from negative emotions (such as sadness, fear, and anger) and also from other positive emotions (such as affection, excitement, and interest). This emotion often co-occurs with a specific facial expression: the smile.

Happiness is an electrifying and elusive state. Philosophers, theologians, psychologists, and even economists have long sought to define it. And since the 1990s, a whole branch of psychology—**Positive Psychology**—has been dedicated to pinning it down. More than simply positive mood, happiness is a state of well-being that encompasses living a good life, one with a sense of meaning and deep contentment.

Feeling joyful has its health perks as well. A growing body of research also suggests that happiness can improve your physical health; feelings of positivity and fulfillment seem to benefit cardiovascular health, the immune system, inflammation levels, and blood pressure, among other things. Happiness has even been linked to a longer lifespan as well as a higher quality of life and well-being.

Attaining happiness is a global pursuit. Researchers find that people from every corner of the world rate happiness more important than other desirable personal outcomes, such as obtaining wealth, acquiring material goods, and getting into heaven.

Positive psychology is the branch of psychology that explores human flourishing. It asks how individuals can experience positive emotions, develop authentic relationships, find flow, achieve their goals, and build a meaningful life.

Propelled by University of Pennsylvania psychologist *Martin Seligman*, the movement emerged from the desire for a fundamental shift in psychology—from revolving around disease and distress to providing the knowledge and skills to cultivate growth, meaning, and fulfillment.

Determiners of happiness:

The basic tendency of human being is to express the emotions in his environment towards the stimulus. Basically, we express our emotions in two ways as positive or negative form. When we feel pleasure experience in our environment we express positive emotions and when we feel sad experience in our environment we express negative emotions. The mental state of expression of positive emotions in a pleasure form may be called happiness. Expression of positive emotions depends on the positive functioning of physical, psychological and social functioning. In other words we can say that happiness is the combination of physical, psychological and social wellbeing. Happiness has been a topic of interest for many centuries, starting with ancient Greek philosophy, post-enlightenment western-European moral philosophy to current quality-of-life and well-being research in social, political and economic sciences.

The **factor** that has been most closely linked to high levels of happiness is **social relationships**. Research consistently shows that people who have strong social relationships tend to report higher levels of well-being.

Many of the factors that may first come to mind do not seem to play a major role in happiness is **Wealth**. Income leads to smaller and smaller gains in happiness as income levels rise.

Health also plays a role in subjective well-being, but the associations are, again, surprisingly small. Surveys of representative populations show that objective measures (including doctors' reports, hospital visits, and lists of symptoms) are very weakly correlated with happiness. Subjective reports (such as a person's own evaluation of his or her health) tend to correlate more strongly, but even these associations are, at most, moderate in size.

Religious people tend to report greater happiness than nonreligious people, though the size of these effects varies depending on whether religious beliefs or religious behaviors are measured. Factors such as intelligence, education, and job prestige are also only slightly related to well-being.

In contrast to the relatively weak effects of external circumstance, research shows that **internal factors** play a strong role in subjective well-being. Individual differences in happiness-related variables emerge early in life, are stable over time, and are at least partially heritable. For instance, behavioral genetic studies show that identical twins who were reared apart are quite a bit more similar in their levels of happiness than are fraternal twins who were reared apart. This suggests that genes play an important role.

Personality, at least some of these genetic effects may be due to the influence of specific personality traits on happiness. People who are outgoing, assertive, and sociable tend to report more intense and more frequent positive emotions. This association is so robust that some psychologists have even suggested that the two constructs—extraversion and positive affect—are controlled by the same underlying physiological systems.

There is a popular notion that **the way that people view the world** should influence their happiness. Some people always look for the silver lining in things, and presumably this positive outlook shapes the emotions that they feel. A great deal of research has been conducted to examine the cognitive processes that affect a person's subjective well-being.

Many researchers examine the role that **social comparison processes** play in happiness. Initially, psychologists thought that people evaluated the conditions in their own lives by comparing them with the conditions in other people's lives. Those individuals who are worse off than the people around them (in other words, people who experience upward comparisons) should experience unhappiness; those individuals who are better off than the

people around them (in other words, people who experience downward comparisons) would experience happiness.

Goals and aspirations influence happiness. Not surprisingly, people who are rapidly approaching a goal tend to experience higher levels of happiness than people who are approaching a goal more slowly. But research also shows that simply having important goals is associated with greater happiness.

Levels of Happiness:

The pursuit of happiness is a human characteristic everyone has in common. For many, happiness seems to be an elusive goal, and it's easy to sink into misery and unhappiness. When this happens, people may turn to destructive substitutes like drugs or alcohol to mask the pain.

There are many different types of happiness that you can attain: joy, excitement, gratitude, pride, optimism, contentment and love, to name a few. Each person has something unique that makes them happy. As you become more self-aware, you'll be able to reach a new level of contentment.

Here, we will look at the different types of happiness as you examine the things in your life that make you happy.

The four levels of happiness represent your personal priorities and how you relate to others. The lower levels of happiness (Level 1 and Level 2) are more immediate feelings. Higher levels of happiness (Level 3 and Level 4) are more rational and related to your values and ethics.

Level 1: Pleasure

The first level of happiness includes the fundamental drivers in your life — physical pleasure and immediate gratification. This form of happiness is relatively short-lived and shallow. Examples include a delicious meal, new clothes or even listening to your favorite music. Although not inherently wrong, getting stuck at the first level of happiness is a constant roller coaster of seeking satisfaction in temporary desires.

Level 2: Passion

Whether it's a hobby or getting recognition at your job, being passionate about something is an excellent source of happiness. Yet it's usually based on a need to satisfy your ego.

Passion is needed to gain self-confidence. However, if you get stuck at Level 2, you may become obsessed with winning so much that you feel the need to keep others down. This type of happiness is not enduring.

Level 3: Purpose

When you feel like your talents and skills allow you to serve others and are part of something bigger, this can give you a sense of purpose, fulfillment and long-term happiness. Everyone wants to think that their life has meaning. Deeper, longer-lasting happiness grows as you make a positive difference in the world.

Level 4: Ultimate Good

The fourth level of happiness is known as ultimate good. This is a fundamental desire we have as human beings for perfect truth, goodness, beauty and love.

Many people find this form of happiness through their religious beliefs. Even those who don't believe in a higher power can find happiness in their pursuit of truth, beauty, love and goodness in them and in helping others. This level of happiness is often considered the most enduring and profound.

Signs of a Happy Person

Happy people live with purpose. They find joy in lasting relationships, working toward their goals, and living according to their values. The happy person is not enamored with material goods or luxury vacations. This person is fine with the simple pleasures of life—petting a dog, sitting under a tree, enjoying a cup of tea. Here are a few of the outward signs that someone is content.

- Gives and receives without torment
- Lives with meaning and purpose
- Does not feel entitled and has fewer expectations
- Does not hold grudges
- Does not register small annoyances
- Does not angst over yesterday and tomorrow

-
- Does not play games
 - Is open to learning new things
 - Is high in humility and patience
 - Is not spiteful or insulting
 - Is often grateful
 - Is not a martyr or victim
 - Is not stingy with their happiness
 - Smiles and laughs readily
 - Goes with the flow
 - Practices compassion
 - Exercises self-care
 - Enjoys healthy relationships
 - Is happy for other people

Myths of Happiness

Misperceptions abound when it comes to what we think will make us happy. People often believe that happiness will be achieved once they reach a certain milestone, such as finding the perfect partner or landing a particular salary.

Humans, however, are excellent at adapting to new circumstances, which means that people will habituate to their new relationship or wealth, return to a baseline level of happiness, and seek out the next milestone. Fortunately, the same principle applies to setbacks—we are resilient and will most likely find happiness again.

The thoughts below exemplify the misconceptions about happiness:

"I'll be happy when I'm rich and successful."

"I'll be happy when I'm married to the right person."

"Landing my dream job will make me happy."

"I can't be happy when my relationship has fallen apart."

"I will never recover from this diagnosis."

"The best years of my life are over."

World Happiness Report:

The report of happiest countries in the world is a publication of the Sustainable Development Solutions Network, a global initiative of the United Nations. Each annual report is accessible to the public on the World Happiness Report website.

The rankings of national happiness are derived from a global survey conducted by the polling company Gallup, Inc., known as the Cantril Ladder survey. In this survey, individuals are asked to envision a ladder, with a perfect life rated as ten and the worst possible life rated as 0. They are then asked to assess their current lives on this 0 to 10 scale. The report analyses these evaluations and correlates them with various life factors.

The life factor variables employed in the report reflect determinants commonly associated with disparities in national-level life evaluations. However, some variables, such as unemployment and inequality, are excluded due to the unavailability of comparable data across all countries.

The adoption of subjective measurements of well-being represents a bottom-up approach, empowering respondents to evaluate their well-being. The Cantril Ladder is valuable in this context as it allows respondents to anchor their assessment based on their perspectives.

In the report, experts from various fields, including economics, psychology, survey analysis, and national statistics, discuss how well-being measurements can effectively gauge a nation's progress and address other related topics.

Each report is structured into chapters that delve deeper into happiness-related issues, such as mental health, the tangible benefits of happiness, the role of ethics, policy implications, and connections to the Organization for Economic Co-operation and Development's (OECD) approach to measuring subjective well-being, as well as other international and national initiatives.

India's rank in happiness index:

India is currently positioned at 126th place out of 146 countries with Happiness score of 4.036, according to the World Happiness Report, classifying it as one of the world's least joyful nations. India's rank in the happiness index is lower than its neighboring countries like Nepal, Bangladesh, and China.

This drop in happiness levels is closely linked to India's escalating mental health crisis, which has been exacerbated by the challenges posed by the Covid-19 pandemic.

Secrets of the happiest countries

Why do some countries routinely clinch the top positions in the World Happiness Report while others fail? When you look into what sets these happiest countries in the world apart from the rest of the world, several common themes emerge:

Strong social support: The happiest countries in the world have robust social support systems, which include healthcare, education, and unemployment benefits. This safety net ensures that citizens can face life's challenges with confidence.

Freedom and trust: High levels of freedom and trust in government and fellow citizens contribute to a sense of security and well-being.

Work-life balance: Most of the happiest countries in the world prioritise work-life balance, with shorter workweeks, longer paid vacations, and family-friendly policies.

Connection to nature: Access to beautiful natural landscapes and outdoor activities often plays a role in the overall happiness of the population.

CONCLUSION:

In conclusion we can say that happiness is a mental or emotional state of well-being characterized by positive or pleasant emotions ranging from contentment to intense joy. A variety of biological, psychological, religious and philosophical approaches have striven to define happiness and identify its sources. The basic tendency of human being is to express the emotions in his environment towards the stimulus. Basically, we express our emotions in two ways as positive or negative form. When we feel pleasure experience in our environment we express positive emotions and when we feel sad experience in our environment we express negative emotions. The mental state of expression of positive emotions in a pleasure form may be called happiness. When we analyzed these approaches we find that happiness and wellbeing is a state of mind developed by three basic interlinked elements such as physical or structural health, psychological or mental health and social health.

REFERENCES:

- <https://ijip.in/wp-content/uploads/2019/02/04-Happiness-and-Wellbeing-by-Ruchi-Sundriyal-Dr.-Ravindra-Kumar.pdf>
- <https://7summitpathways.com/blog/the-four-levels-of-happiness/#>
- <https://www.britannica.com/topic/happiness>
- <https://psychology.osu.edu/about/what-psychology#:~:text=Psychology>
- <https://www.psychologytoday.com/us/basics/happiness>
- <https://www.forbesindia.com/article/explainers/happiest-countries-in-the-world>

IMPACT OF ACADEMIC PROCRASTINATION ON ACADEMIC ACHIEVEMENTS: A REVIEW

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What affects the academic achievements of any student the most it's time management. Although most of the students constantly delay their academic work. This is what is called academic procrastination. Academic procrastination is a self-disabled behavior that affects people. There are many internal or external factors that influence students such as becoming distracted people who procrastinate are easily distracted by looking at an activity that is too interesting or fun. In the Academic procrastination, Procrastination Causes, Levels, Gender our search, on the other hand, was not constrained by a time limitation. This is a relatively typical occurrence that can lead to major performance and increased stress, students engage in academic procrastination when they put off completing tasks, projects, and assignments unnecessarily. Drawing on the literature- an attempt was made to identify the effect of academic procrastination on academic achievement. Academic procrastination is now a common phenomenon and its negative impact on student's achievement. When people try to complete their work in a rush until the last deadline, procrastinating can cause extra tension and anxiety. Academic procrastination and academic accomplishment were found to have a substantial association. At the end of this review, several suggestions for reducing academic procrastination are outlined.

Keywords: - Academic procrastination, Relationship, Academic achievement.

INTRODUCTION

Academic procrastination is a common problem which is found in all the people in some form or the other. This is especially a problem related to time management in students this problem is usually found, and they consider many factors responsible for it, such as the workload is so much that they are not able to complete it by trying hard. There are many such activities in the workplace which they find more interesting than that and they become more interested in doing it. Procrastination as a persistent failure to do what should be done to reach goals (Lay,1986). Academic procrastination has been coined to describe the overall tendency to postpone academic tasks in an academic setting. It is a common problem among students and many students must deal with it at practically every step of their education because of the negative effect which include academic failure and decreased well-being. Procrastination has recognized that people like to do those things which give them pleasure, they avoid doing what they do not like (Solomon & Roth Blum ,1984).

Academic procrastination is a self-disabled behavior that affects people. There are many internal or external factors that influence students such as becoming distracted people who procrastinate are easily distracted by looking at an activity that is too interesting or fun. Many social or personal factor are also responsible for procrastination. Time management skill also play a very important role in the work of procrastination because they should know which work should be given how much time or if they don't do it properly, they fail to manage the time.

There are certain things that symbolize people who procrastinate. Some of those are low self-esteem, self-efficacy, self-vital behavior, irrational worry of fulfillment or failure. A procrastinator is also said to be self-critical Because he has high expectations and wants to do something. But what will others say about him? This often does not allow such a person to begin. A procrastinator is someone who knows what he must do, even trying to do, but still doesn't (Poopla,2005). Similarly, the fear of success or failure is another characteristic of procrastinator. He is engrossed in the pain of success or failure before doing any work. That is why he is not able to complete any work even if he wants to. So, he keeps avoiding doing important work and wastes his time in other activities. Procrastinators lack self-esteem. He is late in doing any task because he believes that he lacks the ability to achieve any task sequentially. The destructive procrastination: - These are procrastinations according to the Ferron and Emmons (1994), who fail to pick up cues from the environment due to inability to defer gratification of pleasure, a lack of self-control, a lack of enthusiasm for accomplishing certain goals, and a lack of energy or organizational abilities. As a result, this sort of procrastination is frequently linked to a problem with time perception and estimation procrastinator who strives for perfection. This type of procrastinator prepares to work but refuses to do so, (Ellis and Knauss ,1977). This type of procrastination is thought to be caused by cognitive distortions or faulty thinking as a result, such procrastinators are hyper-aware and they are more likely to fear success or failure, which leads to neurotic avoidance. They lack self-efficacy and self-esteem, as well as being self-conscious and critical of themselves.

Definitions: - The Time period “procrastination” is product of parts “Pro” which means forward, beforehand and in aid of and “Crastinus” which means the following day as much as they are following day. This period derived from the Latin word “procrastinate” which means “swallowing”, “delaying”, “Pulling”, “Pausing”, “forestall moving” or “suspending a task”. This time period has been cited as a awful habit and behavioral trouble that’s skilled via way of means of many adults of their day by day works.

Causes: - crucial factor is that regardless of various definitions and thoughts concerning procrastination, motives of procrastination amongst personnel of the groups are nonetheless unknown, or even from time to time. Contradictory findings were executed on this relation. Time management is also one of the main reasons for procrastination. The procrastinator is found to have an inability to use time sequentially. He is not so goal oriented and keeps on wasting his time in low priority things. Due to this, he stops doing certain activities while focusing on non-productive activities. Another reason is that he is unable to concentrate due to external factors .as there are many distortions found in the atmosphere like; noise, teaching room is not appropriate, appropriate facilities are not available at home. Such students certainly do not take studies seriously and their only goal is to pass the class. That’s why let’s try to find the easiest way in the end and try to imitate others. Another main reason for procrastination is fear and anxiety. Instead of planning and completing them, this type of person is worried about what will happen in the upcoming tests and projects. There is another reason, refraining from doing these tasks is not the desire of the person to live or lack of knowledge and skills to do any work. Many times, the internal state of the person also becomes the reason of his delay.

OVERCOMING AND UNDERSTANDING OF PROCRASTINATION: -

- **Awareness:** - Firstly, to overcome procrastination you must understand the reasons why you procrastinate, and the work Procrastination acts in your life. You can’t come up with an effective solution if you don’t really understand the root of the Problem. So, reflect at the motives why you Procrastinate, your conduct and mind that cause procrastination.
- **Staying Motivated:** - if you are passive in class, you are probably not “entering” the curriculum and its subjects, and this undermines your motivation. Prevent that with the aid of using aiming to certainly recognize route material, now no longer memorize it or just get vid it. Instead, searching out what’s thrilling and applicable to you withinside the routl materials, placing your personal cause for each analyzing and sophistication session, and asking yourself (and others) question on what you are learning.
- **Be realistic:** - It takes time and effort to achieve goals and change habits; don’t sabotage yourself by having unrealistic expectations you can’t meet.
- **Self-talk:** - Pay attention to how you’re thinking and speaking to yourself. Talk to yourself in approaches that remind you of your desires and update old, counter-effective conduct of self-talk.
- **Time management:** To triumph over procrastination time control strategies and equipment are indispensable, however they are now no longer sufficient through themselves. And now no longer all techniques of handling time are similarly beneficial in coping with procrastination. There is a while control strategy which might be nicely desirable to overcoming procrastination and others which could make it worse. Those that lessen tension and worry and emphasize the pride and rewards of finishing duties paintings best.

ACADEMIC INTERVENTION FOR ACADEMIC PROCRASTINATION

A review of the literature offers some examples of effective interventions for Academic Procrastination. One of the recent study the evaluation of the major characteristics and aspects of the procrastination (Balkis and Duru, 2007). The author state that common counselling and psychotherapy techniques have made some improvement with procrastination. However, specific behavioral and cognitive-behavioral techniques (such as systematic desensitization, relaxation training & rational emotional therapy) appear to be more effective in reducing procrastination. Structured intention setting, breaking down assignment and converting cognitive patterns inclusive of perfectionism and worry of failure or achievement are not unusual place middle techniques used to assist lessen student’s educational procrastination The author mentioned that behavioral and CBT strategies appear to be greater powerful than widespread counselling and psychotherapy. In a recent study getting up a flipped classroom design to reduce student Academic Procrastination (Gonda, D., 2021). In this research, he said that if we say that the child may be successful in flipped classroom, then it is very important to direct the student mind.

He holds two steps for the success of this research. First, the child should study with the written material, after that watch the video to understand the key points-second, along with watching the video, students can ask the

question to the teacher in the classroom. Due to this research, a change was felt in the behavior of the children and now they started doing mature discussion that if they flipped classroom design has the potential to enhance student's self-regulatory skills, which is reflected in a change in their attitudes towards learning responsibilities. Students' attitudes to online learning outside of the classroom have changed, and thus their chances of successful completing a combination course have increased statistically significantly are preparing for a classroom meeting. Research has additionally showed that academic procrastination may be decreased with the aid of using a flipped School room design.

Ones such studies (steel & Ferrari, 2013) Teacher intervention strategies observed withinside the literature is typically powerful and easy to implement. The do now no longer requite the direction teacher to have preceding understanding of an education in any unique remedy types. These interventions take region withinside the framework of the direction elected with the aid of using the pupil and do now no longer require attendance at conferences or participation in any specialized intervention programs. These teacher- primarily totally based intervention strategies are designed to goal all college students no matter bey and procrastination habits. This is a precious gain given the full-size incidence of procrastination amongst university college students.

Flipped classroom design has the potential to enhance student's self-regulatory skills, which is reflected in a change in their attitudes towards learning responsibilities. Student's attitudes to online learning outside of the classroom have changed, and thus their chances of successful completing a combination course have increased statistically significantly.

RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT AND ACADEMIC PROCRASTINATION

Academic procrastination is typically seen as a sign of a bad disposition. Murat Balkis (2013) stated his study that academic procrastination become negatively associated with rational ideals approximately analyzing, instructional existence. Pleasure and educational achievement. In contrast rational ideals approximately analyzing have been undoubtedly associated with instructional existence pleasure and academic achievement. The effect of Structural Equation Modeling (SEM) analyses confirmed that rational ideals approximately analyzing mediated relationships among academic procrastination, instructional existence pleasure and academic achievement. one of the other study on Analysis of procrastination among University Students. The researcher has taken 500 students in his study who are from Islamia university. He focused on his study which analyzes the factors of procrastination and its impact on the learning of university students. He divided his study into 5 parts-areas of procrastination, reason of procrastination, effect of procrastination on learning of university students, negative social effect of procrastination, remedial measures. And he found the effect of procrastination on learning of university students that Academic procrastination has a negative impact on student's studies resulting in their low achievement in examinations, or it causes failure in examinations, or it creates fear of examination resulting in depression and anxiety, lowering their morale. They feel hesitant to start their academic work losing their competitive spirit students become victims of inferiority complex and eventually stop their studies. (Akinsola, Adedeji Tella, Adeyinka Tella ,2007). Correlates of academic procrastination and mathematics achievement of Undergraduate students reported that Academic procrastination achievement is causing more harm to the students, it is having a negative effect on their studies. A total of 100 part 3 and 4 students from the department of mathematics and mathematics education at the Universities of Lbadan and Lages, Nigeria was used in the study. (Tuckman ,1991) designed and validated a 35- item academic procrastination scale, which was used to collect data, along with the subjects GPA score to date in mathematics and the study results also indicated that there is significant difference between Procrastination and math achievement, with a student with low procrastination having higher achievement in math than students with moderate and high levels of procrastination. This has very important implications for the quality and number of students who become available for higher studies in the field of mathematics in his study. Scholar said about the gender difference that Academic procrastination and Gender difference are independent of Each other. This means that both males and females procrastinate in Similar manners. Tuckman (1991) emphasizes that Procrastination describes themselves as people who doubt their abilities and that each gender entity has its share of such people. (Bashir and Gupta ,2018) A deeper look into the relationship between Academic Procrastination and Academic performance among universities students stated that academic Procrastination is now a common phenomenon which adversely affect the student's performance. They used convenient sampling and conducted their research on 380 university students. He found in his study that a significant negative association exists between academic procrastination and the academic performance of university students. The academic performance of pupils was also severely impacted by aspects of academic procrastination such time management, work aversion, conscientiousness and personally initiative. According to the findings, people who

experience significant intellectual delays perform poorly in School. (Kim & Seo, 2015) They conducted a meta-analysis of the relationship between procrastination and academic performance and stated that academic performance was negatively correlated with academic Procrastination. They gathered these results using a meta-analysis of 33 pertinent studies with a total of 38,529 participants. The results of this analysis showed that procrastination was negatively connected with academic success, the choice of measurements or indicators had an impact on this connection. The detection of a substantial link between procrastination and academic achievement was hindered using self- reported scales. The observed association was also impacted by the participant's demographic makeup in each study.

In conclusion, we can say that there is negative relationship between academic procrastination and academic achievement. Academic procrastination act as a negative variable on the students and behave in a manner that leads them to laziness and anxiety. On the basis of all these reviews we check our study by dividing it into demographic variables.

a) On the basis of gender

b) On the basis of levels

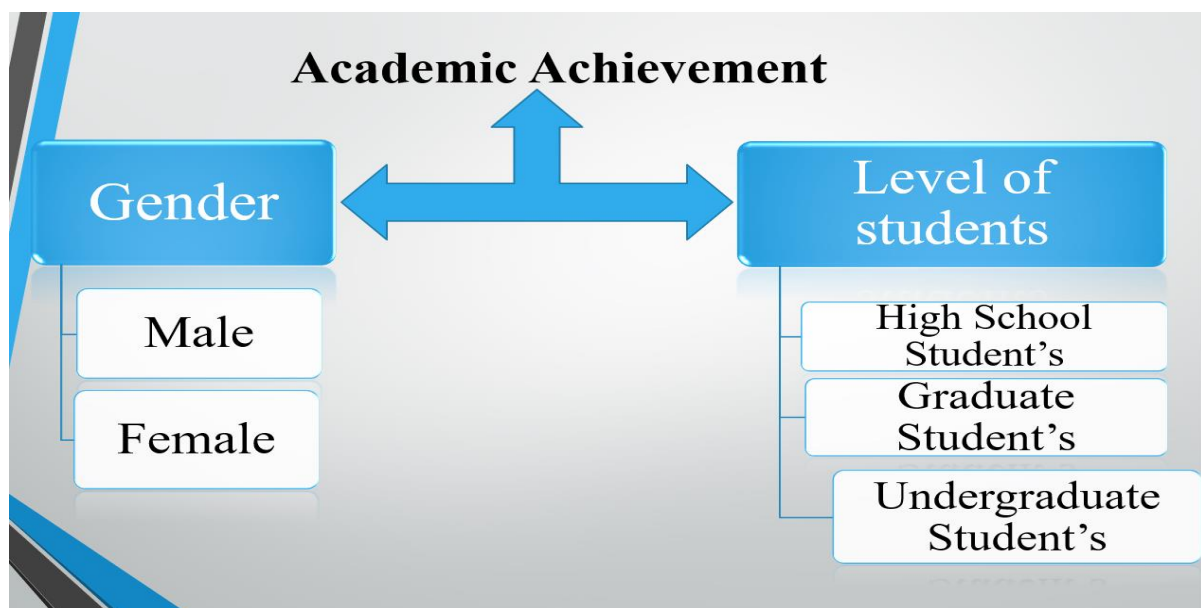


Figure No. 1

GENDER

Hakan Karatas (2015) in his study Correlation among academic procrastination, personality traits and academic achievement state that the correlation among Academic procrastination, personality traits and academic achievement. Researchers find the negative relationship between academic procrastination and academic achievement. The impact of personality qualities, particularly the conscientious dimension, an academic procrastination and accomplishment is demonstrated in the study. First and foremost, it is critical to remove the barriers that cause procrastination, which has a detrimental impact on student's learning, resulting in bad grades or failure in exams, as well as despair and anxiety during the school years. Academic advisors, counsellor, and educators should be particularly interested in this result. New academic programmes are being developed to assist students in overcoming academic procrastination, which is one of the leading causes of poor academic performance. The researcher in this study also finds that the role of gender differences in academic procrastination and said that role of gender in academic achievement, which is in favor of girl students. The literature cites these results as female students using self-regulation strategies more frequently and effectively. Murat Balkis & Erdin Duru (2017) The study was designed to examine the gender differences in the relationship between academic procrastination, academic performance, and satisfaction with academic life. Researcher used in his study 441 under-graduate students (49.4% of female and 50.6% of male) and finds that academic procrastination was inversely associated with academic performance and satisfaction with academic life. Female student reported lower level of academic procrastination that male counter parts, and higher levels of academic performance and satisfaction with academic life. These findings suggested that male students were more prone to procrastination, receiving low grades and being dissatisfied with academic life, male students should be the focus of an intervention programme developed by a college psychologist and counsellor. A psychoeducational

course tailored to boys could be offered to assist them develop coping techniques for their dilatory conduct. Examining the differences in procrastination Tendencies among university students Mandap, M.C. (2016): Gender disparities in procrastination were discovered, with male students procrastinating more than female students. Because of their hatred of activities and the perceived difficulty of completing a task, male students had greater procrastination scores. Procrastination scores were substantially greater among students with low perceived academic self-efficacy than in students with strong self-efficacy when students were divided into group based on the sort of academic course they were taking and their degree of achievement, no significant differences in procrastination scores were detected. Jabeen Khan (2014): Academic procrastination among male and female university and college students. He took a sample of 200 students in his study. He did his study with 3 objectives. Examine the gender differences in academic procrastination, to investigate the variations in procrastination across college and university students, to research academic procrastination across age groups. He found in the result that Male students will have more delays than female students. The results show that male students procrastinate more than female students, procrastination behavior among college students will be higher compared to the university. The result of the present study demonstrates a significant difference between the two groups. Delays will be more in students below 20 years than those above 20 years of age. Taking age factor into academic procrastination reveals age factor into academic procrastination reveals significant difference between age groups. Younger individuals procrastinate more than older persons.

Based on all reviews, we can say that low level of procrastination is found in girl as compared to boys.

LEVEL

To examine the relationship between academic Procrastination and academic achievement we divide our study into levels. A review of literature offers some examples of levels.

A cross sectional study on Procrastination: Who procrastinate more?

(Ozer, U., 2011) Examined the level and prevalence of academic procrastination on high school, undergraduate and graduate students. According to the findings of the descriptive statistics conducted on each group, undergraduate exhibit the highest level of procrastination. The high school participants procrastinate less than the other two student's groups, according to the result, and graduates are the second category of procrastinators. He also examined that student in high school and college admitted to procrastinating on studying for examinations almost always or always. Whereas graduate students allegedly procrastinate more when it comes to completing terms papers. One of the recent studies on academic procrastination: prevalence among high school and undergraduate students and relationship to academic achievement (Jill Jansen, 2015) stated that: -For teachers, counsellors, and parents these discoveries how significant, educational ramifications. He examined that we can better understand how academic procrastination manifests itself as a student's age by comparing the prevalence of procrastination and undergraduate college students. He also suggested people who struggle with procrastination may need to start with the simplest task and work their way up to more difficult and demanding activities. Students are more inclined to put off finishing larger projects.

Not much research has been done in this field yet, but we can say on the basis of their review that graduate students procrastinate more than higher school students, age factor has a dual role e.g., 20–25-year-old students more procrastinate. Because at this age size, they prefer to spend most of their time in their peers group and like to do the same work or activities that their peer group is doing, which has negative academic impact on them.

DISCUSSION AND SUGGESTIONS

One of the most crucial elements of the educational system and the main determinant of how well a school is doing is the academic achievement of the student's Academic success is influenced by both internal and external influence, with academic procrastination being one of the internal and external influences, with academic procrastination being one of the internal causes. Therefore, the goal of the current study was to draw conclusions on the relationship between demographic variables academic procrastination and performance, while it is obvious that academic procrastination is a serious issue that must be handled on a personal and environmental level, procrastination exhibit traits like a preference for easy schoolwork, poor time management, a referral to explain their skills, difficulties making decisions and a tendency to dwell on the past. As a result, they waste chances, abandon jobs unfinished and put off doing work. The study examined academic intervention for academic procrastination as well as the association between academic procrastination is associated with poor academic achievement, according to the systematic research. Low achievement could be an unavoidable side effect of procrastinating. According to our findings, (Kim, S. & Lee, 2015) also investigated the possibility that academic procrastination and academic accomplishment have a bad relationship. This study found that pupils with low academic procrastination outperform those with high levels in terms of academic

accomplishment. Our findings also supported by Murat Balkis & Erdin Duru (2017) that female students reported lower level of academic procrastination in comparison to male students. According to review we can say that undergraduate students show maximum procrastination among high school and graduate students. Based on reviewing many papers, academic procrastination can be cure with the help of intervention program and the study has given suggestions to the teachers as to how he can save the students from procrastination.

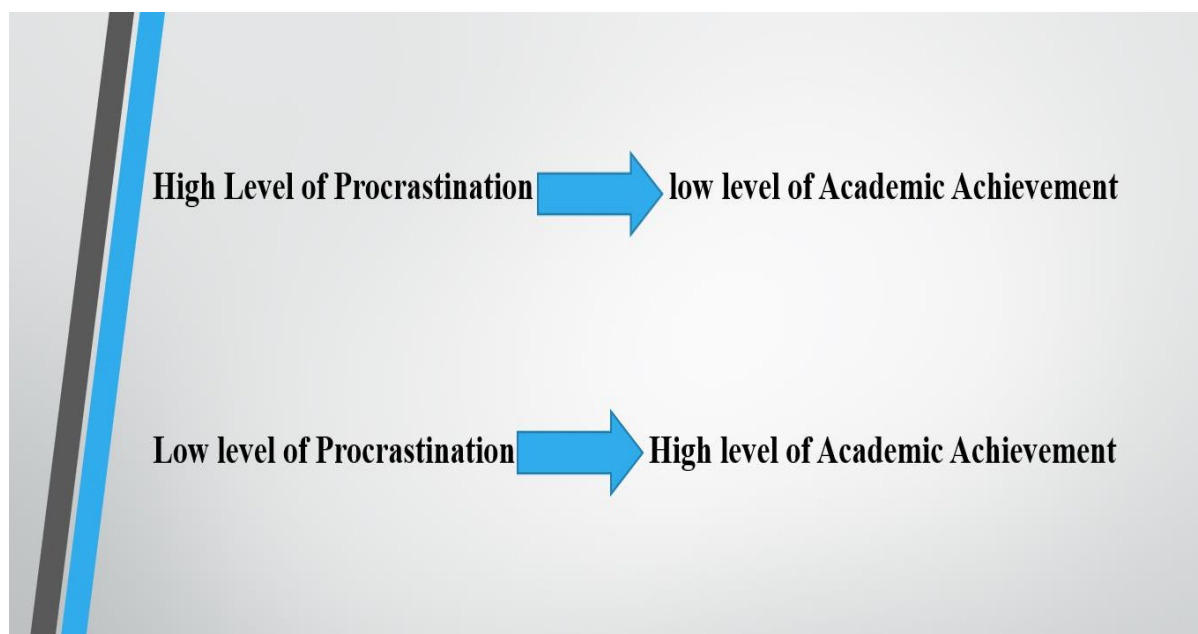


Figure NO. 2

IMPLICATIONS: -

The study findings show potential practical applications. It is important to remember that procrastination has detrimental effect on student's lives, and many students have run into difficulties because of their attitudes and practices toward procrastination. Researchers need to come up with useful strategies to assist students in lessening the frequency of this activity since many students have been discovered to be aware of it and have stated that they desire to do so during tests, when doing assignments and when writing term papers. It is recommended that some programmes be developed and implemented to instruct pupils in task oriented coping techniques.

CONCLUSION

The study was divided into two parts, one based on gender, and one based on level. Reviewing many literatures found negative associations between academic procrastination and academic achievement. When studying based on level and gender, undergraduate students is more procrastinate than high school and graduate students, male is more procrastinate than female.

The association between academic procrastination and academic accomplishments is the main topic of this study. The findings of this preliminary research demonstrate that there is a significant link between these variables. Academic procrastination, however, can also be regarded as the failure to complete an academic task within the anticipated or desired time range despite knowing that one must and possibly wishes to do so.

SUGGESTION FOR FURTHER RESEARCH: -

No research is Complete in itself. Due to limited time and resources, the researcher limited the research as it was not possible to deal with all aspects of the problem under consideration. Therefore, some suggestions for further research based on present study experiences are given below: -

The present study has been conducted by using only one variable academic procrastination. Similar study can variables like: - Anxiety, stress, self-efficacy, Motivation level etc.

The present study was delimited to Gender and level.

Further it can be extended to another level. i.e., 0Age group, School type (Government and private). Etc.

REFERENCES

- Abu, K.N.& Saral, G.D. (2016). The reasons of academic procrastination tendencies of education faculty students. *The online journal of new horizons in education*, 6(1), 165-169.

- Akinsola, M.K., Tella, A.& Adeyinka, T. (2007). Correlates of academic procrastination and mathematics achievement of university undergraduate students. *Eurasia journal of mathematics, science, and technology*, 3(4), 363-370.
- Balkis, M. (2013). Academic procrastination, academic life satisfaction and academic achievement. the mediation role of rational beliefs about studying. *Journal of cognitive and behavioral psychotherapies*, 13(1), 57-74.
- Batool, S. (2020). Academic achievement: interplay of positive parenting, self -esteem, and academic procrastination. *Australian journal of psychology*, 72(2), 174-187.
- Bilge, U.O. (2011). A cross sectional study on procrastination: who procrastinate more? *International conference on education, research, and innovation*, 18(1), 34-37.
- Duru, E.& Balkis, M. (2014). The roles of academic procrastination tendency on the relationships among self-doubt, self-esteem, and academic achievement. *Education and science* 2014, 39(173), 274-287.
- Fritzsche., B.A., Young, B. R.& Hickson. (2003). Individual differences in academic procrastination tendency and writing success. *Personality and individual differences*, 35(7), 1549-1557.
- Gonad, D., Pavlovicova, G., Tripakova, A. & Duris, V. (2021). Setting up a flipped classroom design to reduce student academic procrastination. *sustainability* 2021, 13(15). 274-285.
- Goroshit, M. (2018). Academic procrastination and academic performance: an initial basis for intervention. *Journal of prevention & intervention in the community*, 46(2), 131-142.
- Gregory, S., Theresa, W.& Lori, O. (2007). Doing the things, we do: a grounded theory of academic procrastination. *Journal of educational psychology*, 99(1), 12-25.
- Hussain, I. & Sultan, S. (2010). Analysis of procrastination among university students. *procedia social and behavioral sciences*, 5(1), 1897-1904.
- Karatas, H. (2015). Correlates of academic procrastination, personality traits, and academic achievement. *Anthropologist* (2015), 20(1,2), 243-255.
- Khan, J.M. (2014). Academic procrastination among male and female university and college students. *FWU journal of social sciences*, 8(2), 65-70.
- Manda.,M.C. (2016). Examining the difference in procrastination tendencies among university students. *International journal of education and research*, 4(4), 431-436.
- Moonaghi, H.K.& Beydokhti, T.B. (2017). Academic procrastination and its characteristics: a narrative review. *Future of Medical Education Journal*, 7(2).
- Olubusay, A. (2010). Academic procrastination in mathematics: causes, dangers, and implications of counselling for effective learning. *International education studies*, 13(3), 1913-9020.
- Steel, P.& Kling, S.K. (2016). Academic procrastination: psychological antecedents revisited. *Australian psychologist*, 51(1), 36-46.
- Thakkar, N. (2009). Why procrastinate: an investigation of the root causes behind procrastination. *Lethbridge undergraduate research journal*, 4(2), 1-12.
- Wolters, C.A. (2001). Understanding procrastination from a self-regulated learning perspective. *Journal of educational psychology*, 95(1), 179-187.
- Zacks, S.& Hen, M. (2018). Academic intervention for academic procrastination: a review of the literature. *Journal prevention and intervention in the community*, 46(2), 117-130.

A PRODUCTIVITY OF AGRICULTURE IN VANGAON REGION OF PALGHAR DISTRICT IN COMPARISON WITH LATGHAR (DAPOLI) REGION OF RATNAGIRI DISTRICT WITH SPECIAL REFERENCE TO RICE CULTIVATION

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ABSTRACT

In this review paper we have mentioned about the situation of productivity of agriculture in Vangaon Region of Palghar District in comparison with Latghar (Dapoli) region of Ratnagiri District with special reference to productivity of rice cultivation of these region. Since last 15 years Vangaon was standing on one of the top position in Palghar District in case of rice cultivation. Although, Vangaon was standing on top position once upon a time in total area under rice, the productivity of rice is not so satisfying currently, comparing with other places of Palghar district as well as Konkan region such as Dapoli, Latghar, Harnai, Anjarle of Ratnagiri district etc. Here it has been tried to explain the concept of agricultural productivity and reasons for decreasing productivity of Vangaon region and need to improve the Productivity. Also, the strategies are mentioned to overcome the problem of low productivity.

Keywords: Agricultural Productivity, Rice, Agriculture, Vangaon, Farmers, Crops.

MATERIALS AND METHODS:

The present study is based on primary data to fulfil the objectives. Multistage sampling technique was used for selection of rice cultivators, tahsil as primary unit, village as secondary were taken for the study. Rice is cultivated as a food grain crop on large scale basically in Ratnagiri and Palghar District hence, Ratnagiri and Palghar districts were selected purposively and highest area was reported under Dapoli, Latghar, Anjarle and Harnai villeges of Dapoli tahsils of Ratnagiri district. Hence, these villages were selected purposively for the comparative study. From these villages, list of commercial rice cultivators was prepared with the help of talathi and Sarpanch of that particular village. From each selected village, 15 commercial rice cultivators were selected randomly. Thus, the final sample was consisted of 8 villages and about 20 rice cultivators from Vangaon, Shivale, Ambadi, Mokhade, Bandhan villeges of Palghar District as well as Dapoli, Harnai, Latghar and Anjarle of Dapoli Tahsils of Ratnagiri. The data were obtained from 20 rice cultivators by personal interview method for the year 2022-2023 in the month of January, 2024. The data were analyzed by adopting simple statistical tools such as arithmetic mean, percentage and ratios. To study the effect of farm size on productivity, the selected sample cultivators were classified according to their size of land under rice crop. The grouping was done by calculating mean and standard deviation of the area under rice production. The stratification was carried out as small, medium and large size farms and results were presented accordingly.

1. INTRODUCTION

Agriculture has been the backbone of the Indian economy and it will continue to remain so far, a long time. It has to support 17 per cent of world population from 2.3 % of world geographical area and 4.2 % of world's water resources. In India between 1965-66 and 2010-11, total food grain production was increased by over 230%. During this period, rice production increased from 30.59 MT to 95.32 MT – a straight line growth of over 211%. In Maharashtra, the rice is the main crop of Kharif season. This crop is cultivated particularly in high temperature and in the high rainfall zone. In Maharashtra, Thane, Palghar, Raigad, Ratnagiri and Sindhudurga districts of Konkan are the main producers of rice. In Palghar district of Maharashtra the rice is being cultivated predominantly in Wada, Jawhar, Mokhada, Dahanu, Vangaon, Vasai, Ambadi, Shivale etc. In Palghar, Vangaon was standing on top position in total area under rice. But the productivity of rice is not so satisfying currently, comparing with other places of Palghar district as well as Konkan region such as Ratnagiri. So many factors are responsible for this reason such as socio economic background of farmers, land holdings and fragmentation, farm operations and implements, land degradation, uncertain Monsoons and inadequate irrigation facilities, inability to use HYV Seeds etc. but by implementing certain measures the problem of low productivity of this region can be solved.

1.1 Understanding Agricultural Productivity

Agricultural Productivity is one of the components of regional development. It may be pointed out that, the agricultural development should be assessed by the agricultural production and productivity, and also by various physical inputs, extent of cultivated area, irrigation, fertilizers, improved seeds and labour availability. It is assessed in this manner, agricultural development may constitute as one of the significant components of

regional development. It helps to increase food surplus to growing population, helps to expand the secondary and tertiary sectors, increases rural incomes and improves the welfare of the population of the region.

Formula:

Agricultural productivity = Total agriculture crop production/Total land area (hectares)

Agricultural productivity is measured as the ratio of agricultural outputs to agricultural inputs. While individual products are usually measured by weight; their varying densities make measuring overall agricultural output difficult.

2. PROFILE OF VANGAON VILLEGE: -

Vangaon is a small village (524.46 ha.) located in the north east part of Palghar district, about 81 km from Thane city. Low crop diversification well represented here. This village is connected to Palghar, Dahanu and Thane by road and railway. Other services available at Vangaon include a primary school, a secondary school, Junior college, a dispensary, a health center, electric power supply, well water for drinking, pucca road, railway station, bus stand, post office etc. Vangaon has experienced a steady growth of population during the last decade (total increase 32.66 per cent).

2.1 General Landuse of Vangaon Villege:

Vangaon situated on the western coastal plain of Palghar district, is surrounded by plain areas. Small stream rises from the eastern tip and flows westwards, finally to the seawards. The moderate slope in the western side and nature of soil cover have contributed to the present land utilization for cultivation. Forest occupies 85.21 ha. area in the year 2016, it shows decline since 1991. Net sown area in the village shows decline and increase in fallow in the year 2016. Forest covers a large area in the eastern half of the village. It is observed that areas not suitable for cultivation are given to grass. Rest of the area comes under the category of area occupied by houses, huts, road, railway and current fallow and other fallows.

Proportion of Total Area Under Different Categories of Land use in Vangaon (2023). (Area in hectare) :

Sr. No.	Landuse	1991	2001	2023
1.	Forest	113.62	104.55	85.21
2.	Net Sown Area	318.23	368.38	284.59
3.	Cultivable Waste	58.5	28.29	11.04
4.	Not Available for Cultivation	34.54	22.65	31.55
5.	Fallow	-	-	112.60

Source: Village Records, Panchayat Office, Vangaon

2.2 Agricultural Landuse of Vangaon

Nearly half of the area (285 ha.) of Vangaon village is available for cultivation. Most of it is located in the western part of the village. Some patches under cultivation are also observed along the eastern margins. In the coastal plain area, soil is thicker. Moderate black soil is common in the cultivable areas, while coarse shallow varieties occupy the eastern part. The table given below indicates the share of each crop in the total cropped area. It is obvious that in an area receiving rainfall about 2000 mm. rice should dominate the cropping pattern. Rice alone accounts for about 36.61 per cent of the cultivated area followed by grass, fruits and vegetables. Generally better agricultural lands are under rice, whereas inferior lands are given to grass. Fruits and vegetables cover a comparatively smaller area. Among the fruits, Chiku occupies 7.96 per cent of the gross cropped area. Vegetables are grown on 9.76 per cent of cropped area.

Proportion of G.C.A.(Gross Cropped Area) Under Different Crops in Vangaon (2023) :

Sr. No.	Crop	Gross Cropped Area	Percent of G.C.A.
1.	Rice	104.20	36.61
2.	Grass	121.39	42.65
3.	Vegetables	27.80	9.76
4.	Fruits	31.21	10.96

Source: Village Records, Panchayat Office, Vangaon

Proportion of G.C.A.(Gross Cropped Area) Under Rice Cultivation in Vangaon as Compare to other Places of Palghar District (2023) :

Sr. No.	Villages	Gross Cropped Area	Percent of G.C.A.
1.	Vangaon	104.20	36.61
2.	Shivale	151.00	36.61
3.	Mokhade	297.70	21.60
4.	Ambadi	92.49	52.25
5.	Bandhan	197.83	59.39

The above table shows that, the percentage of G.C.A. under rice cultivation in Vangaon as compare to other places in Palghar. The percent of GCA under rice cultivation of Shivale and Vangaon is 36.61% where as Bandhan has highest, i.e. 59.39% followed by Ambadi which is 52.25%. Mokhade has the lowest percentage of G.C.A. i.e. 21.60%.

Proportion of G.C.A.(Gross Cropped Area) Under Rice Cultivation in Latghar as Compare to other Places of Dapoli Tehsil of Ratnagiri District (2023) :

Sr. No.	Villages	Gross Cropped Area	Percent of G.C.A.
1.	Dapoli	154.20	42.36
2.	Anjarle	97.80	58.61
3.	Latghar	298.56	69.60
4.	Harnai	82.49	53.28

The above table shows that, the percentage of G.C.A. under rice cultivation in Lathgar as compare to other places in Ratnagiri. The above table clearly indicates that, the percentage of G.C.A. under rice cultivation is highest at Latghar followed by Anjarle, Harnai and Dapoli. Percentage of G.C.A. is always higher in Ratnagiri than that of Palghar District.

3. REASONS FOR INCREASE IN HIGH PRODUCTIVITY OF RICE IN LATGHAR (DAPOLI): -

Konkan is a coastal region of Maharashtra state. It contributes maximum to the rice production in the state of Maharashtra. Konkan being a high rainfall zone, most of the area is under rice crop during kharif season. However, rice being main crop of Konkan region mainly because of the modernization of rice crop cultivation technology and due to availability of improved high yielding varieties of rice increased per hectare yield of rice in Konkan during recent years. After the establishment of Konkan Krishi Vidyapeeth Dapoli on 18th May, 1972, breeding programs were guided by modern rice technologies and resulted in the development of several rice varieties with high yield potential and other desirable traits. University has developed approximately 25 high yielding varieties with improved architecture and 5 excellent rice hybrids of various durations. In addition to development of varieties, University has recommended several modern technologies for the benefit of farmers. Rice is the most staple food crop of North Konkan region. Considerable research efforts have gone into rice crop in the state. In all 53 varieties of rice are being cultivated in the North Konkan region of Maharashtra during last 12 years. Among the 53 varieties cultivated, 29 varieties have been developed by and released by Dr. Balasaheb Sawant Konkan Krushi Vidyapeeth, Dapoli. Out of these 29 varieties released, 22 varieties are still being cultivated. Other factors such as agricultural subsidies, adequate credit facilities, implementation of Land Reform Programs, improved seeds and fertilizers, proper irrigation facilities and expansion of technical knowledge etc. factors are also responsible for increase in high productivity of Rice in this region.

4. REASONS OF LOW PRODUCTIVITY OF RICE IN VANGAON:-**4.1 Socio-Economic Background of Farmers:**

A major proportion of total farm workers in Vangaon comprises of small holders. Among the small holders many farmers own less than three acres of land which is divided into fragments. Through the information collected from personal interviews with farmers relates to the size of holding, attitudes towards application of new methods, techniques, the type of implements used, investment in the farm, nature of agricultural operation, credit facilities, marketing of that villages, we can say that, small farmers cannot afford to use improved seeds, fertilizers and pesticides. Those who own lands above 10 acres with irrigation facilities are more enthusiastic about new techniques. They own at least two bullocks, tractor and all implements essential for farming like plough, harrow, seed drills, oil engines or electric pumps. Some farmers have successfully implemented new techniques in the farm; this indicates the progressive attitude of the farmers. But they are very few in numbers and unfortunately, percentage of the small farmer is more in Vangaon than landlords who cannot afford to adopt modern techniques.

4.2 Land Holdings and Fragmentation:

In order to understand the structure of land holdings resulting from interaction between physio - socio-economic elements and its impact on agricultural patterns, data for the total land holders, size of landholdings, location of the holdings, and number of fragments were collected from the village records available at the Village level Revenue and Panchayat Office. It is generally understood that, a small farmer is a farmer, holding less than five acres of land (Govt. of Maharashtra, 1976). A medium farmer holds between five and ten acres of land and a big farmer is one who owns more than ten acres of land. In Vangaon, 20 % of the total area is cultivated by 60 % of the holders. In contrast, only 21 % holders own 65 % cultivable area. In Vangaon, like the rest of the coastal villages, high proportions of area are under grass.

The problem of fragmentation has been recognised long back. As the farmer's total holdings are in many instances divided into several pieces far apart from one another, efficient cultivation of all these pieces is always a problem. Fragmentation has occurred in Vangaon where the size of fragments increases with the increase in the size of holding. The number of fragments, is also observed, increases with the larger sizes of holdings. The size of fragments and the number of fragments indifferent classes of holdings reflect the influence of the nature of the terrain, productivity of the land and the choice of crops to be grown. As rice is generally grown in small fields, the size of the individual fragment tends to be relatively small in Vangaon.

4.3 Farm Operation and Implements:

A plough, a blade, harrow, and planker are the common implements used by farmers. Small holders are economically too weak to own all these implements. It is a usual practice to share these implements among three to four farmers. Rice being the major crop grown, the farm size is very small i.e. the total cultivated area is divided and subdivided into numerous small paddy fields of the size of 00.00.10 ha. This small size alone explains the emphasis on human and animal labour. Not only 'Vangaon', but the farmers in the whole area along the eastern transition zone of coastal plain do not possess any mechanized tillers like tractor.

The farmers appeared to be conservative in their attitudes towards the adoption of new techniques, use of chemical fertilizers and improved seeds. Experiments in the recent past being unsuccessful, most of the farmers do not use improved varieties of rice. Urea and superphosphate are the chemical fertilizers generally used while farm manure accounts for a major proportion of the total fertilizer application. Pesticides are not used and oil engines or electric pumps are rare.

Farmers require capital for purchases of farm inputs like fertilizers, seeds and other implements. Two co-operative banks located at Dahanu, Central Co-operative Bank Ltd. and Land Development Bank Ltd., provide the farmers with credit facilities. Vangaon has banks and agricultural service centres and small provision store. Agricultural produce in this area is transported to Thane and Navi Mumbai market centre.

4.4 Land Degradation:

For an agricultural country like India, soil is a precious resource, and degradation- of soil is a serious problem, which leads to depletion of soil fertility. The Vangaon is also not an exception to this. Soil erosion is the main form of degradation which occurs because of deforestation and unscientific agricultural practices like shifting cultivation. Increasing salinity, alkalinity and aridity because of mismanagement and repeated use are other reasons for loss of soil fertility. Also the excess unscientific method of irrigation causes to further harm to the fertility levels of the soil.

4.5 Uncertain Monsoons and Inadequate Irrigation Facilities:

The major cause of low productivity of rice cultivation of this region is that, the Government has failed to provide irrigation support to its farmers. In 2000-01 about 43.4% of the cultivated land had irrigation facilities. Almost a whole decade later, in 2008-09, only 48.3% of the cultivated area came under irrigation. Not surprisingly, the farmers located here are still exposed to the vagaries of the monsoons. The agriculture is thus rightly remarked as a gamble against monsoon. With more than half of the gross cropped area being rainfed, failure or inadequacy of rains causes fluctuation in yields. Even if the maximum irrigation potential is realized, around 86.5 mha of gross cropped area will remain under rainfed conditions. This underlines the need to develop rainfed agriculture on scientific lines.

4.6 Inability to use HYV Seeds:

High yielding variety of seeds heralded the green revolution in India. Yet even in terms of wheat and rice only 86% and 74% of the total produce comes from HYV seeds. This is mainly because these HYV requires plenty of water in addition to pesticides and chemical fertilizer support. All these call for a fair investment, which becomes all the more risky due to the absence of assured irrigation facility and blind reliance on monsoons. The efficacy of other agricultural inputs such as fertilizers, pesticides and irrigation is largely determined by the

quality of the seed used. It is estimated that i.e., most of the produce is directly consumed by the producers and surplus, if any, is generally low. This is because most of the farmers located here, being poor, use outdated implements and technology, and are not able to afford costly inputs. This results in low levels of returns and meager incomes, which in turn means low savings and low levels of reinvestments. Thus, coupled with disguised unemployment is a vicious circle operates and stagnation in agriculture prevails.

5. STRATEGIES TO OVERCOME THE LOW PRODUCTIVITY:-

Several measures have been adopted from the view of socioeconomic angles to raise the productivity of agricultural system especially in case of Rice cultivation of this region. They are as follows:

5.1 Consolidation of Holdings:

Consolidation of holding is a first step towards the modernization of agriculture practicing in this region and this should be done immediately by enacting proper legislation required in this regard. Uneconomic small farms should be properly consolidated and small fragmented holdings should also be consolidated by forming 'co-operatives and co-operative farming societies.

5.2 Overcoming Natural Factors:

Proper steps should be undertaken to overcome various problems of agriculture resulted from natural factors. All these steps include extensive flood control measures, creation of adequate irrigation facilities and supplying adequate quantity of pesticides and insecticides.

5.3 Application of Modern Techniques:

The farmers located here must apply modern techniques of cultivation by utilizing modern implements, applying adequate quantity of fertilizers, using high yielding variety of seeds, by adopting scientific rotation of crops and careful crop planning. Agricultural research should be carefully intensified and fruits of research should be made available to the local farmers.

5.4 Economic Measures:

Economic measures must be adopted in order to make the agriculture more remunerative. Proper steps must be undertaken for the improvement of farm organization and land management. Besides this, steps must be taken for the establishment of different types of agro- based industries in rural areas like Vangaon, Dahanu, Boisar etc. Provision also be made for adequate credit and marketing facilities. Moreover, the Government must introduce minimum price support policy, guarantee minimum prices of the agricultural produce and implement crop-insurance scheme to cover the various risks in agriculture.

5.5 Human Development:

For the improvement of agricultural productivity of this region, the quality of farmers should be improved and they should be imparted with adequate general and technical education. In the rural areas like Vangaon, Farmers should shed off their fatalism and adopt themselves with changing ideas. Thus, the agricultural productivity of this region can be improved with the adoption of aforesaid measures in the agricultural sector of the Palghar District.

5.6 Proper Education:

Positive efforts have been taken by the government to educate the illiterate poor farmers about the new methods of technical farming. All the marginal farmers and tillers must know how to introduce latest scientific technology in the cultivable lands. This will definitely increase the productivity.

5.7 Implementation of the Package Programmes:

Proper implementation of 'Package Programme (i.e. irrigation, high yielding variety seeds chemical fertilizers, modern machineries etc.) is necessary to increase the productivity of the soil. All these will not only increase the fertility of land, but change the single time crop producing land into multi production. In Palghar district, there is no permanent water flowing system. Thus per hectare production is very poor. Therefore, the government has to take positive initiatives. The government should implement 'Package Programme' as stated above which will help to increase the fertility of the soil.

5.8 Crop Protection:

It is estimated that, nearly 5% of the total crop production is destroyed by different insects, pests and diseases. Maximum farmers are ignorant about the use of insecticides and pesticides. Hence to increase productivity, the government must take initiatives to start several programmes regarding the crop protection.

5.9 Adequate Credit and Marketing Facilities:

To apply 'Package Programme' the farmers need adequate amount of low rate of interest credit facilities. Farmers should get easy loans at the beginning of the cultivation so that they can use all the modern

technologies in the land and improve both crop production and productivity. Not only that, the government must pay proper attention to expand the agricultural market from remote corner villages to urban areas so that sufficient amount of marketable surpluses can be generated.

5.10 Producers should be Encouraged: -

Government must encourage the producers by giving various incentives like:

- (a) By giving agricultural subsidies;
- (b) Provide adequate credit facility;
- (c) Rendering price support;
- (d) Providing crop-insurance to the poor farmers;
- (e) By implementing land reform programmes;
- (f) Use of improved seeds, fertilizers, etc.
- (g) Implementing irrigation facilities; and
- (h) Expansion of technical knowledge etc.

4.11 Research and Development:

Government of India made Indian Council of Agricultural Research and several Agricultural Universities to organize several research and development programme for the improvement of cultivation. Like Dapoli Krishi Vidyapith of Ratnagiri District, in West Bengal, Kalyani Krishi (Agriculture) Vishwavidyalaya (University) has been introduced to initiate agricultural research and development. The farmers located here also should be given a proper knowledge about the research and development taking place in the agricultural field.

6. CONCLUSION:

Thus from the above discussion, we can conclude that, from the last few years, the agricultural productivity of the Vangaon under rice cultivation is slightly decreased because the present approach of the farmers is inadequate for familiarizing the entire family with modern agricultural technology. Vangaon village lies in Palghar District and hence it is near to Mumbai and sub-urban. It is a big challenge to agrarian community of this village to produce and to fulfill the increasing demand of the city population. Multiple cropping, increasing production and productivity and demand driven production are the biggest challenges in this region. With increasing civilization, agriculture land is reducing day by day. Changing traditional mind set of farmers and general reluctance of new generation towards farming is also a challenge. However, by adopting the above mentioned measures, the agricultural productivity especially in case of rice cultivation can be increased but for this purpose, a co-ordinated approach with necessary support from Government and the local community is very essential.

REFERENCES: -

1. Village Records Panchayat Office Vangaon.
2. Ministry of Agriculture Government of India, 2012.
3. Maddina Sreekanth, AH Hakeem, Quadri Javeed Ahmed Peer and Irfath Rashid: Low productivity of Indian agriculture with special reference on cereals.
4. Vidya Sethy, Measures to Raise Agricultural Productivity in India (www.yourarticlelibrary.com).
5. Bhalla, G.S. (1995), "Globalization and Agricultural Policy in India", *Indian Journal of Agricultural Economics*, Vol.50, No.1
6. "Sustainable Agricultural Productivity Growth and Bridging the Gap for Small Family Farms": Interagency Report to the Mexican G20 Presidency Final Draft, 27th April, 2012.
7. Regional variation in agricultural development and productivity, *Indian journal of agricultural economics*, Vol.19.No.1,1964. P. 168-266.
8. Pandit, A.D, Application of productivity concept to Indian agriculture, Productivity, *Special issue on agricultural productivity* 6 (2 and 3) 1965, P.187.
9. Munir, A, *Agricultural Productivity and Regional Development*, Manak Publication New Delhi, 1992.
10. Sarma, J.S, Measurement of agricultural productivity-Concepts, Definitions, etc. *Journal of the Indian society of agricultural statistics*,27(2),1965,pp.253-57.

DIFFERENT CATEGORIES OF PRISONS AND PRISONERS IN INDIA: A REVIEW

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ABSTRACT

The word prison means different things for the different people. To the law be stable it is considered as a place where the criminals end up. To the criminal it could be an obscure hazard or an unavoidable indignity. For the social inadequate it is a shelter. To some isolated individuals it may be the only place where they can find some semblance of championship. It is the place of work for Prison officers. For the psychologist, it is a place of career in studying behavior of the prisoners. But for thousands of the people, an experience which slows up time, which crows them together, sets them apart and changes the conditions of their lives.

Keywords: Prison, People, Prisoner and Punishment.

INTRODUCTION

We use the word punishment to describe anything We think is painful; for example, we Refer to a “punishing work schedule” or a “punishing exercise program.” We also talk Of punishment in the context of parents or teachers disciplining children. However, in this discussion we will consider punishment in a particular sense. Flew argues that punishment, in the sense of a sanction imposed for a criminal offense, consists of five elements:

1. It must involve an unpleasantness to the victim.
2. It must be for an offense, real or supposed.
3. It must be of an offender, actual or supposed.
4. It must be the work of personal agencies; in other words, it must not be the natural consequence of an action.
5. It must be imposed by an authority or an institution against whose rules the offense has been committed.

If this is not the case, then the act is not one of punishment but is simply a hostile act. Similarly, direct action by a person who has no special authority is not properly called punishment, and is more likely to be revenge or an act of hostility.¹ In addition to these five elements, Benn and Peters add that the unpleasantness should be an essential part of what is intended. The value of this definition of punishment resides in its presentation of punishment in terms of a system of rules, and that it distinguishes punishment from other kinds of unpleasantness. Another definition of punishment proposed by Garland is “the legal process whereby violators of criminal law are condemned and sanctioned in accordance with specified legal categories and procedures”.² Here we will discuss forms of punishment that take place as the result of legal processes defined above.

CHARACTERISTICS OF PRISON

- The chief characteristic of prison system is, it has a unique position in the society in which organizations compete either for economic resources or for the loyalty and support of group members. It is non-competitive in the sense that no other organization challenges it directly.
- Another characteristic of prison system is, it is relatively an isolated social system. It is a structure composes of a ruling caste and a subordinate caste. The term caste is more appropriate here, however, since there is no possibility of vertical mobility across caste lines in the prison and unlike organizations of a bureaucratic type, the two castes do not share any over-all primary goal through co-operative participation in production.
- Another special feature of prison system is that it is a closed or protected system. Members of the larger society (except for the relatives of the inmates and official and non-official visitors) have no direct stake in the prison in terms of ownership, goods, services or reciprocal relations of any kind. Thus, the prison is relatively protected from outside scrutiny.

¹ Philip Bean, Punishment: A Philosophical and Criminological Inquiry, Published by Martin Robertson, Oxford, England, Ed.VIII, 1981, pp. 5-6.

² David Garland, Punishment and Modern Society, Oxford University Press, Oxford, England, Ed.I, 1990, p. 17.

- The use of force is another characteristic of prison system. This does not mean that the inmates are systematically flogged or physically tortured. The force used is not the dynamic energy of the whip: it is the static power of tool-proof steel cells. The inflexible restraint of a square of steel is a directly felt prison experience. As time turns the thumbscrew of that square down closer on the mind, the pain may express itself in a physical sensation. When, as often happens, the isolated inmate beats his own head and hands against the walls, the bloody results cannot be easily distinguished from brutality.
- Another characteristic of this authoritarian system is regimentation and de personalization. Life goes on in an absolutely unchanging routine.
- An additional characteristic of the incorrigible unit (prison) is the ever present eye of authority.
- An equally important characteristic is the unresponsiveness of the governing authority.
- A final authoritarian characteristic of the prison system is uncertainly and indefiniteness.

IMPORTANCE OF PRISONS

In every democratic society, prison has a unique role as a formal agency of the criminal justice system. The purpose of imprisonment as a punishment is plain enough the person who has committed a wrong must suffer in return. The state through the prison is entitled if not morally obligated to hurt the individual who has broken the criminal law. Since a crime is by definition a wrong committed against the state. Imprisonment should be punishment, not only by depriving the individual of his liberty, but by imposing a kind of painful condition under which the prisoner must live within the walls. Today prisons serve main three purposes, which may be described as custodial, coercive and correctional. A prison as a place of correction historically is developing and new in conception. Earlier prisons served only the custodial function, where an alleged offender could be kept in lawful custody until he could be tried and if found guilty punished. The Digest of Justanian, in Roman law established the custodial principle with the statement that “a prison is for confinement, not for punishment” and in countries that followed Roman law the principle that imprisonment was not a legal punishment was dominant for many years. In England also the High Court judges went out to “deliver the gaols” to clear them not to fill them. The prisons of the middle ages were, therefore, concurred only with holding prisoners awaiting trial. Penal institutions were chiefly dungeons or detention rooms in secure parts of castles or city towers, used to detain prisoners awaiting trial or execution of sentence. The punishments imposed were torture, banishment, exile, death, branding, mutilation, but never imprisonment.¹ The coercive function means that imprisonment may be used to persuade a person to comply with an order made by the court of law, whether civil or criminal; if he complies, he is released. The first use of the prison in this way was against convicted offenders, mostly for juveniles, “sturdy beggars”, vagabonds and prostitutes. This function is still active in England, since those committed for non-payment of fines or debts or for contempt of court may secure release by paying what they owe or purging their contempt. The purposes of prison is protection of the community, supply of food, clothing, shelters to convicted criminals, and protection of inmates from each other and from persons in the outside community, imposition of punishment and rehabilitation of criminals. These purposes are assigned by outsiders and are shared by institutional personal, although some of them are logically contradictory. A complex division of labour is established to attempt their achievement, and each of the purposes is achieved to some extent by the people whose institutional behaviour is patterned by the roles that make up the division of labour. The three principal sections in this division of labour are a hierarchy of custodial ranks, an industrial hierarchy, and a social welfare agency and they are devoted to keeping inmates, using inmates and serving inmates.² The prisons, during the last three centuries or so have evolved to the status of an institution of social control and symbol of legitimate coercion. It is no more a resting ground in the legal process where death penalty, banishment, or life transportation may be the verdict. Rather, the institution of prison has imbibed and is influenced by the conventional norms, ideals and assumptions of humanitarianism, enlightenment and the welfare state. It not only carries the bearings of the ideals of the period, but is also impregnated with the expedencies of organizational science. The prison is not an autonomous body like a church. It is not an independent system of power, but an instrument of the State, shaped by its social milieu and the stage of social,

¹Mohanty Amarendra, Indian Prison System, Published by Ashish Publishing House, New Delhi, 1990, p.3.

²Donald R. Cressy, The Prison: Studies in Institutional and Organizational Change, Published by Holt Rinehart and Winston, New York, 1961, p.5.

political and economic development. It reacts to and is acted upon by the society as various struggle to advance their interests.¹

THE PURPOSES OF IMPRISONMENT

1. Prisons have existed in most societies for many centuries. Usually they have been places where individuals were detained until they underwent some legal process. They might be waiting to go on trial, or for execution or exile, or until a ransom, a fine or a debt is paid. Occasionally, individuals who posed a particular threat to the local ruler or state might be deprived of their liberty for a long period. The use of imprisonment as a direct punishment of the court was introduced to Western Europe and North America in the 18th century. It has spread gradually to most countries, often as a result of colonial oppression. In some countries, the concept of imprisoning human beings does not fit easily with the local culture.

2. Over the years there has been a lively debate, which is still going on, about the purposes of imprisonment. Some commentators argue that it should be used only to punish criminals. Others insist that its main purpose is to deter individuals who are in prison from committing further crimes after they are released, as well as to deter those who might be inclined to commit crime. Another perspective is that people are sent to prison to be reformed or rehabilitated. That is to say, during the time they are in prison they will come to realize that committing crime is wrong and will learn skills which will help them to lead a law-abiding life when they are released. Sometimes it is argued that personal rehabilitation comes about through work. In some instances, people may be sent to prison because the crime they have committed shows that they present a grave threat to public safety.

3. In practical terms, the purposes of imprisonment will be interpreted as a combination of some or all of these reasons. The relative importance of each one will vary according to the circumstances of individual prisoners. However, a more and more widely held opinion is that prison is an expensive last resort, which should be used only when it is clear to the court that a non-custodial sentence would not be appropriate.

4. The detention of individuals who are awaiting trial is a matter of special concern. Their situation is quite distinct from that of people who have been convicted of an offence. They have yet to be found guilty of any offence and are therefore innocent in the eyes of the law. The reality is that they are often held in the most restricted conditions, conditions that in some cases are an affront to human dignity. In a number of countries, the majority of people who are in prison are awaiting trial. The proportion sometimes is as high as 60 per cent. There are particular problems with the way pre-trial prisoners are treated and when the access that they have to lawyers and to their families is determined not by the prison authorities, but by another authority, such as the prosecutor.²

PRISONS IN INDIA

Prisons in India, and their administration, is a state subject covered by item under the State List in the Seventh Schedule of the Constitution of India. The management and administration of prisons falls exclusively in the domain of the State Governments, and is governed by the Prisons Act, 1894 and the Prison Manuals of the respective State Governments. Thus, states have the primary role, responsibility and authority to change the current prison laws, rules and regulations. Day-to-day administration of prisoners rests on principles incorporated in the Prisons Act of 1894, the Prisoners Act of 1900, and the Transfer of Prisoners Act of 1950. An Inspector General of Prisons administers prison affairs in each state and territory. The Central Government provides assistance to the states to improve security in prisons, for the repair and renovation of old prisons, medical facilities, development of borstal schools, facilities to women offenders, vocational training, modernization of prison industries, training to prison personnel, and for the creation of high security enclosures. The Supreme Court of India, in its judgments on various aspects of prison administration, has laid down 3 broad principles regarding imprisonment and custody. Firstly, a person in prison does not become a non-person. Secondly, a person in prison is entitled to all human rights within the limitations of imprisonment. Lastly, there is no justification for aggravating the suffering already inherent in the process of incarceration. Prison establishments in India comprise of 8 categories of prisons. The most common and standard prison institutions are Central Prisons, District Prisons and Sub Prisons. The other types of Prison establishments are Women Prisons, Borstal Schools, Open Prisons and Special Prisons. Some of the Important Prisons are discussed below:

¹Indra Jeet Singh, Indian Prison: A Sociological Enquiry, Published by Concept Publishing House, Delhi, 1979, p.1.

²Human Rights and Prisons Manual on Human Rights Training For Prison Officials United Nations, Published by United Nations Publication, New York & Geneva, Ed. XI, 2005, p.3.

CENTRAL PRISON

The criteria for a Prison to be categorised as a Central Prison varies from state to state. However, the common feature observed throughout India is that prisoners sentenced to imprisonment for a long period (more than 2 years) are confined in the Central Prisons, which have larger capacity in comparison to other Prisons. These Prisons also have rehabilitation facilities. Maharashtra and Tamil Nadu have the highest number of 9 Central Prisons each followed by Karnataka, Bihar, Madhya Pradesh, Rajasthan and Delhi with 8 each. Arunachal Pradesh, Meghalaya, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Daman & Diu and Lakshadweep do not have any Central Prisons. Haryana have the number of 3 Central Prisons Ambala, Hisar-I and Hisar-II.

DISTRICT PRISON

District Prisons serve as the main prisons in States/UTs where there are no Central Prisons. States which have considerable number of District Prisons are Uttar Pradesh (53), Bihar (30), Maharashtra and Rajasthan (25 each), Madhya Pradesh (22), Assam (21), Jharkhand (17), Haryana (16) and Karnataka (15).

SUB PRISON

Sub Prisons are smaller institutions situated at a sub-divisional level in the States. Ten states have reported comparatively higher number of sub-Prisons revealing a well organized prison set-up even at lower formation. These states are Maharashtra (172), Andhra Pradesh (96), Tamil Nadu (94), Madhya Pradesh (92), Karnataka (74), Odisha (66), Rajasthan (60), West Bengal (31), Kerala (29) and Bihar (16). Odisha had the highest capacity of inmates in various Sub-Prisons. 8 States/UTs have no Sub-Prisons namely Arunachal Pradesh, Haryana, Manipur, Meghalaya, Mizoram, Sikkim, Chandigarh and Delhi.

WOMEN PRISION

Women Prisons are exclusively used for women prisoners, although women may also be imprisoned in other Prisons. They exist only in 12 States/UTs. Tamil Nadu and Kerala have 3 Women Prisons each and Andhra Pradesh, Rajasthan & West Bengal have 2 Women Prisons each. Bihar, Maharashtra, Odisha, Punjab, Haryana, Tripura, Uttar Pradesh and Delhi have one Women Prison each. The total capacity of women inmates was highest in Tamil Nadu

BORSTAL SCHOOL

Borstal Schools are a type of youth detention center and are used exclusively for the imprisonment of minors or juveniles. The primary objective of Borstal Schools is to ensure care, welfare and rehabilitation of young offenders in an environment suitable for children and keep them away from contaminating atmosphere of the prison. The juveniles in conflict with law detained in Borstal Schools are provided various vocational training and education with the help of trained teachers. The emphasis is given on the education, training and moral influence conducive for their reformation and prevention of crime. Ten States namely, Andhra Pradesh, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Punjab, Rajasthan and Tamil Nadu have borstal schools in their respective jurisdictions. Haryana and Himachal Pradesh are the only states that have the capacity to lodge female inmates in 3 of their Borstal Schools. There are no borstal schools in any of the UTs.

OPEN PRISON

Open prisons are minimum security prisons. Prisoners with good behaviour satisfying certain norms prescribed in the prison rules are admitted in open prisons. Prisoners are engaged in agricultural activities. Fourteen states have functioning Open Prisons in their jurisdiction. Rajasthan reported the highest number of 23 open jails. There are no Open Prisons in any of the UTs. India has 1,328 correctional facilities, of which 27 are Open Prisons. Open Prisons, in one form or another, have existed in India for almost half a century. They have developed differently in different states, but prison authorities have always used prison labor in agricultural and other work outside the prison. Open prisons in India can be broadly classified into three categories: Open farms, where inmates do farming and agricultural work assigned to them and live in open areas with other eligible prisoners. Open farms, where inmates do farming and agricultural work assigned to them and live in an open farm area with their families and the families of other eligible inmates. Open camps, where inmates work their own trades and occupations, build their own homes and live with their families. The advantages of open prisons in India are both practical and philosophical. From a practical standpoint, they are less costly than traditional prisons and often profitable for the state. They could help reduce crowding since they are relatively easy to establish and require few staff. Philosophically, open prisons are more humane and reduce the time inmates spend in locked rooms. They are much more effective in keeping families together and help give offenders a sense of social responsibility. According to a Rajasthan State Human Rights Commission on jail reforms chaired by Justice A.N. Mulla in the early 1980s, the open prison gives inmates an effective exercise in

selfreliance, cooperation and community living in a family atmosphere. The commission recommended that each state in India develop an institution such as Sanganer. The commission noted that the purpose of an open camp is to:

1. Minimize the damage of punishment;
2. Let the community see the offender at close quarters;
3. Lay bare an offender's day-to-day behavior to reveal that not every person who has committed a crime is hardened, vicious and unrelenting;
4. Demonstrate that the presence of family has a moderating effect on the offender; and
5. Show that offending, punishing, restoring and compensating are all part of the social process.

PRI, which has studied the open prisons in India and supports them, lists the following limitations

1. Open prisons are likely to succeed only in societies where the family has a role to play;
2. They have limited success with female offenders. Whereas a man's family is happy to unite with him, in a female offender's case, the family in all likelihood would rather abandon her;
3. Open camps can only succeed if they are well explained to the public and the community, which is becoming increasingly vindictive as tension and terror increases in society; and
4. Victims and their families feel outraged by such measures, which are seen as "soft" options.¹

SPECIAL PRISON

Special Prisons are high security facilities that have specialized arrangements for keeping offenders and prisoners who are convicted of terrorism, insurgency and violent crimes. Special Prison means any prison provided for the confinement of a particular class or particular classes of prisoners which are broadly as follows:

1. Prisoners who have committed serious violations of prison discipline.
2. Prisoners showing tendencies towards violence and aggression.
3. Difficult discipline cases of habitual offenders.
4. Difficult discipline cases from a group of professional criminals.

Kerala has the highest number of special Prisons nine. Provision for keeping female prisoners in these Special Prisons is available in Tamil Nadu, West Bengal, Gujarat, Kerala, Assam, Karnataka and Maharashtra.²

OTHER PRISONS

Prisons that do not fall into the categories discussed above, fall under the category of Other Prisons. Three states Goa, Karnataka & Maharashtra have other Prison each in their jurisdiction. No other state/UT has an other prison. The capacity of inmates (male & female) reported by these three States in such Prisons was highest in Karnataka (250) followed by Goa (45) and Maharashtra (28).³

PRISONER: CONCEPT AND TYPES OF PRISONERS

A prisoner, also known as an inmate, is a person who is deprived of liberty against their will. This can be by confinement, captivity, or by forcible restraint. The term applies particularly to those on trial or serving a prison sentence. Any person confined in prison under the order of a competent authority.⁴ At the time when reaction to crime was purely punitive, there was no need for classifying prisoners and all of them were flocked together in a single prison. This system of singular treatment of criminals, however turned the prisons into a living hell on earth with all sorts of vices. The sole object of prisonisation in those days was to subject the inmates to maximum torture and pain and therefore there was no need to classify them. With the evolution of penal science during the late eighteenth and early nineteenth century, the offenders were classified into different categories according to their sex, age and gravity of offence. Even at this time, objective approach to prisoners was not

¹Glanville Williams, Learning the Law, Published by Cambridge University Press, Ed,XI, 1982, p. 3.

²Rajeev Mehrishi, Prison Statistics India, Published by National Crime Records Bureau, EdXX, 2014, p.15.

³Rajeev Mehrishi, Prison Statistics India, Published by National Crime Records Bureau, Ed.XX, 2014, p.37.

⁴Goa Prison Rules. (2006). which has been approved by Government of Goa on 12-10-2006 by way of Notification: 9/29/2004-HD(G)/Part .

known. It was towards the end of 19th century that the idea of individualization of prisoners drew attention of penologists and this principle has since then been firmly established into practice. Individualization of offender as a method of rehabilitation has now become the cardinal principle of modern penology. Evidently in the changed circumstances the earlier classification of criminals on the basis of their physical differences serves no useful purpose. Therefore modern penologists have worked out an objective classification of prisoners according to differential treatment. In spite of being lodged in maximum security prisons, the modern prisoners are placed in quasi-penal and even non-penal institutions for their reformation. The prisoners are now classified according to the treatment to which they are likely to respond to most favourably. In the modern context, social-defence, namely the protection of society from criminals is the prime object of punishment while classification of prisoners for treatment is the method of it. To achieve this end the criminals are classified in to two broad categories, viz, (1) hardened criminals who are fit for treatment in a conventional jail, and (2) casual criminals, who are fit for treatment in a medium-custody jail or even fit to be sent to Borstal or Reformatory or released on probation.¹

Under the present correctional system in United States the task of classifying inmates for their rehabilitation is performed by the following agencies:-

- (1) The Central Classification Centre;
- (2) The Classification Committee; and
- (3) The Reception Centre.

All the convicted persons are first brought before the Central Classification Centre where their antecedents, past history and mental attitude etc. are thoroughly examined by the expert psychologists and psychiatrists. If in the opinion of these experts the inmate is considered responsive to reformation, he is sent to an appropriate correctional institution as recommended by the Central Classification Centre. There is a Classification Committee associated with each correctional institution which decides the outline of treatment programme for individual inmate according to his mental attitude, psychology and possible reaction to the treatment. The Reception Centre at each Correctional Institution, on the other hand, receives the new inmate on a trial basis for a month or so and plans to prepare him for his subsequent stay in the institution. Thus the major function of Reception Centre according to Donald Traft is "inmate-orientation through group meetings, pictures booklets and interviews". If this pattern of classification of prisoners is adopted in India, the prison authorities may find it easy to tackle the problems of prison and prisoners and at the same time it may also accelerate the reformation of prisoners.² Prison inmates lodged in Indian prisons are categorised as Convicts, Undertrials and Detenues. A convict is "a person found guilty of a crime and sentenced by a court" or "a person serving a sentence in prison". An Undertrial is a person who is in Indian jails in relation to non-Indian Penal Code (IPC) crimes are classified as civil prisoners. They consist of Convicts and Undertrials.³

The Prisons Act 1894 talks about the following types of prisoners:-

Section 23. Convict officers. Prisoners who have been appointed as officers shall be deemed to be public servants within the meaning of the Indian Penal Code, 1860 (45 of 1860).

Section 27. Separation of prisoners. The requisitions of this Act with respect to the separation of prisoners are as follows:

- (1) In a prison containing female as well as male prisoners, the females shall be imprisoned in separate buildings or separate parts of the same building, in such a manner as to prevent their seeing, or conversing or holding any intercourse with, the male prisoners;
- (2) In a prison where male prisoners under the age of twenty-one are confined, means shall be provided for separating them altogether from the other prisoners and for separating those of them who have arrived at the age of puberty from those who have not;
- (3) Civil prisoners shall be kept apart from criminal prisoners. Association and segregation of prisoners. Subject to the requirements of the last foregoing section, convicted criminal prisoners may be confined either in association or individually in cells or partly in one way and partly in the other.

¹N.V. Paranjape, Criminology and Penology, Published by Central Law Publication, Allahabad, 2008.

² Ibid.

³Rajeev Mehrishi, Prison Statistics India, Published by National Crime Records Bureau, Ed.XX, 2014, p.73.

Solitary confinement. No cell shall be used for solitary confinement unless it is furnished with the means enabling the prisoner to communicate at any time with an officer of the prison, and every prisoner so confined in a cell for more than twenty-four hours, whether as a punishment or otherwise, shall be visited at least once a day by the Medical Officer or Medical Subordinate.

PRISONERS UNDER SENTENCE OF DEATH

Every prisoner under sentence of death shall, immediately on his arrival in the prison after sentence, be searched by, or by the order of, the Superintendent and all articles shall be taken from him, which the Superintendent deems it dangerous or inexpedient to leave in his possession. Every such prisoner shall be confined in a cell apart from all other prisoners, and shall be placed by day and by night under the charge of a guard. Prison inmates lodged in various prisons are categorised as Convicts, Undertrials and Detenues. This population can also be further classified on other parameters such as Gender, Nationality, Mental health etc. Unconvicted criminal prisoners shall be kept apart from convicted prisoners;

ADOLESCENT PRISONER

Any person as who have been convicted of any offence punishable with imprisonment, or who having been ordered to give security under section 117, Code of Criminal Procedure, 1973 (Central Act 2 of 1974) has failed to do so and who at the time of such conviction or failure to give security, is not less than 18 years, but not more than 21 years of age. b) who has been committed to prison custody during the pendency of his trial and who at the time of commitment, is not less than 18 years, but not more than 21 years of age.

ADULT PRISONER

Any prisoner who is more than 21 years of age.

CASUAL PRISONER

A convicted criminal prisoner other than a habitual offender. Prisoner means any individual involuntarily confined or detained in a penal institution. The term is intended to encompass individuals sentenced to such an institution under a criminal or civil statute, individuals detained in other facilities by virtue of statutes or commitment procedures which provide alternatives to criminal prosecution or incarceration in a penal institution, and individuals detained pending arraignment, trial, or sentencing.

CIVIL PRISONER

Any prisoner who is not committed to custody under a writ, warrant or order of any court or authority exercising criminal jurisdiction, or by order of a court martial and who is not a detainee.¹

CONVICT PRISONER

Any prisoner under sentence of a court exercising criminal jurisdiction or court martial and includes a person detained in prison under the provisions of chapter VIII of the Code of Criminal Procedure of 1973 and the Prisoners Act of 1900.²

DETENUE PRISONER

Any person detained in prison at the order of the competent authority under the relevant preventive laws.

HABITUAL OFFENDER

A prisoner classified as such in accordance with the provisions of the law or rules. A habitual criminal offender, also known as a repeat offender, refers to a person who has been previously convicted of one or more crimes in the past and is currently facing new charges. Although many habitual offenders tend to commit the same type of crime over and over again, a person does not necessarily have to commit the same crime in order to be called a repeat or **habitual offender**.

INMATE

Any person kept in an institution. An inmate is a person who lives in a specific place, especially someone who's confined there, like a prisoner. You can call yourself an Inmate if you get sent to your room, but usually inmates are behind bars.

MILITARY PRISONER

A prisoner convicted by court martial. A military prison is a prison built and maintained by the military, which may be used to hold members of the military who have committed crimes relating to military service, prisoners

¹Rajeev Mehrishi, Prison Statistics India, Published by National Crime Records Bureau, Ed.XX, 2014, p.69.

²Brenda V. Smith, "The Prison Rape Elimination Act: Implementation and Unresolved Issues Torture, Volume 1, Issue 3, 2008.

of war, or people who are threats to national security. The conditions in this type of prison and the way in which the prison is used depends on the country in question. In some areas, prisoners in this type of facility might receive better treatment than prisoners who have committed other crimes, particularly because there are often strict rules about ethical treatment of prisoners that are externally monitored. Even so, the conditions inside a military prison may not be as transparent as they seem, and prisoners may be treated very poorly in some cases. Most countries have a military prison system of some sort, but some are more defined than others. The first type of military prisoner housed in this type of prison consists of people involved with the military who have committed a crime relating to the military. Typically, these prisoners have been convicted by a military court. In this sense, a military prison can be used to punish offenders. The other type of prisoner most often housed in a military prison is usually not guilty of committing a crime within the military, but rather is an enemy of the nation or an enemy combatant. Prisoners of war are usually held in this type of prison, but this is not a system explicitly designed to punish prisoners. There are many international rules regarding the treatment of this type of prisoner while within prison, and breaking these rules can have dire consequences for a country. Certain criminals may be considered particularly dangerous for a nation and may be housed in a military prison as well. These criminals, who may include terrorists or spies, are often more vulnerable to poor treatment than prisoners of war. It is sometimes considered acceptable to interrogate this type of prisoner to obtain information. Judgment of this type of criminal is also complex, so a prisoner of this sort may not even be guilty when he or she is sent to prison. Quality and fairness of a military prison can often be taken to represent the ethics of a military organization itself. These prisons are run entirely by the military, and treatment of prisoners reflects the attitude of the military, as it might be manifested without direct oversight. Looking at behavior within a military prison can therefore be used to talk about changes that need to be made overall to make sure that a military organization behaves ethically in all activities. Quality and fairness of a military prison can often be taken to represent the ethics of a military organization itself. These prisons are run entirely by the military, and treatment of prisoners reflects the attitude of the military, as it might be manifested without direct oversight. Looking at behavior within a military prison can therefore be used to talk about changes that need to be made overall to make sure that a military organization behaves ethically in all activities.

OBJECTIVES OF THE STUDY

- To assess the awareness of Law provisions enshrined in various Acts among prisoners.
- To examine the adequacy of Prison/Jail Manual in the light prisons Acts Provisions.

HYPOTHESES OF THE STUDY

The organizational management and administrative setup of Prisons in Haryana State is quite satisfactory. The present Prison Management in Haryana does not properly incorporate the modern correctional treatments for prisoners. The rights regimes for prisoners are quite comprehensive and satisfactory. Prison laws and prison manuals intended to protect the fundamental rights and human rights of the prisoners are not being adhered to in letter and spirit and there are no proper mechanisms to monitor the implementation of the laws and manuals.

RESEARCH METHODOLOGY

Both empirical and doctrinal methods will be followed in this study. The empirical study aims to analyze the prison management in the light of the problems of inmates lodged therein. For the purpose of the study, a formal permission from the prison authority will be obtained. The inmates will be requested to answer the questionnaire, those who willingly agreed were given the questionnaire. Approx. 600 Respondents will have been part of this study and they include both convicts and under-trials. Keeping in view the objectives of the study, both primary and secondary sources of data will have be used. The primary data is collected from the prisoners. The primary dates will be collected with the help of well-structured interview schedules. The secondary data will be collected from reports and files of jail department, books, journal, magazines, newspapers, NGOs reports, National crime records, Bureau reports, National Human Rights Commission Reports, etc. The data will be analyzed with the help of appropriate statistical techniques.

CONCLUSIONS AND SUGGESTIONS

The prisons are no more the institutions designed to achieve only the retributive and deterrent aspects of punishment. They are now the places where the prisoners are lodged not as forgotten and forsaken members of the society but as human beings who have to go out to their surroundings as well behaving and reformed persons. The post- independence era witnessed the formation of Model Prison Rules, enhanced vocational training, and scope for prison visit, periodic supervision and introduction of wage system. On the whole, attempts to modify the prison culture by shifting from cruelty to humanism were clear. Now there is a shift from the individualization of punishment policy to the progressive new form of individualization of treatment. Prisons are no longer regarded only as places for punishment with the changing perception towards prisoners. In

the early days of the post-independence era, the courts did not adopt liberal attitudes towards prisoner's claims of various freedoms concomitant to the fundamental rights concepts. But when the Constitution was adopted and the people got their fundamental rights guaranteed, prisoners' rights also began to draw the attention of the legislators and the judiciary. The Courts have taken the cognizance of the letters and telegrams sent by the prisoners and have triggered off the judicial machinery to protect them, unmindful of the violation of the through proper channel procedure required to be followed by the prisoners while communicating outside.

BIBLIOGRAPHY

- Akbar Nama, Bev.II, pp 504-05; Farishsta, II, P 350: Badawni, Test II at 120-24.
- Barbara Hudson, Understanding Justice: An Introduction to Ideas, Perspectives and Controversies in Modern Penal Theory, Published by Open University Press, Buckingham, England, 1996.
- Bejoy Shankar Haikerwal, Economic and Social Aspect of Crimes in India, Published by Allen and Unwin, London, 1934.
- B.V. Trivedi, Prison Administration in India, Published by Uppal Publishing House, New Delhi, 1987.
- Carter, Robert Melvin and Glaser, Daniel, Correctional Institutions, Published by Lippincott Company, Philadelphia, 1977.
- David A Crighton and Graham J. Towl, Psychology in Prisons, Published by, B P S Blackwell Publishers, USA, Ed.II, 2008.
- David Garland, Punishment and Modern Society, Published by Oxford University Press, Oxford, England, Ed.I, 1990.
- Dr. Ashutosh, Rights of Accused, Published by Universal Law Publishing Co., New Delhi, 2009.
- Dr. Paramjit S. Jaswal, Human Rights and the Law, Published by APH Publishing Corporation, 1996.
- Donald Clemmer, The Prison Community, Published by University of Chicago Press, 1940.
- Duffee David and Fitch Robert, An Introduction to Corrections. Published by Goodyear Publishing Company, California, 1976.
- Dr.Satya Prakash Sangar, Administration of Justice in Mughal India.
- E. Rotman,, Beyond Punishment. Quoted in Duff, Antony and Garland, David. (Ed.) A Reader on Punishment, Published by Oxford University Press, Oxford, England, 1994.
- Francis T. Cullen and Cheryl Lero Jonson, Correctional Theory: Context and Consequences, Published by Sage Publications, Thousand Oaks, United States, 2012.
- Kiran Bedi, It's always Possible, Published by Sterling Publishers Private Limited, New Delhi, 2005.

ADOPTION AND TRENDS OF ARTIFICIAL INTELLIGENCE (AI) IN ENTREPRENEURIAL BUSINESS DOMAINS IN INDIA: A REVIEW STUDY

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ABSTRACT

Artificial Intelligence (AI) is the newest buzzword in the digital world today. AI refers to a broad term for all applications, technologies and digital processes that simulate human efforts, processes, and thoughts to make informed decisions and solve problems. Over the few years of its existence, it has found extensive use in many sectors of the businesses across the globe; namely – manufacturing, tertiary and primary sectors. The future of entrepreneurs and entrepreneurship is going to be deeply impacted by AI technologies. Even though the concept of AI is in its teething stage in India, many start-ups and businesses have started adopting AI as a major catalyst of business processes in India. Several sectors are exploring and adopting AI applications actively in various areas of businesses like product design, delivery systems, logistics, quality control and even human resource management. This adoption of AI in several sectors will have lasting implications on the growth of entrepreneurship. It may have positive and negative influences on sectors in areas of technological innovation, service delivery, risks, and costs. Considering these pertinent observations, the current study traces the adoption and trends of AI in various domains of the business sectors in India. The study uses several literatures to track the same. Further, the study puts forth several deliberations and suggestions for a smooth transition towards AI enabled businesses. The study finally aims to provide a future direction for deeper research into different areas of AI implementation and its effect on entrepreneurs and enterprises.

Keywords: Artificial Intelligence, Entrepreneurs, Entrepreneurship, Start-ups, Business Sectors, AI Implementations, AI Applications

1. INTRODUCTION – CONCEPT OF ARTIFICIAL INTELLIGENCE:

Artificial Intelligence is a created phenomenon where specific aspects of human intelligence consisting of logic and reasoning, problem solving and machine-human interaction are incorporated through devices. Over the past decade, AI has been developed gradually to simulate human effort through an action process using applications like natural processing of languages, speech recognition and machine vision. Usually, a generic AI system focusses on the following aspects:

- a) Learning- Learning and machine learning are sub systems of AI where, algorithms are created to enable information and data to be analyzed and thus enabling the devices to use that information and data to complete the assigned tasks.
- b) Logic and reasoning- Further, information and data is used to arrive at an expected outcome. This is done through correlation and patterns that can be identified amongst the data.
- c) Calculations and innovations- AI focusses on using algorithms, neural networks and even statistical methods to find out results and create text, images, ideas and even music.

Using advanced concepts of machine and deep learning and such other technologies, AI is replicating human actions and processes at workplaces. One of the significant examples of this is ChatGPT and self- driving cars. An article by Tech target states that AI finds application in businesses in areas like innovations in product designs, service deliveries, augmenting employee efforts, mobilizing knowledge and information across business sectors, optimizing strategies and enhancing productivity and operations, to name a few.

2. BACKGROUND OF THE STUDY – AI AS A CATALYST IN THE GROWTH OF ENTREPRENEURSHIP:

Post 2016, the growth of entrepreneurship can be accredited to several policy measures (NITI Aayog scheme and Make in India). Further, the MSME ministry swung into full force to support start- ups. Currently, several start-ups are operating in the market using the B2C model. The intervening factor has been technology. The dynamics of entrepreneurship are no longer limited to social media marketing or digital marketing. Several studies have suggested that AI is going to have a long lasting and a powerful impact on enterprises. The impact is multifold.

Few amongst the many economic impacts include higher productivity through automation, and fulfilled consumer demands through AI driven high quality products and services. With the latest phenomenon of

Industry 4.0, entrepreneurs involved in manufacturing start-ups and businesses are looking to adopt AI enabled manufacturing processes and shopfloor automation. Tertiary sector is also looking forward to AI led delivery of services, customer management automations and brand management. Various literatures have suggested that entrepreneurship and innovation is a pertinent way towards sustainable growth for a labour dense and developing country like India. Hence, to foster strong entrepreneurship in the country, adoption of AI is inevitable as it is the need of the hour. Moreover, the pillars of robust entrepreneurship- innovation, customer relationship management, data analytics, strong product development, market mapping and funding; each one of them will be impacted intensely by AI technologies in the future.

3. OBJECTIVES OF THE STUDY:

1. To review various literatures related to artificial intelligence (AI) and its application in business processes.
2. To examine the trends of AI adoption in India by entrepreneurial domains.
3. To provide suitable suggestions to optimize the application of AI in enterprises with respect to India

4. RESEARCH METHODOLOGY:

The current study is a secondary study based on exploratory research design. The researcher strives to achieve the objectives of the study using several literatures like research papers, articles, reports, blogs, and such other authentic literary material. The researcher has also surveyed online databases that comprise of information on artificial intelligence and its use in business. After collating the findings from secondary data, the researcher presents an overview of AI trends in businesses in India and deliberations with regards to the same.

5. SIGNIFICANCE AND SCOPE OF THE STUDY:

The study has used several literatures and databases to assemble the findings, information and data to trace the adoption and use of AI by different entrepreneurial sectors in India. The research aims to bring forth certain deliberations and suggestions for use of AI in businesses. The current study aims to provide a further trajectory for future research in the areas of AI and its use in business.

6. TRENDS OF AI IN ENTREPRENEURIAL DOMAINS IN INDIA:

Despite the prediction that AI will double the economic growth for India by 2035, it presents several opportunities and challenges to every nation. It requires a planned strategy and preparation for the potential impact that AI might have on vital areas like the job market, regulatory aspects and infrastructure. AI will definitely have long standing and unique effects on Indian trade, commerce and business. Considering the unique demography of India having the maximum share of the world's youngest population, there is a movement towards entrepreneurial activities. Further, the encouragement of the entrepreneurial ethos in India has led to a large number of enterprises being established. According to GEM (Global Entrepreneurship Monitor), India stands fourth in world's highest number of tech start-ups, world's highest number of unicorns start-ups and in providing quality entrepreneurship ecosystem. Several studies have indicated that enterprises have utilized various aspects and applications of AI. In this regard, India has seen disruptive transformations in augmenting labour and production capabilities. It can also be said that India is already on the way to adopting AI as an indispensable tool for business processes. The predominant sectors which have already initiated the use of AI are BFSI, healthcare, education, and E- Commerce. There is a considerable debate as to whether AI presents positive changes or negative implications. While, it may present job opportunities in certain areas, it also has the potentiality to displace jobs (Sahane et al., 2023). Considering the potentiality of AI, it is important to highlight the sectors and areas most impacted by it.

A report by Niti Aayog in 2018 has identified certain domains within the economy where AI could have long standing effects. Further, the report connected the growth of entrepreneurship in India and success of the new start-ups to quick adoption of AI. The report further envisages AI to be the newest factor of production, where it enhances the use of other factors of production like capital and labour. Every entrepreneur will have to factorize the use, cost and effect of AI in the seed stage itself. An overview of entrepreneurial sectors vis-à-vis AI adoption is presented below:

- 1) IT Sector- The future of Indian IT companies and start-ups are dependent on cloud infrastructure and technologies which are AI driven. This sector was the dominant sector to explore and adopt AI. Established companies like Wipro, TCS, Infosys and others have begun to make significant strides in this respect. The aim is to provide modern solutions to clients which focus on higher data privacy, data security, end to end solutions, seamless management of applications and data across platforms.
- 2) Healthcare- Diversity of the country has led to disparity in provision of health care services to rural areas and a few states. AI solutions like predictive smart diagnostics, customized treatments through online mediums,

forecasting pandemics and even imaging solutions will solve the problem of access to healthcare facilities in far-off areas. Remote patient monitoring tools and applications are all set to enter the healthcare sector in India in a big way. Pharmeasy, the Mumbai based start-up uses AI to get real time data and communicate with the consumers. Several other healthcare pharmacies and start-ups in India like Qure.ai (which uses AI for virtual radiology scans) and Healthify me uses AI tools to provide services in real time and in regional languages. The healthcare sector uses machine learning tools like Hadoop, Tensorflow, Hbase, Kafka and Hive to upgrade their services.

3) Manufacturing and construction- AI is set to transform the secondary sector; namely, construction through AI powered research and development, machine maintenance through smart asset utilization and use, production efficiency through machine-based demand forecasting and supply chain logistics through smart mobility and tracking. Currently, AI is applied to areas of quality control for defects identification and standardisation solutions in India. When leveraged rightly, AI impacted systems can be used in core sectors like power, energy and infrastructure too for better use of resources, lesser gestation periods and lesser breakdowns. Further, Use of AI is beyond the nascent stage in the automotive sector where AI can be used in testing automobile performances, identify defects and create modern designs and features.

4) Education- Currently, this sector is witnessing disruptions in the form of several edutech start-ups. Byjus and Unacademy were the frontrunners followed by several others. Use of AI in education sector is leading to learning and teaching disruptions. The use of AI in education sector is to predominantly provide enhanced learning solutions, interactive tests and experiential vocational training. A relevant example here would be the adoption of AI technologies by the edutech giant Courseera. The start-up runs several courses across the world and in India. They have successfully used machine learning technologies to translate courses in several languages. Further, AI can provide technologies to serve the students better and faster in real time. This will lead to improved skill-based education and training focused on higher employability and better human capital.

5) Agriculture- India started off as an agrarian economy. Even though its contribution to the country's economy may not be as substantial as the tertiary sector, it is integral to the rural economy of India. Agritech is a phenomenon which is here to stay. There are several agriculture-based start-ups like Aibono, Apna Godam, Big Haat, Agrostar and such others. This sector is looking towards a potential \$24 Billion market by 2025. Each of these entrepreneurs have used tools of AI and machine learning to launch innovative services. Thus, the application of AI can be two-fold here; one in the actual fields with farmers and other with the growing agritech sector. AI finds potential use in the rural agriculture farmlands through smart solutions to predicting crop productivity, evaluating agricultural challenges like irrigation problems, innovative solutions for pesticide and fertilizer application and even improvement in output through real time advisory for the farmers.

6) E- Commerce and service sectors- The use of AI in service is three pronged; namely, to scrutinize consumer behavioural patterns, augment customer's shopping experience and integrate all business processes. For example, several food delivery platforms are using chatbots for ordering food, provide recommendations of products to be purchased and also relationship management. Application of AI is noteworthy in the service sector areas like travel and tourism, BFSI and E-commerce. Each of these domains have started using AI for creating user experiences and client satisfaction.

An article by Indiaai (National AI portal of India) reveals that Nasscom collaborated with Microsoft to launch the AI adoption index. The methodology for this comprises of tracking the journey of adoption of AI by several sectors. Accordingly, the sectors were assigned categories like explorers, enthusiasts, experts, and evangelists depending on their intensity and prowess to use AI. Further every sector is given a score based on the category of maturity in adopting AI. This score is calculated based on parameters like AI strategy, talent and use, investments, technology, ethics and governance. Accordingly, sectors like manufacturing and industrial acquired the highest score followed by retail, BFSI and healthcare sector.

Similarly, according to a study by PwC India, AI presents forth several opportunities amidst the post- covid crisis. The firm conducted a survey of top CXOs of new enterprises and entrepreneurs in India and have put forth findings which suggest that 62% of the newly started companies that were surveyed have started exploring AI in some form or the other. They belong to different stages of AI implementations and adoptions. 16% of the companies reported initial progress in adoption of AI while more than 19% of the companies reported successful adoption of AI and a 360 degree transformation in digital processes. A pertinent revelation by the report is that 38% of the companies do not plan to implement AI even in the future.

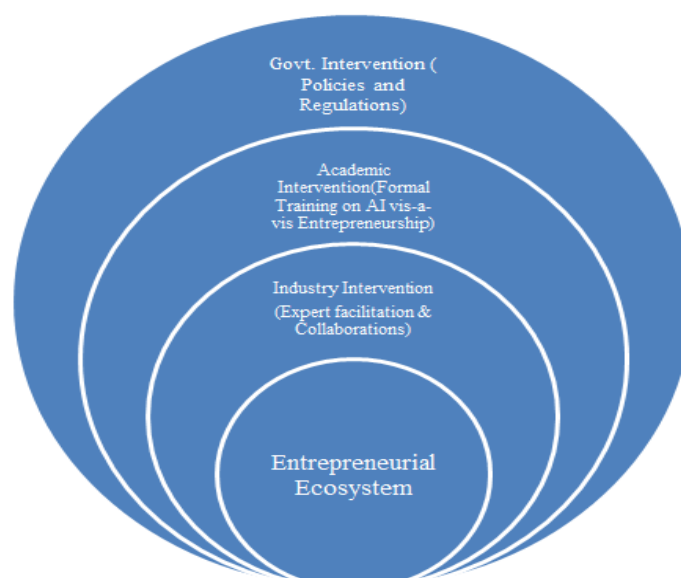
7. CONCLUSIONS AND DELIBERATIONS OF THE STUDY:

Despite the advantages and positive implications that application of AI provides, there are several deliberations with regards to challenges with its adoption and implementation. For successful implementation of AI across business domains and processes, it requires committed leadership, skilled employees, and a clear roadmap. The following points of contention can be put forth through this study:

- Entrepreneurs desirous of adopting end to end AI solutions must transform their vision, mission and business strategies in alignment with the overall AI roadmap of the company.
- In order to implement long term AI solutions, enterprises need to have a strong design and architecture of its IT infrastructure and digital capabilities to handle data, processes and contingencies.
- Entrepreneurs should consider phased out implementation of AI in digital roll outs and conduct a cost benefit analysis at every phase to avoid possible failures
- The application of AI is nuanced and has several dimensions. Hence, it will affect several areas in organizations like people, processes, and policies. Thus, organizations should prepare a change management plan.
- The success of any digital application depends on vendor strategy. Enterprises should have a well thought vendor strategy considering all aspects of quality, cost and benefits.
- The use of AI and its application should be evaluated vis-à-vis its impact on various stakeholders like customers, clients, distributors, intermediaries, and the society. This will have long standing effect on brands and their reputation.
- It is challenging to exactly measure the economic benefit of AI application. Hence it is necessary to formulate ways to measure the return on investment of AI applications in business.
- Currently, the use of AI is predominantly by the large start-ups and firms. AI is yet to take off as a tangible mass market application. The smaller firms should work towards a suitable value proposition by combining traditional business ethos powered by AI platforms in order to break barriers.
- AI should be used to supplement creativity and innovation rather than replacing human thinking and effort in order to avoid product and service homogenization.

To conclude, there should be an initiation and enhancement of an overall AI powered entrepreneurial ecosystem in India. Governments, higher education institutes and industry experts should collaborate and work towards systematic spread of AI knowledge, tools and their adoption. Government policies would encourage responsible application of AI through comprehensive security and data privacy measures. Education institutions can aid in creating AI enabled innovation hubs and entrepreneurs can foster world class sophisticated work environment and enterprises. Given below is the suggested framework for augmenting AI based entrepreneurial ecosystem represented by four concentric circles:

Figure 1: AI Based entrepreneurial ecosystem



REFERENCES**Bibliography:**

- Srivastav, S (2018), 'Artificial Intelligence: Way forward for India', Journal of Information Systems and technology Management, Vol. 15
- Sahane, et al. (2023), 'Impact of AI on Employability in India', Shodhsamhita, Vol. 10- No.2
- Singh and Tilak (2019), 'Employment transformation through AI in India', International Journal for Engineering Research, Vol.14- No. 7
- Soni, Et al (2020), 'Artificial Intelligence in Business: From Research and Innovation to Market Deployment', Procedia Computer Science, Vol. 167
- Jain,V (2019), 'Impact of Artificial Intelligence on Business', International Journal of Research and Analytical Reviews, Vol. 6- No. 2
- Manivel, R (2023), 'Exploring the Impact of AI in Business Decision Making', Journal of Data Acquisition and Processing.
- Rouse, D (2020), Artificial Intelligence in Business, O'Reilly Publications
- Jha, A (2020), Artificial Intelligence for Business Leaders, Atlantic Publishers & Distributors
- Singhal, V (2020), Leveraging Artificial Intelligence for Business Success, Notion Press
- Kumar, E (2020), Artificial Intelligence, Dreamtech Press

Webliography:

- <https://www.ibm.com/thought-leadership/institute-business-value/en-us/report/cognitiveindia/>
- <https://www.niti.gov.in/sites/default/files/2023-03/National-Strategy-for-Artificial-Intelligence.pdf>
- <https://indiaai.gov.in/research-reports/ai-adoption-index-tracking-india-s-sectoral-progress-on-ai-adoption/>
- <https://www.pwc.in/assets/pdfs/data-and-analytics/ai-an-opportunity-amidst-a-crisis.pdf>
- <https://indiaai.gov.in/>
- https://www.ey.com/en_in/ai/ey-nasscom-ai-adoption-index-is-ai-still-incubating-in-your-organization-or-driving-innovation
- <https://nasscom.in/knowledge-center/publications/generative-ai-startup-landscape-india-2023-perspective>
- <https://www.gemconsortium.org/reports/latest-global-report>
- <https://inc42.com/startups/agritech-startups-disrupting-agricultural-landscape-in-india/>

A STUDY ON EVALUATING DETERMINANTS OF ADOPTION OF ARTIFICIAL INTELLIGENCE IN RESEARCH AMONG THE FACULTY MEMBERS OF MUMBAI AND THANE REGION

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ABSTRACT

Purpose: *The research evaluates the determinants of the adoption of AI in Research Among the Faculty Members.*

Design/Method/Approach: *210 faculty members were chosen for the current study, and the model was build using Structural equation model.*

Findings: *It was found that “Effort Expectancy (EE), Facilitating Conditions (FC), Performance Expectancy - (PE), Social Influence (SI) do not have a significant impact on Behavioral Intention (BI) towards the adoption of Artificial Intelligence (AI) in research among faculty members Whereas it was found that Hedonic Motivation (HM) and Security (SEC) has a significant impact on Behavioral Intention (BI)” towards adoption of AI in research among the Faculty Members.*

Practical Implication: *Education is an ever-growing sector where any person can gain knowledge till, they depart the world. This study will be useful in understanding the various factors that lead to the adoption of AI, as in the current times, the application of AI has grown significantly. This study evaluates the determinants of the adoption of AI in Research among faculty members.*

Originality/values: *This study extends the research made by Venkatesh et al. 2004 UTAUT model and Parasuraman, A., et al. (2005). E-service quality model by combining the factors of both the models and evaluating the determinants of adoption of AI in research among the faculty members*

Funding Statement: *This study has not received any funding or financial assistance from any organization or individual. They conducted their independent research and analysis for the study without using outside funds. Without assistance, all study-related tasks were completed, including data processing, interpretation, and collecting. The integrity and quality of this work are entirely the result of the writers' time, energy, and resources. The author's hard work alone produced the study's results, and the fact that other sources did not support them does not lessen the importance of the conclusions made here.*

Ethical Compliance: *Strict ethical rules were followed throughout the study, and participant permission and anonymity were guaranteed. It complies with all relevant legal requirements and is approved by the appropriate ethics body. The study acts impartially, respects the rights of the participants, and discloses its findings honestly.*

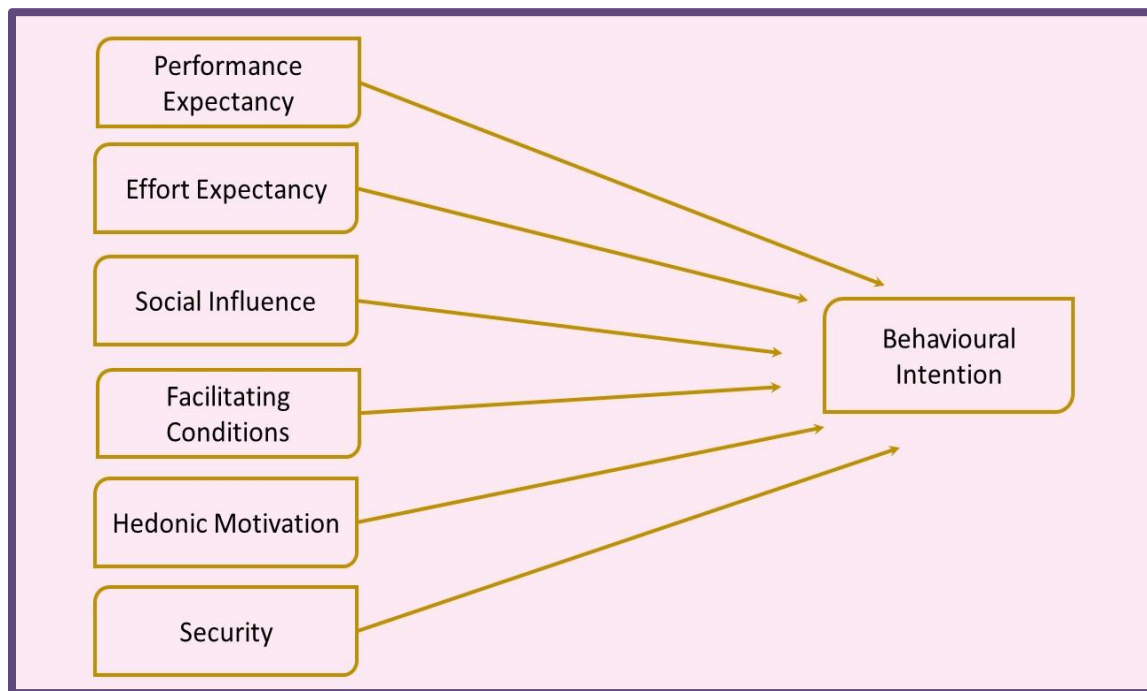
Keywords: *UTAUT, E-service Quality, Artificial Intelligence*

INTRODUCTION

In the middle of the 1950s, artificial intelligence (AI) first emerged. Despite its early promise, it faltered and appeared to be coming to an end for several reasons, including technological constraints related to managing various sorts of data, matching human thought processes, and data processing capabilities. The emergence of artificial intelligence systems that overcome historical limitations may be attributed in large part to the fast progress of technology. The development of AI tools and their potential advantages for businesses are at an unprecedented rate. To reap the benefits of AI, gain a competitive edge, and improve performance, Businesses are racing to acquire, deploy, and make use of AI technologies for a variety of organisational tasks. The concept of AI tools and their contents are still developing, particularly in light of the incorporation of several contemporary technologies and data types, including big data and the Internet of Things (Y. Wang et al. 2019). An increasing amount of research is being done on many different aspects of artificial intelligence (AI) tools. The effectiveness of these AI-based tools is interesting, especially when compared to earlier methods and algorithms (Razzaghi et al., 2019). A special emphasis is placed on preventing biases that can inadvertently enter models, particularly when learning is derived from biased data (Lambrecht and Tucker 2019).

One of the most popular theories successfully reproduced several times is the “unified theory of acceptance and use of technology” (UTAUT; Venkatesh et al. 2003). It has been used to analyze a range of technologies and even scenarios outside employee adoption. “Four factors “performance expectancy, effort expectancy, social influence, and facilitating conditions” are identified by UTAUT as predictors of intention to use and technology

usage. Here is how these constructs are defined: The level to which an individual expects that using a system would enhance their capacity to complete their task is referred to as performance expectancy; the ease of use of the system is known as effort expectancy; Social influence is the notion held by significant individuals that the new system should be used while facilitating conditions is the idea held by an individual that the system's technological and organizational foundation will allow it to be used. In Venkatesh et al. 2004 A detailed theoretical model called the UTAUT2 was created to fully capture the variables affecting people's acceptance and usage of technology. By adding crucial concepts like "Performance Expectancy and Hedonic Motivation," which highlight the "perceived benefits, ease of use, and enjoyment of technology," UTAUT2 expands upon the original UTAUT model. To account for moderating elements like gender, age, and voluntariness of usage, it also takes into consideration social impact and enabling environments.



The foundation of the concept of e-service quality is the service quality construct. According to Seth et al. (2005), there isn't yet a recognized standard or established technique for assessing the quality of electronic services. However, e-service quality standards are not as well-defined as conventional service quality benchmarks (Zeithaml et al., 2002). Service quality is the whole evaluation of a particular service provider based on how well they perform compared to the general expectations of customers for providers in that industry, according to Parasuraman et al. (1988). E-service quality is defined by Bitner et al. (1990) as the general opinion of customers about how good or bad an organization's services are. According to Asubonteng et al. (1996), it is the difference between what customers think they should receive and what they obtain regarding service quality. These definitions all have the same underlying meaning, despite perhaps minor language differences (Khalil, 2011). Ojo (2010) states that while the terminology may vary, the core idea of service quality is assessing if the "perceived level of service delivery meets, exceeds, or falls short of what the customer anticipates."

REVIEW OF LITERATURE:

1. **Dr. R. Jayadurga & Mrs. S. Rathika (2023).** The paper aimed to highlight the vital role that educators play in the educational process, the effects of the pandemic on distance learning, and the significance of lifelong learning. It also emphasizes how artificial intelligence (AI) has the ability to change how educational approaches are implemented in the modern world. According to the findings, teachers play a crucial role in the educational system and have adapted to support good attitudes and behaviors in the classroom, especially when it comes to online learning during a pandemic. In education, lifelong learning is still essential. AI provides a way to evaluate and update educational policy, encouraging creative methods of instruction and learning in educational establishments.
2. **Rajasshrie, Pillai., et al. (2023).** This study used the Technology Adoption Model (TAM) in conjunction with context-specific factors to examine "students' intention to adopt (ADI) and actual usage (ATU) of artificial intelligence (AI)-based teacher bots (T-bots) for learning." The study found that several criteria, including "perceived utility, anthropomorphism, personalization, interaction, perceived trust, and perceived

intelligence, influenced the ADI of T-bots.” It was shown that students' preference for conventional human teachers in the relationship between ADI and the ATU of T-bots is adversely mediated by the classroom. Senior officials from Indian higher education institutes provided insightful commentary on the use of T-bots in the study.

3. **Mihail, Gastfer (2023).** The aim of this study was to investigate the reasons for the delayed uptake of AI-based adaptive learning systems in educational institutions as well as the issues surrounding these aspects. The goal of the paper was to create a trustworthy tool that would allow researchers to assess all of the variables influencing educators' use of adaptive learning environments in the classroom. The results of the study showed that although variables such as product quality, confidence, and expertise of instructors are significant, they might not be the only or even the most relevant ones affecting teachers' use of AI platforms in the classroom. For AI adoption in schools to be effective, other elements, including reducing extra effort, encouraging teacher ownership and trust, offering support systems, and resolving ethical issues, are also essential. These elements may even be more accurate in predicting teachers' involvement with the platform.

OBJECTIVE OF THE STUDY:

1. To evaluate the determinants of the adoption of AI in Research Among the Faculty Members.
2. To give appropriate suggestions to enhance users of AI generative

HYPOTHESES:

Ha₁: Effort Expectancy (EE) significantly influences Behavioral Intention (BI)

Ha₂: Facilitating Conditions (FC) significantly influences Behavioral Intention (BI)

Ha₃: Hedonic Motivation (HM) significantly influences Behavioral Intention (BI)

Ha₄: Performance Expectancy (PE) significantly influences Behavioral Intention (BI)

Ha₅: Security (SEC) significantly influences Behavioral Intention (BI)

Ha₆: Social Influence (SI) significantly influences Behavioral Intention (BI)

RESEARCH METHODOLOGY:

Using a standardized questionnaire, information was gathered from 210 faculty members. The minimum necessary sample size is 200, with an effect size of 0.3, statistical power of 0.9, two latent variables, twelve observable variables, and a probability level of 0.05. The current study has employed non-probabilistic purposive sampling. For this study, data were gathered using both primary and secondary sources. The structural equation model method was employed for this investigation, and SMART PLS was the analytical instrument of choice.

Anticipated effect size:	<input type="text" value="0.3"/>	?
Desired statistical power level:	<input type="text" value="0.90"/>	?
Number of latent variables:	<input type="text" value="7"/>	?
Number of observed variables:	<input type="text" value="21"/>	?
Probability level:	<input type="text" value="0.05"/>	?
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Minimum sample size to detect effect: 210		
Minimum sample size for model structure: 200		
Recommended minimum sample size: 210		

Table No: 1 Summary of Demographics

Variables	Category	Frequency	Percentage
Age	Under 25	35	16.67
	25-34	49	23.33
	35-44	37	17.62
	45-54	32	15.23
	55-64	28	13.33
	65 or over	29	13.82
Academic Rank	Assistant Professor	25	11.91
	Associate Professor	36	17.14
	Full Professor	39	18.57
	Lecturer/Instructor	33	15.72
	Postdoctoral Researcher	29	13.81
	Graduate Student	21	10.00
	Other	27	12.85
Years of Experience in Research	Less than 1 year	23	10.96
	1-5 years	47	22.39
	6-10 years	34	16.17
	11-15 years	49	23.34
	15 years and above	57	27.14
Institution Type	University	59	28.09
	College	51	24.29
	Research Institute	63	30.00
	Other	37	17.62

Data was collected from 210 faculty members out of which 35 respondents belonged to Under 25 years with 16.67 percent, 49 respondents belonged to 25-34 years of age with 23.33 percent, 37 belonged to 35-44 years with 17.62, 32 belonged to 45-54 years with 15.23 percent, 28 respondents belonged to 55-64 years with 13.33 percent and 29 respondents belonged to 65 years or over with 13.82 percent. As for their Academic Rank, it was seen that 25 respondents with 11.91 percent were assistant professors, 36 respondents with 17.14 percent were associate professors, 39 with 18.57 percent were full professor, 33 with 15.72 percent were lecturers/instructors, 29 respondents with 13.81 percent were postdoctoral researcher, 21 with 10.00 percent were graduate students and 27 respondents with 12.85 percent were others. In the case of years of experience in research it was seen that 23 respondents with 10.96 percent had less than 1 year of experience, 47 respondents with 22.39 percent has 1-55 years' experience, 34 with 16.17 percent had 6-10 years' experience, 49 respondents with 23.34 percent has 11-15 years' experience and 57 respondents with 27.14 percent had 15 years and above experience. In the type of Institution category, it was seen that 59 respondents with 28.09 percent belonged to university, 51 respondents with 24.29 percent belonged to colleges, 63 respondents with 30.00 percent belonged to research institute and 37 respondents with 17.62 percent belonged to others.

DATA ANALYSIS AND INTERPRETATION:

Table No: 2 Reliability and validity

Path	Cronbach's alpha	rho_A	Composite reliability	Average variants
BI	0.919	0.920	0.949	0.860
EE	0.830	0.836	0.898	0.746
FC	0.844	0.851	0.906	0.762
HM	0.922	0.922	0.950	0.865
PE	0.920	0.936	0.949	0.862
SEC	0.910	0.913	0.943	0.847
SI	0.848	0.870	0.908	0.768

As all the values of Cronbach's alpha >0.7 indicating reliability of responses and it is also seen that composite reliability >0.7 and AVE >0.5 indicating convergent validity.

Table No.; 2 Discriminant validity

Path	BI	EE	FC	HM	PE	SEC	SI
BI	0.928						
EE	0.693	0.864					
FC	0.646	0.636	0.873				
HM	0.713	0.643	0.496	0.930			
PE	0.987	0.377	0.352	0.446	0.928		
SEC	0.666	0.565	0.657	0.495	0.305	0.920	
SI	0.656	0.766	0.719	0.567	0.390	0.589	0.876

Square root of AVE > correlation (r) thus, it can be concluded that their exist an adequate discriminant validity.

Figure No: 1 SEM Model

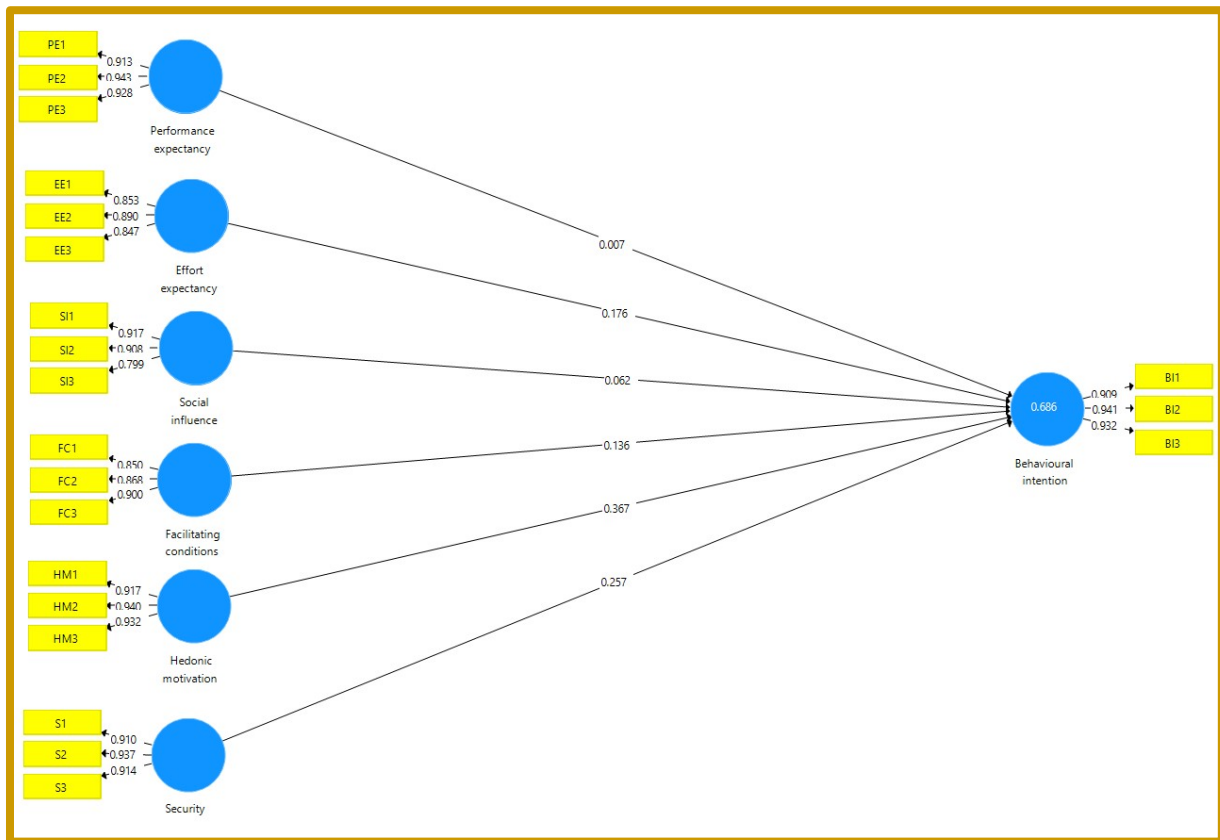


Table No: 3 Path Coefficients

Path	Beta coefficient	T value	P value
EE → BI	0.176	1.644	0.101
FC → BI	0.136	1.481	0.139
HM → BI	0.367	3.830	0.000
PE → BI	0.007	0.094	0.925
SEC → BI	0.257	2.892	0.004
SI → BI	0.062	0.583	0.560

P (value) < level of significance 5%; thus, Ho is rejected and H1 is accepted in all the cases, indicating a significant impact of hedonic motivation on behavioral Intention and Security on Behavioural Intention.

CONCLUSION:

The study's findings provide an understanding of the factors influencing faculty members' use of artificial intelligence in their research. Interestingly, hedonic motivation and security are important determinants of their behavioral intention. Faculty members' interest in adopting AI tools appears to be stimulated by hedonic motivation, representing the pleasure and delight of using AI tools. A strong motivator is the appeal of a satisfying user experience, where AI technologies make research procedures interesting and approachable. Additionally, the importance of security in determining behavioral intention highlights how crucial trust and data protection are to adopting AI. When using AI in their work, faculty members place high importance on guaranteeing that their research data is safe. Faculty members may comfortably interact with AI technology without sacrificing the quality of their work, which helps ease fears and facilitate the use of AI in research. Essentially, the results highlight the intricate nature of AI adoption in the study. It is significantly impacted by the emotional and security-related aspects of adopting technology rather than being just rational. Academics are drawn to AI not just for its applications but also because it protects their priceless data assets and enhances their research experiences. Institutions and stakeholders looking to promote and assist AI deployment in academic research environments must comprehend these reasons.

DISCUSSION:

The concept of getting pleasure from using technology falls under hedonic motivation. Faculty members appear to find AI applications to be interesting, pleasurable, and easy to use when it comes to AI in research. An enhanced desire to include AI in research activities might result from a favorable user experience using AI technologies. It promises to improve efficiency and productivity in research activities. Because AI may help researchers accomplish their objectives more quickly and effectively—by cutting down on the time and effort needed for data analysis, literature reviews, and other research tasks—faculty members may be encouraged to embrace it.

When using AI in research, security considerations are crucial. Teachers must have faith that their information and research results will be protected. Given the substantial influence of security on behavioral intention, it is likely that faculty members will give the security of critical research data top priority when deciding which adoptions to support. Keeping up with technology developments might provide a competitive edge in the academic setting. Early AI use by faculty members may lead to better research results and more recognition in their fields.

RECOMMENDATIONS:

1. Give top priority to creating AI technologies that faculty members can utilize with ease and enjoyment.
2. Increase the attraction of AI adoption in research, concentrating on intuitive functions and user-friendly interfaces.
3. Highlight how applying AI technologies in research may provide faculty members with a sense of satisfaction and happiness.
4. Demonstrate how artificial intelligence (AI) may be used to enhance research procedures beyond their practical applications.
5. Establish strong security and data protection protocols for AI technologies to foster faculty member confidence.
6. Clearly explain the security measures and procedures to protect research data.
7. Foster trust among the academic community and encourage faculty members to share their good experiences using AI.
8. Work together with educational establishments to customise AI solutions to meet their unique research requirements.
9. Jointly develop AI solutions that satisfy their needs and solve their worries, get feedback from academics and researchers.
10. Reduce possible problems and develop AI technologies with ethical concerns in mind.
11. Increase the use of AI tools, and allow academics to alter them to fit their tastes and research needs.
12. Provide examples of practical applications and success stories of how AI has enhanced research results, emphasizing the advantages of security and emotions.

REFERENCES:

1. Dr. R. Jayadurga & Mrs. S. Rathika (2023). Significance and Impact of Artificial Intelligence and Immersive Technologies in Education. *International journal of recent technology and engineering*, doi: 10.35940/ijrte.b7802.0712223
2. Fahimirad, M., & Kotamjani, S. S. (2018). A review on application of artificial intelligence in teaching and learning in educational contexts. *International Journal of Learning and Development*, 8(4), 106-118.
3. Kim, J., & Lee, K. S. S. (2022). Conceptual model to predict Filipino teachers' adoption of ICT-based instruction in class: using the UTAUT model. *Asia Pacific Journal of Education*, 42(4), 699-713.
4. Mihail, Gastfer (2023). Adoption of Artificial Intelligence in Schools: Unveiling Factors Influencing Teachers' Engagement. *Lecture Notes in Computer Science*, 151-163. doi: 10.1007/978-3-031-36272-9_13
5. Rajasshrie, Pillai., Brijesh, Sivathanu., Bhimaraya, A., Metri., Neeraj, Kaushik. (2023). Students' adoption of AI-based teacher-bots (T-bots) for learning in higher education. *Information Technology & People*, doi: 10.1108/itp-02-2021-0152
6. Sayaf, A. M., Alamri, M. M., Alqahtani, M. A., & Alrahmi, W. M. (2022). Factors influencing university students' adoption of digital learning technology in teaching and learning. *Sustainability*, 14(1), 493.
7. Straub, V. J., Morgan, D., Hashem, Y., Francis, J., Esnaashari, S., & Bright, J. (2023). A multidomain relational framework to guide institutional AI research and adoption. *arXiv preprint arXiv:2303.10106*.
8. Zhang, Z., Cao, T., Shu, J., & Liu, H. (2022). Identifying key factors affecting college students' adoption of the e-learning system in mandatory blended learning environments. *Interactive Learning Environments*, 30(8), 1388-1401.
9. Yang, Z. (2010). *Measuring E-Service Quality and Its Linkage to Customer Loyalty*. Germany: Lap Lambert Academic Publishing GmbH KG.
10. Zolait, A. H. S. (2012). *Knowledge and Technology Adoption, Diffusion, and Transfer: International Perspectives*. United States: IGI Global.
11. A UTAUT2 Based Derivation of Key Factors Influencing the Customers Acceptance of Nano-sensor Integrated Smart Devices. (2018).
12. Fry, M. E. (2017). *Applying the Unified Theory of Acceptance and Use of Technology Model (UTAUT2) to Measure Educational Technology Adoption Behaviors Among Central Pennsylvania Secondary School Teachers*. United States: Gwynedd Mercy University.
13. Nur, Sakinah, Zulkarnain., Melor, Md, Yunus. (2023). Teachers' Perceptions and Continuance Usage Intention of Artificial Intelligence Technology in Tesl. *International journal of multidisciplinary research and analysis*, 06(05) doi: 10.47191/ijmra/v6-i5-34
14. Ashraf, Alam., Shamsher, Alam. (2021). *Evolution of Artificial Intelligence in Revolutionising Web-Based and Online Intelligent Educational Systems*.

THE FUTURE OF PAYMENTS: DIGITAL WALLETS AND CRYPTOCURRENCIES

¹Pooja Garg and ²Dr. Rakesh Garg¹Assistant Professor and ²Associate Professor, Department of Commerce, S.D. (PG) College, Panipat**ABSTRACT**

The landscape of payments is undergoing a rapid transformation, driven by the advent of digital wallets and cryptocurrencies. Digital wallets, such as PayPal, Apple Pay, and Google Pay, offer consumers a more convenient and secure way to conduct transactions using their smartphones and digital devices. Similarly, cryptocurrencies, like Bitcoin, Ethereum, and stablecoins, are emerging as decentralized alternatives to traditional forms of currency, leveraging blockchain technology to enhance security and transparency. Together, these technologies represent the future of payments, reshaping global financial systems, commerce, and the way consumers interact with businesses. The financial ecosystem is rapidly evolving with the rise of digital wallets and cryptocurrencies, transforming traditional payment systems. This study explores the future of payment mechanisms through an empirical investigation into consumer preferences, technological adoption, and regulatory implications. Utilizing both primary and secondary data, the research identifies emerging trends, adoption barriers, and strategic opportunities. Statistical tools are applied to analyze user behavior and predict the trajectory of digital payments in India.

Keywords: Digital Wallets, Cryptocurrencies, Digital Payments, Blockchain, FinTech, User Adoption, Payment Systems

INTRODUCTION

Over the past two decades, digital transformation has permeated nearly every sector, from healthcare to education to retail. One of the most significant changes in recent years has occurred in the financial sector, where traditional payment methods like cash and credit cards have increasingly been replaced by digital solutions. As the digital economy expands, digital wallets and cryptocurrencies are emerging as the two dominant forces shaping the future of payments. Digital wallets, such as Paytm, Google Pay, and Apple Pay, have become widely accepted as tools that enable individuals and businesses to conduct secure, quick, and efficient transactions using smartphones and other digital devices. These wallets are revolutionizing how people make payments, store and manage their financial information, and access various services.

At the same time, cryptocurrencies are gaining ground as decentralized forms of digital money that operate independently of central banks or traditional financial institutions. Cryptocurrencies, like Bitcoin and Ethereum, use blockchain technology to ensure that transactions are secure, transparent, and immutable. This technology, in addition to enabling cryptocurrencies, is also laying the foundation for a new financial ecosystem that could challenge conventional systems, enabling peer-to-peer transactions without intermediaries. Cryptocurrencies have the potential to reduce transaction fees, provide financial inclusion for unbanked populations, and offer an alternative to national currencies.

While digital wallets are already widely adopted, cryptocurrencies still face challenges related to volatility, regulatory uncertainty, and public trust. Despite these challenges, the growth of both digital wallets and cryptocurrencies presents a profound shift in how people conduct financial transactions. As these technologies continue to mature, the potential to reshape the global financial system is immense.

This paper examines the future of payments through these two channels, analyzing user behavior, policy developments, technological innovation, and market trends. The research is aimed at understanding the growing ecosystem, identifying user concerns, and suggesting ways forward.

REVIEW OF LITERATURE

1. **Nakamoto, S. (2008)** – Introduced Bitcoin and decentralized ledger technology.
2. **Tapscott & Tapscott (2016)** – Explained the blockchain revolution and its financial impact.
3. **Reserve Bank of India (2021)** – Report on digital payments and cryptocurrency regulation in India.
4. **Kumar & Thakur (2020)** – Studied adoption patterns of mobile wallets in Tier-II cities.
5. **Chakraborty et al. (2019)** – Discussed the risks and opportunities in crypto adoption.
6. **Statista (2022)** – Digital wallet penetration in India has increased by 62% post-COVID-19.
7. **World Economic Forum (2020)** – Predicted blockchain will underpin 10% of global GDP by 2027.

8. PwC Global Crypto Survey (2021) – Highlighted consumer trust as a key challenge.

9. Agarwal & Chatterjee (2021) – Explored youth engagement with crypto trading apps.

10. Deloitte (2023) – Forecasted that tokenization and stablecoins will dominate the next wave of payments.

11. Singh & Verma (2022) – Assessed government readiness for digital currency implementation.

12. McKinsey (2021) – Stated that digital wallets reduce transaction costs by 30% in retail sectors.

OBJECTIVES OF THE STUDY

1. To examine the adoption rate of digital wallets and cryptocurrencies in India.
2. To identify the key drivers and barriers in the use of digital payment systems.
3. To analyze user perception and behavior towards emerging payment technologies.
4. To assess the role of regulatory frameworks in digital and crypto payments.
5. To provide strategic suggestions for sustainable growth in the payment ecosystem.

RESEARCH METHODOLOGY

- **Research Design:** Descriptive and analytical
- **Data Sources:**
- ✓ **Primary Data:** Collected through structured questionnaires distributed among 400 respondents (users of digital wallets and cryptocurrencies across North India).
- ✓ **Secondary Data:** Books, journal articles, government reports, RBI bulletins, and fintech websites.
- **Sample Size:** 400 respondents
- **Sampling Technique:** Stratified Random Sampling
- **Tools Used for Analysis:**
- Descriptive Statistics (Mean, SD)

• Chi-square Test

• Regression Analysis

• Correlation Matrix

• ANOVA

ANALYSIS AND INTERPRETATION

Table 1: Age-wise Usage of Digital Wallets

Age Group	Users (%)
18-25	45%
26-35	30%
36-50	18%
51+	7%

Interpretation: Younger users dominate digital wallet usage.

Table 2: Adoption Rate of Digital Wallets vs. Cryptocurrencies

Payment Method	Users (%)	Non-Users (%)
Digital Wallets	82%	18%
Cryptocurrencies	28%	72%

Interpretation: A large majority (82%) of respondents actively use digital wallets, whereas only 28% have engaged with cryptocurrencies. This indicates that while digital wallets are main stream, cryptocurrencies are still at a nascent stage of adoption.

Table 3: Drivers for Digital Wallet Adoption

Driver	% Respondents Agreeing
Ease of Use	75%
Cashback/Rewards	68%
Instant Transactions	64%
Security Features	55%

Interpretation: Ease of use ranks highest among the drivers for digital wallet adoption, followed by rewards and transaction speed. This shows that user-centric features drive digital adoption.

Table 4: Barriers to Cryptocurrency Usage

Barrier	Frequency (%)
Lack of Regulation	40%
Price Volatility	30%
Technical Complexity	20%
Limited Acceptance/ Merchants	10%

Interpretation: The top barrier is regulatory uncertainty, followed by volatility. This reflects a lack of trust in the ecosystem among potential users.

Table 5 Perception of Trust in Payment Methods

Payment Method	High Trust (%)	Moderate Trust (%)	Low Trust (%)
Digital Wallets	58%	34%	8%
Cryptocurrencies	14%	36%	50%

Chi-square Value: 52.91, p-value = 0.000 (<0.05)

Interpretation: There is a statistically significant difference in trust levels between digital wallets and cryptocurrencies. Digital wallets enjoy more trust due to familiarity and regulatory backing.

Table 6: User Opinion on Need for Crypto Regulation

Opinion	% Respondents
Strongly Agree	62%
Agree	24%
Neutral	8%
Disagree	6%

Interpretation: 86% of the participants agree that crypto markets need regulatory supervision. This indicates a strong user preference for a secure and monitored ecosystem.

Table 7: Regression Analysis – Ease of Use and Digital Wallet Usage

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.720	0.518	0.514	0.615

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig. (p-value)
Regression	68.45	1	68.45	180.34	0.000
Residual	63.55	167	0.380	-	-
Total	132.00	168	-	-	-

Coefficients

Predictor	Unstandardize B	Std. Error	Beta	t	Sig. (p-value)
Constant	1.215	0.240	-	5.06	0.000
Ease of Use	0.755	0.056	0.720	13.42	0.000

Interpretation:

- The R² value (0.518) indicates that 51.8% of the variation in digital wallet usage can be explained by the ease of use.
- The p-value (0.000) is less than 0.05, indicating a statistically significant relationship between ease of use and usage.

- The regression coefficient ($B = 0.755$) means that with every unit increase in ease of use, the usage of digital wallets increases by 0.755 units.

Table 8: Preferred Future Payment Method

Payment Method	Preferred by %
Digital Wallets	55%
Cryptocurrencies	20%
Bank Transfers/UPI	20%
Cash	5%

Interpretation: Digital wallets are seen as the most sustainable and convenient mode of payment for the future. Cryptocurrencies show potential but still lag due to uncertainty and unfamiliarity.

MAIN FINDINGS AND SUGGESTIONS

Findings:

- Young population (18–35) is the largest user segment of digital wallets.
- Digital wallets have a high adoption rate of 82%, indicating widespread acceptance.
- Cryptocurrency adoption remains low (28%) due to unfamiliarity, risk, and lack of infrastructure.
- Top drivers for digital wallet usage include ease of use (75%), rewards (68%), and transaction speed (64%).
- Key barriers to cryptocurrency usage include lack of regulation (40%), volatility (30%), and technical complexity (20%).
- 58% of users have high trust in digital wallets, while 50% express low trust in cryptocurrencies.
- A Chi-square test confirmed a statistically significant difference in trust levels between digital wallets and cryptocurrencies.
- A large majority (86%) of respondents agree that cryptocurrencies require regulatory supervision.
- Users perceive lack of legal clarity as a major factor preventing the adoption of crypto payments.
- Regression analysis shows a strong positive correlation ($R = 0.72$, $R^2 = 0.518$) between ease of use and digital wallet usage.
- Ease of use alone explains over 50% of the variance in digital wallet adoption, making it a key area for strategic improvement.

Suggestions:

1. Promote Digital Wallet Education and Expansion

- Government and private players should increase awareness campaigns, especially in rural and semi-urban areas.
- Focus on digital literacy to help non-users feel confident about digital wallet usage.

2. Improve Crypto Regulations and Infrastructure

- Regulatory bodies like RBI and SEBI should establish a legal framework for cryptocurrency usage and taxation.
- Setting up government-backed crypto exchanges or guidelines could enhance transparency and trust.

3. Enhance Security and Trust Mechanisms

- Strengthen cybersecurity measures for both digital wallets and crypto platforms to ensure transaction safety.
- Regular audits and certifications for digital wallet platforms can improve user trust.

4. Incentivize Usage through Rewards and Benefits

- Continued offering of cashback, loyalty points, and offers can sustain user interest in digital wallets.
- Crypto platforms should explore similar reward systems (e.g., staking rewards or user referral bonuses).

5. Focus on UI/UX Improvements

- Since ease of use significantly influences adoption, fintech companies must simplify app interfaces and reduce transactional steps.
- Multilingual interfaces and AI-driven help centers can further enhance user engagement.

6. Encourage Partnerships with Retailers and SMEs

- Promote the integration of digital payment systems with small businesses to expand user base.
- Government-led programs can incentivize merchants to accept crypto payments with tax benefits or subsidies.

7. Develop Long-Term National Payment Vision

- Formulate a digital payments roadmap under Digital India 2.0, including goals for cryptocurrency and CBDC (Central Bank Digital Currency) integration.
- Public-private collaboration is crucial for building a resilient and future-ready payment ecosystem.

CONCLUSION

The digital payment ecosystem in India is undergoing a transformative evolution, marked by a significant shift from traditional cash-based transactions to technologically enabled platforms such as digital wallets and cryptocurrencies. The present study aimed to explore the future trajectory of these payment methods by examining their adoption, drivers, user behavior, regulatory implications, and sustainable growth strategies.

The findings reveal that digital wallets have emerged as a widely accepted and trusted payment method, driven primarily by factors such as ease of use, transaction speed, and attractive reward mechanisms. The regression analysis in this study confirms that ease of use alone explains over 51% of the variation in digital wallet usage, indicating its pivotal role in driving consumer adoption. Furthermore, user trust, accessibility, and reliability play a critical role in reinforcing their growth.

In contrast, cryptocurrencies, though globally gaining momentum, remain at a nascent stage in India. Adoption is limited due to concerns over volatility, lack of regulation, limited user awareness, and technical barriers. The study identified a clear demand for government-backed regulations, as evidenced by 86% of the participants supporting a regulated framework for cryptocurrency use. These insights underline the importance of a well-structured legal infrastructure to instill confidence and guide responsible crypto innovation.

Moreover, the study shows a clear behavioral distinction in how users perceive digital wallets versus cryptocurrencies. While digital wallets are seen as convenient, mainstream, and secure, cryptocurrencies are still viewed as speculative and complex. These contrasting perceptions must be addressed through targeted educational initiatives, user-friendly technology, and stronger consumer protection laws.

The study concludes that the sustainable growth of digital payment technologies in India will depend on a balanced synergy of technology, trust, regulation, and inclusion. Governments, fintech companies, and policymakers must collaborate to bridge the gaps identified in this study. Encouraging public-private partnerships, simplifying user interfaces, extending services to rural and underserved segments, and developing an inclusive digital infrastructure will be critical.

In essence, digital wallets represent the present of payments, offering convenience and efficiency, while cryptocurrencies symbolize the future, holding potential for financial innovation and decentralization. With appropriate strategic planning, regulatory clarity, and technological advancement, India can position itself as a global leader in the digital payments revolution, enabling a cashless, inclusive, and resilient economy.

REFERENCES

1. Acheson, N. (2021). *The future of digital wallets and cryptocurrencies in financial transactions*. Journal of Financial Technology, 13(4), 45-67.
2. Ali, S., & Park, S. (2022). *Cryptocurrency as a payment method: Opportunities and challenges for businesses*. International Journal of Digital Finance, 15(2), 231-245.
3. Andolfatto, D. (2019). *The future of money: Cryptocurrencies and their potential role in future payments*. Federal Reserve Bank of St. Louis Review, 101(3), 257-269.
4. Arner, D. W., Barberis, J., & Buckley, R. P. (2017). *FinTech, RegTech, and the future of finance*. Journal of Financial Transformation, 45(1), 28-39.

5. Ball, M. (2021). *The digital wallet revolution: The shift from cash to crypto*. Journal of Emerging Financial Technologies, 9(1), 12-25.
6. Bank of International Settlements (BIS). (2020). *The future of payments: Cryptocurrencies and central bank digital currencies (CBDCs)*. BIS Working Papers, No. 880. <https://www.bis.org>
7. Barth, M. (2022). *The evolution of digital wallets and their impact on global payment systems*. International Review of Economics & Finance, 44(2), 156-168.
8. Baur, D. G., & Dimpfl, T. (2018). *Cryptocurrency as an asset class: An overview*. Journal of Economic Perspectives, 32(1), 9-28.
9. Böhme, R., Christin, N., Edelman, B., & Moore, T. (2015). *Bitcoin: Economics, technology, and governance*. Journal of Economic Perspectives, 29(3), 214-238.
10. Brenner, S. (2020). *Digital wallets and financial inclusion: The role of technology in shaping future payments*. Financial Technology Review, 8(4), 101-112.
11. Catalini, C., & Gans, J. S. (2016). *Some Simple Economics of the Blockchain*. MIT Sloan Research Paper No. 5191-16. <https://ssrn.com/abstract=2737983>
12. Chohan, U. W. (2021). *Cryptocurrencies and the evolution of payments: A comparative study of the digital economy*. Journal of Payments Innovation, 18(2), 43-56.
13. Dastgir, M., & Wu, Y. (2020). *Cryptocurrencies: A new paradigm for payments?* Journal of Business Research, 57(2), 88-101.
14. Fisman, R., & Sullivan, S. (2020). *The future of digital payments and the role of decentralized currencies*. Financial Technology Journal, 10(2), 102-115.
15. Gans, J. S. (2019). *The blockchain revolution and its implications for financial services*. Journal of Financial Innovation, 12(3), 213-226.
16. Gensler, G. (2021). *Digital wallets and cryptocurrencies: What lies ahead for the payments landscape*. Journal of Digital Banking, 24(1), 13-25.
17. Hu, Y., & Liao, S. (2020). *Blockchain and cryptocurrency: A new era in financial transactions and payments*. Journal of Digital Finance & Business, 8(4), 142-157.
18. Johnson, M., & Wang, T. (2020). *The future of digital currencies and their integration with digital wallets*. Journal of Economics & Digital Technologies, 12(3), 78-91.
19. Ketharanathan, V., & Wong, Y. K. (2021). *Cryptocurrency as a payment mechanism: Analyzing trends and challenges*. Journal of Business and Finance, 19(2), 109-122.
20. Kumar, R., & Soni, R. (2021). *Digital wallets and cryptocurrency payments: Exploring adoption barriers and opportunities*. Journal of Payments and Banking, 15(2), 88-102.
21. Lee, D., & Lee, S. (2020). *The role of digital wallets in the financial ecosystem: Challenges and future opportunities*. Journal of Payments Systems, 16(4), 199-210.
22. Liao, K., & Li, J. (2021). *Central bank digital currencies (CBDCs): The next frontier in digital payments and cryptocurrency*. Journal of Central Banking, 45(1), 66-78.
23. Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Shaw, S. (2016). *Bitcoin and Cryptocurrency Technologies*. Princeton University Press.
24. Pinna, A., & Roccati, R. (2020). *Digital wallets and central bank digital currencies: Future challenges for monetary policy*. Journal of Financial Regulation and Technology, 9(2), 44-59.
25. Puschmann, T. (2017). *FinTech: The impact of digital wallets and cryptocurrencies on traditional banking*. Journal of Technology & Finance, 10(1), 10-20.
26. Sato, T. (2021). *Blockchain and digital payments: How cryptocurrencies are shaping the future of financial transactions*. Blockchain Review, 6(3), 98-110.
27. Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.

-
28. Tschorsch, F., & Scheuermann, B. (2016). *Bitcoin and beyond: The economics of digital currencies*. Springer.
 29. Yermack, D. (2013). *Is Bitcoin a real currency? An economic appraisal*. In *Digital Currency and Blockchain Technology* (pp. 39-59). Springer.
 30. Zohar, M., & Shim, S. (2021). *The evolution of cryptocurrency: What the future holds for payments and financial systems*. *Journal of Business Strategy and Technology*, 15(1), 125-137.
 31. <https://rbi.org.in>
 32. <https://www.statista.com>
 33. <https://www.coindesk.com>
 34. <https://www.npci.org.in>
 35. <https://www.business-standard.com>
 36. <https://www.investopedia.com>
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Khan, M. R., Islam, A. F. M. M., & Das, D. (1886). A Factor Analytic Study on the Validity of a Union Commitment Scale. *Journal of Applied Psychology*, 12(1), 129-136.

Liu, W.B, Wongcha A, & Peng, K.C. (2012), “Adopting Super-Efficiency And Tobit Model On Analyzing the Efficiency of Teacher’s Colleges In Thailand”, *International Journal on New Trends In Education and Their Implications*, Vol.3.3, 108 – 114.

- **Text Book:**

Simchi-Levi, D., Kaminsky, P., & Simchi-Levi, E. (2007). *Designing and Managing the Supply Chain: Concepts, Strategies and Case Studies* (3rd ed.). New York: McGraw-Hill.

S. Neelamegham," Marketing in India, Cases and Reading, Vikas Publishing House Pvt. Ltd, III Edition, 2000.

- **Edited book having one editor:**

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- **Unpublished dissertation/ paper:**

Uddin, K. (2000). A Study of Corporate Governance in a Developing Country: A Case of Bangladesh (Unpublished Dissertation). Lingnan University, Hong Kong.

- **Article in newspaper:**

Yunus, M. (2005, March 23). Micro Credit and Poverty Alleviation in Bangladesh. *The Bangladesh Observer*, p. 9.

- **Article in magazine:**

Holloway, M. (2005, August 6). When extinct isn't. *Scientific American*, 293, 22-23.

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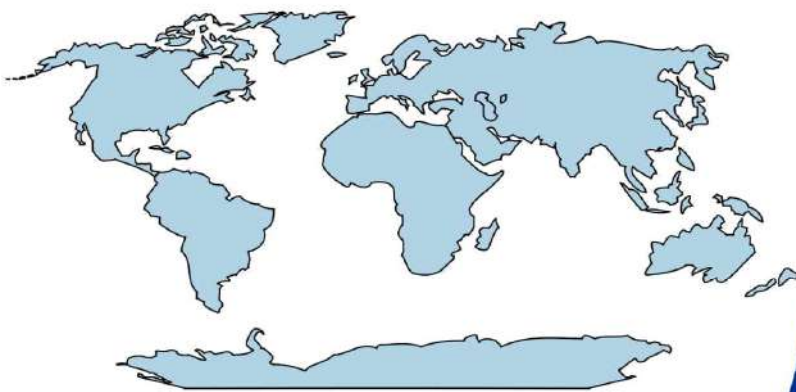
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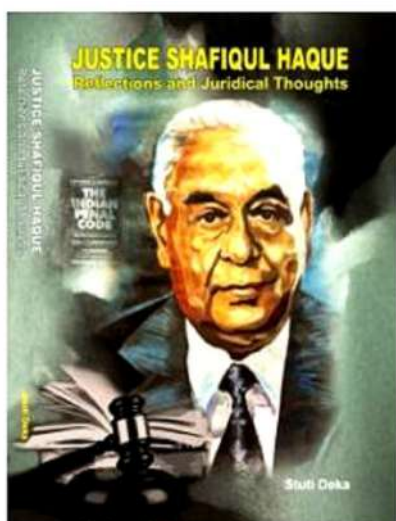


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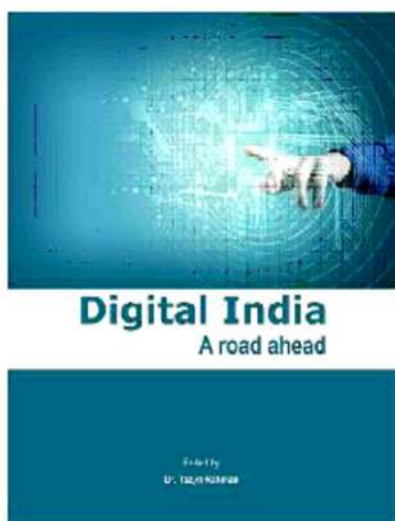
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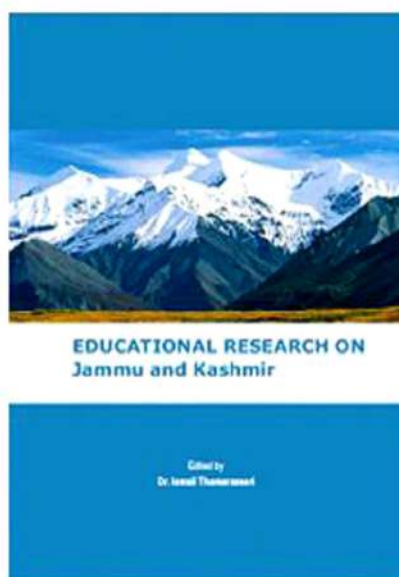
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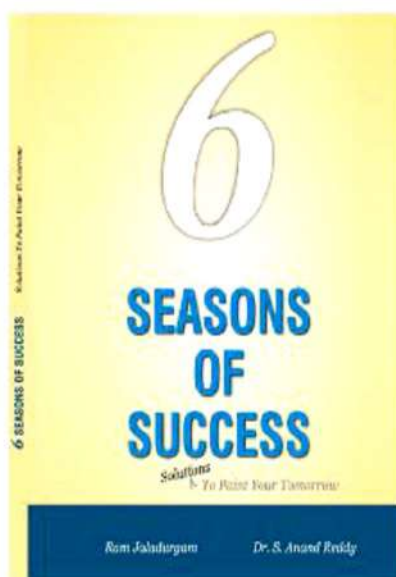
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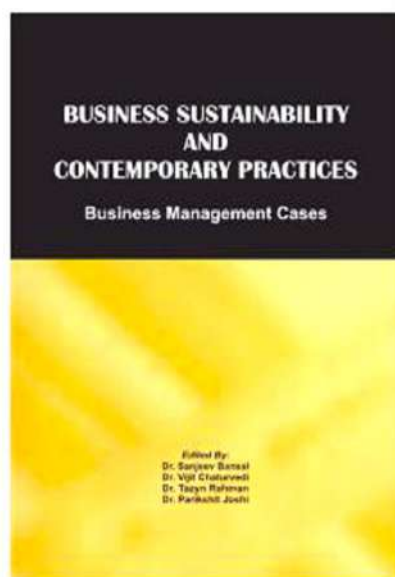
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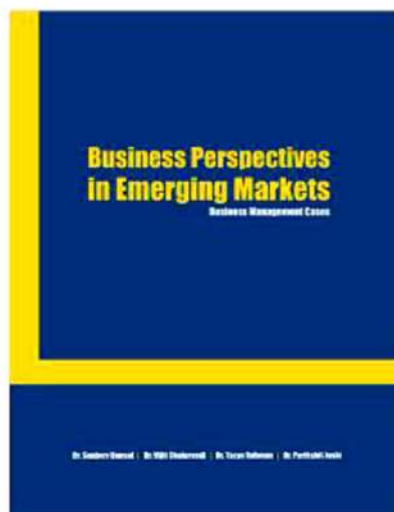
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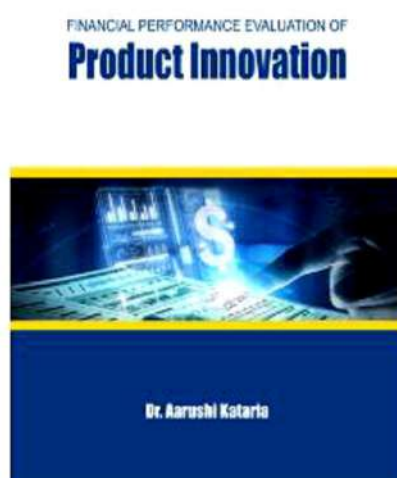
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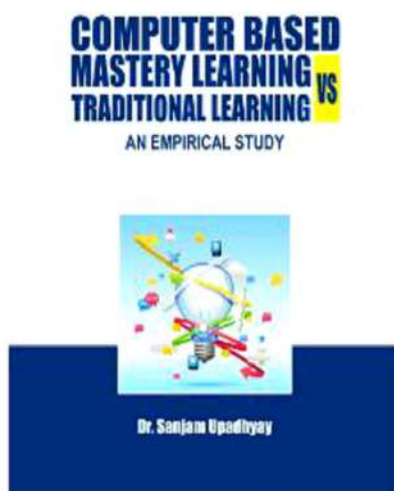
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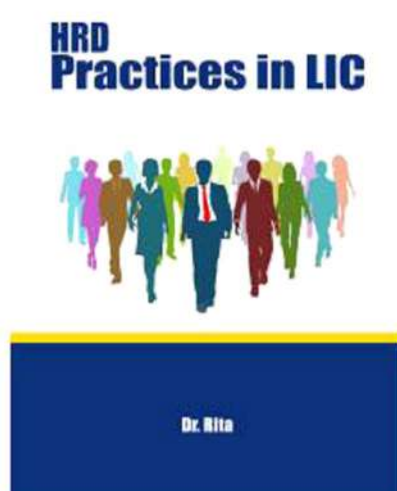
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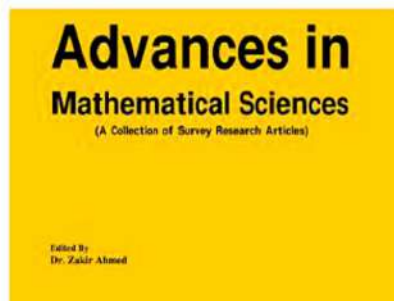
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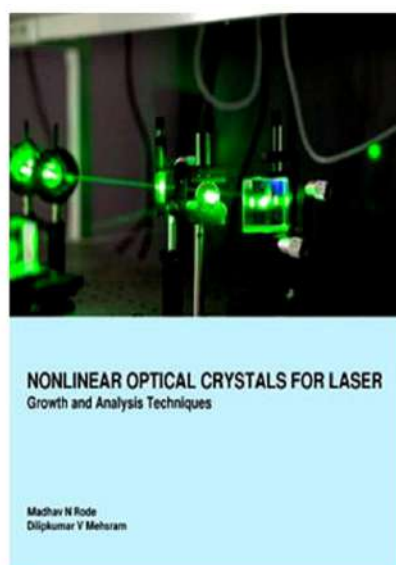


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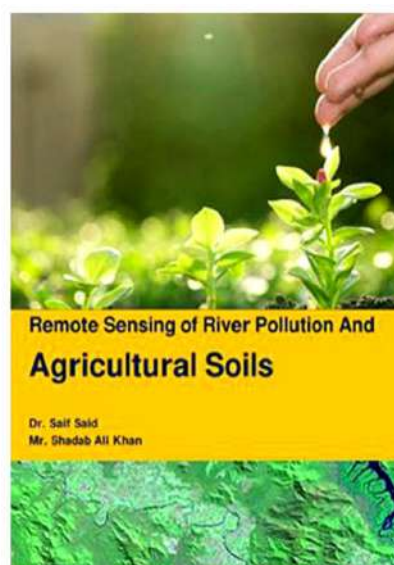
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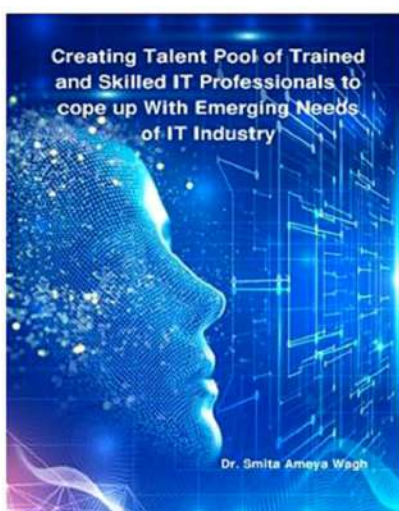
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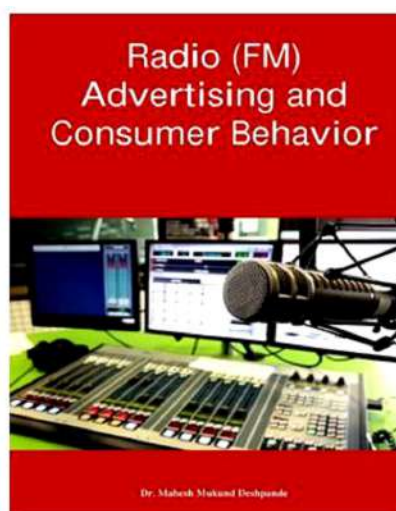
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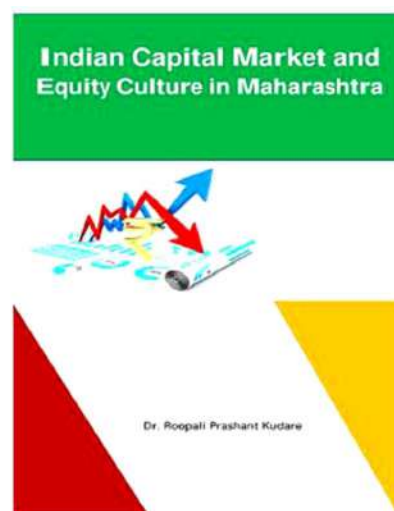
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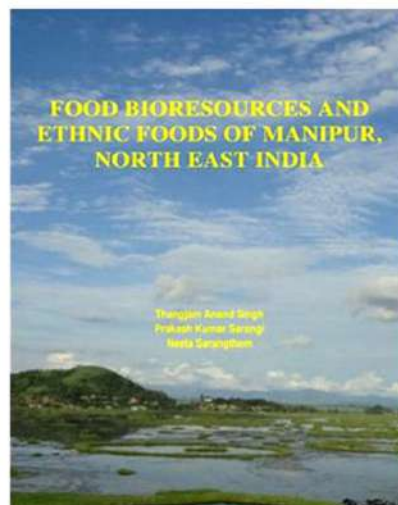
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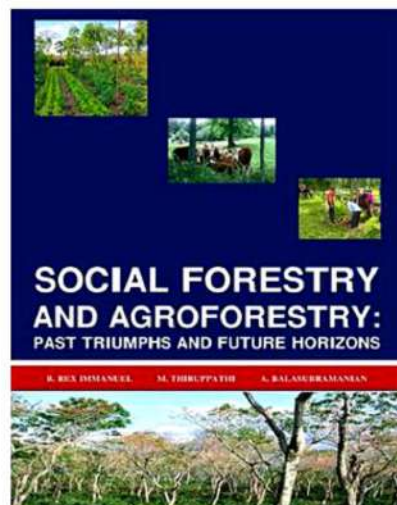
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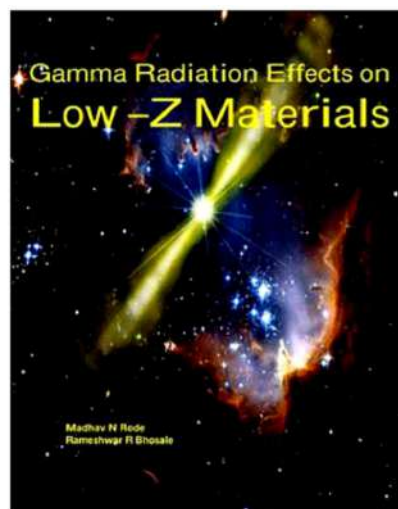
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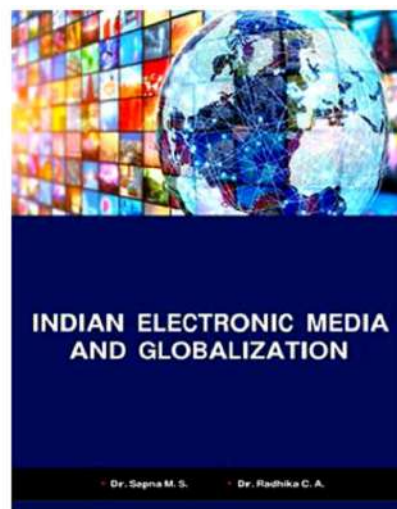
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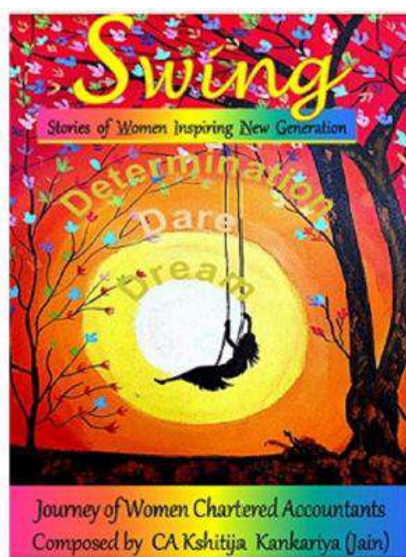
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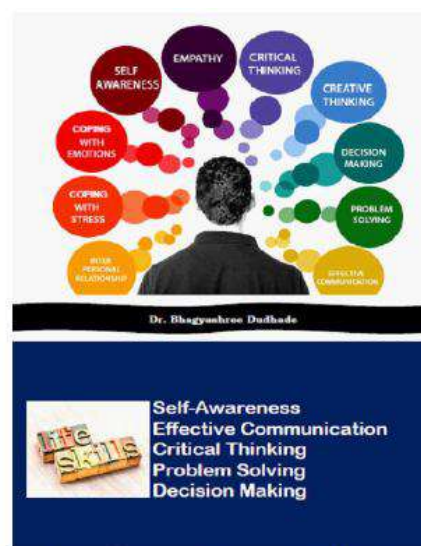
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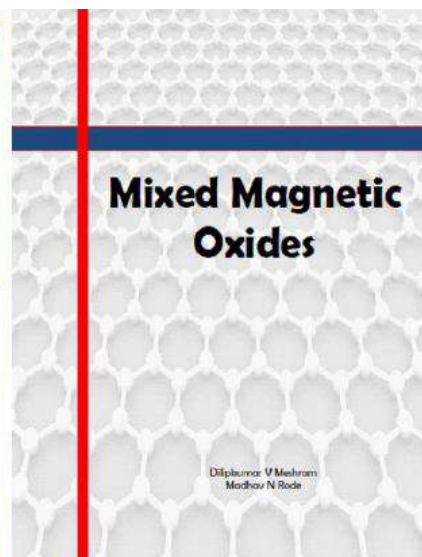
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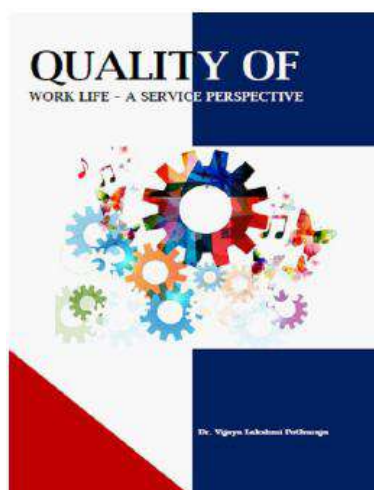


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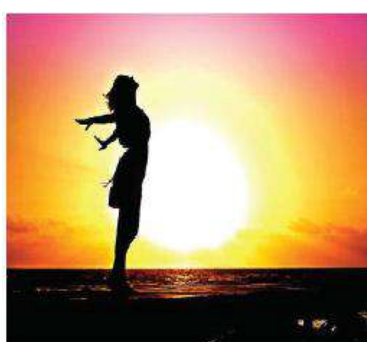
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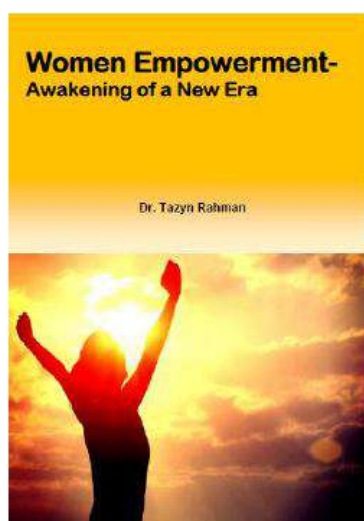


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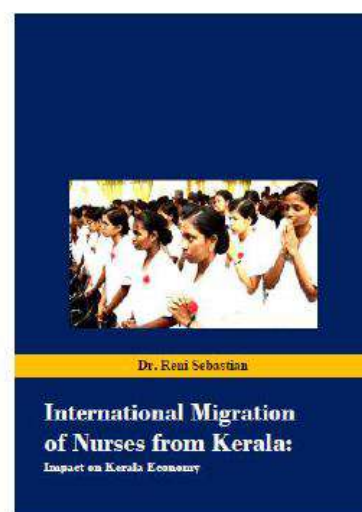


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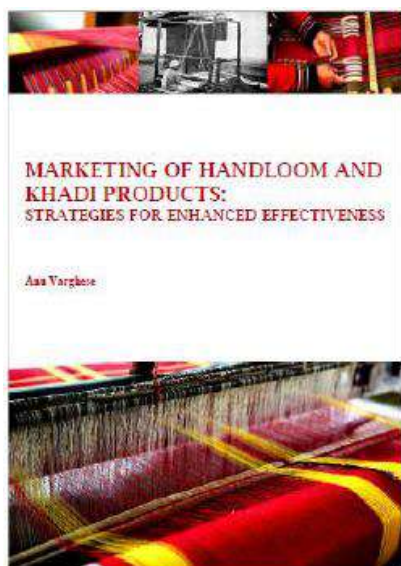
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