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Recent Trends in Multidisciplinary Research



2026

Editors:

Dr. Manju Devi

Dr. Esha Mehta

Mr. Sahil Gupta

Mr. Gourav Kamboj

Bhumi Publishing, India



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PREFACE

Recent Trends in Multidisciplinary Research @ 2026 emerges in a period where academic boundaries are rapidly dissolving and knowledge creation is increasingly shaped by collaboration across diverse fields. As editors, our intention behind curating this volume was to capture the evolving landscape of multidisciplinary inquiry—one where technology, social sciences, management, environment, health, humanities, and emerging domains intersect to offer richer perspectives and more impactful solutions.

This book brings together contributions from scholars, practitioners, and researchers who are exploring innovative approaches and addressing contemporary challenges through integrated frameworks. Each chapter reflects a unique blend of theoretical insight, empirical evidence, and forward-looking ideas that highlight how multidisciplinary thinking is no longer optional but essential for meaningful research in 2026 and beyond.

The themes covered across the volume—ranging from digital transformation and sustainability to societal behaviour, global governance, scientific advancements, and educational innovation—demonstrate the breadth and depth of current academic discourse. Our collective goal has been to provide readers with a comprehensive understanding of these trends, spark new conversations, and encourage future research collaborations across disciplines.

We hope that this edited book serves as a valuable resource for academicians, policy makers, students, and researchers who seek to engage with cutting-edge developments and contribute to the growing movement of multidisciplinary scholarship.

- Editors

ACKNOWLEDGEMENT

The successful completion of *Recent Trends in Multidisciplinary Research @ 2026* has been possible only through the collective effort of many individuals and institutions. As editors, we extend our sincere gratitude to all contributing authors who entrusted us with their scholarly work and responded patiently to multiple rounds of review and refinement. Their commitment to academic quality forms the core strength of this volume.

We are deeply thankful to the reviewers and subject experts whose constructive feedback enhanced the clarity, rigor, and relevance of each chapter. Their time, expertise, and thoughtful critique significantly shaped the final manuscript.

Our appreciation also goes to our respective institutions for providing the academic environment, resources, and encouragement necessary for undertaking an edited book of this scale. We acknowledge the support of colleagues, research scholars, and administrative teams who assisted in coordination, formatting, communication, and logistics throughout the publication process.

We would also like to thank the publishing team for their professionalism, timely guidance, and meticulous attention to detail, ensuring that the book meets high academic and production standards.

Finally, we owe heartfelt thanks to our families and well-wishers for their unwavering support and understanding during the long hours dedicated to editing, reviewing, and compiling this book.

To everyone who contributed directly or indirectly—thank you for making this volume a reality.

- Editors

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**PARENTAL GUIDANCE AND THE DEVELOPMENT OF VOCATIONAL
INTEREST AMONG SECONDARY SCHOOL STUDENTS:
A QUALITATIVE INQUIRY IN THE CONTEXT OF NEP 2020**

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Abstract:

The development of vocational interest during adolescence is a complex and socially embedded process. In the Indian educational context, parental guidance plays a central role in shaping students' perceptions, aspirations, and career-related decisions. The National Education Policy (NEP) 2020 highlights vocational education, early career exposure, and parental engagement as key components of holistic education. The present study adopts a qualitative research approach to explore how parental guidance influences the formation of vocational interest among secondary school students. Using semi-structured interviews and focus group discussions, data were collected from secondary school students and their parents. Thematic analysis revealed that parental expectations, emotional support, exposure to career information, and socio-cultural values significantly shape students' vocational interests. The study provides rich insights into students' lived experiences and underscores the need for parent-inclusive career guidance frameworks aligned with NEP 2020.

Keywords: Vocational Interest, Parental Guidance, Qualitative Study, Secondary School Students, NEP 2020

Introduction:

Career choice is not merely an individual decision but a socially constructed process influenced by family, culture, and educational systems. Vocational interest refers to an individual's inclination towards particular types of occupations or work activities, shaped over time through experiences and social interactions. The secondary school stage is critical for vocational development, as students begin to reflect on their abilities, interests, and future roles in society.

In India, parents play a dominant role in educational and vocational decision-making. Parental guidance often determines the range of career options students consider acceptable or attainable.

While supportive parental involvement can facilitate exploration and confidence, directive or restrictive guidance may suppress students' authentic interests.

The National Education Policy (NEP) 2020 emphasizes the integration of vocational education, flexibility in learning pathways, and active parental engagement. However, most existing studies on vocational interest are quantitative, offering limited insight into students' subjective experiences. A qualitative approach is therefore essential to understand how parental guidance is perceived, interpreted, and internalized by students.

Rationale for a Qualitative Approach

Qualitative research focuses on understanding meaning, experience, and context rather than measurement alone. In the area of vocational interest and parental guidance, qualitative inquiry allows researchers to:

- Capture students' lived experiences
- Explore parental beliefs and expectations
- Understand socio-cultural influences on career decisions

Review of Related Literature

Previous research confirms that parental influence significantly affects adolescents' career development.

Sharma (2018) highlighted that parental encouragement enhances vocational clarity.

Kumar and Singh (2019) reported that parental expectations often shape students' career aspirations, sometimes overriding personal interests.

Gupta (2020) emphasized the role of family socio-cultural capital in vocational decision-making.

Recent literature aligned with NEP 2020 stresses parental awareness and participation in vocational education reforms. However, there is a lack of qualitative studies exploring how students experience parental guidance in real-life contexts. This study addresses this gap.

Research Questions

1. *How do secondary school students perceive parental guidance in relation to their vocational interests?*
2. *What forms of parental guidance influence students' vocational thinking and aspirations?*
3. *How does NEP 2020's emphasis on vocational education align with students' and parents' experiences?*

Methodology

Research Design

The study employed a qualitative phenomenological research design, focusing on participants' lived experiences regarding vocational interest and parental guidance.

Participants

The sample consisted of:

- 20 secondary school students (Classes IX–X)
- 10 parents

Participants were selected using purposive sampling to ensure diversity in gender, school type, and socio-economic background.

Tools for Data Collection

- Semi-structured interviews with students
- Focus group discussions with parents
- Interview guides were developed in alignment with NEP 2020 themes.

Procedure

Data were collected over a period of one month. Interviews were audio-recorded with consent and transcribed verbatim. Ethical considerations such as confidentiality and voluntary participation were strictly followed.

Data Analysis

Data were analyzed using thematic analysis following Braun and Clarke's six-step framework:

1. Familiarization
2. Coding
3. Theme generation
4. Theme review
5. Theme definition
6. Reporting

Findings and Thematic Analysis

Theme 1: Parental Expectations as a Guiding Force

Students reported that parents' aspirations strongly influenced their vocational thinking. Many students felt encouraged to pursue careers perceived as stable or prestigious, such as engineering, medicine, or government jobs.

Theme 2: Emotional Support and Motivation

Participants highlighted that emotional encouragement from parents boosted confidence and motivation. Students who felt emotionally supported were more open to exploring diverse vocational options.

Theme 3: Limited Awareness of Vocational Pathways

Both students and parents expressed limited awareness of vocational and skill-based career options, despite NEP 2020 initiatives. This lack of information restricted students' vocational exploration.

Theme 4: Cultural and Social Values

Cultural beliefs regarding status, gender roles, and job security significantly shaped vocational interest. Parents often guided choices based on societal acceptance rather than students' interests.

Discussion:

The findings reveal that parental guidance is a multidimensional construct encompassing expectations, emotional support, cultural values, and information sharing. Consistent with Social Cognitive Career Theory, parental influence acts as a contextual factor shaping vocational interest.

While NEP 2020 promotes vocational flexibility, the study indicates a gap between policy intent and ground-level awareness. Parental guidance remains largely traditional, highlighting the need for structured parent education programs.

Implications for Practice and Policy

- Schools should conduct parent-inclusive career counseling programs.
- Teachers should mediate between students' interests and parental expectations.
- Policy initiatives should focus on parental orientation to NEP 2020 vocational pathways.
- Career guidance should be contextualized within families' socio-cultural realities.

Trustworthiness of the Study

To ensure qualitative rigor:

- Credibility: Member checking was conducted
- Transferability: Rich, thick descriptions provided
- Dependability: Audit trail maintained
- Conformability: Researcher bias minimized through reflexive notes

Limitations

1. Small sample size limits generalization
2. Findings are context-specific
3. Interpretation is based on participants' self-reported experiences

Conclusion:

This qualitative study demonstrates that parental guidance plays a decisive role in shaping vocational interest among secondary school students. While NEP 2020 provides a progressive framework for vocational education, its success depends significantly on parental awareness and engagement. Understanding students' lived experiences highlights the need for family-centered career guidance models that respect students' interests while addressing parental concerns.

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URBAN GROWTH PATTERNS IN INDIA AND CHINA: A COMPARATIVE ANALYSIS OF INDUSTRIALISATION

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Introduction:

India and China both are heterogeneous countries which are different in terms of population, stage of development, GDP, GDP per capita etc. In the late 19th century, India and China both countries experienced some degree of industrialisation. Since World War II, Manufacturing sector has emerged as an important activity in developing countries. Manufacturing is the oldest and basic single industry all over the globe that creates jobs, infrastructure, information technology, education, financial services, training, customers support and health care etc. Successful industrialisation always promotes high income, growth of urbanisation and living standard. Economic development and urbanisation are the products of globalisation and industrialisation.

Manufacturing sector holds a key position in the Chinese and Indian economy. India is the largest producer of basic metals, food processing, cement, textiles, general, electrical machinery and equipment, chemical products etc whereas China produces toys and games, electronic machinery, furniture, clothing, accessories, optical, medical apparatus, vehicles, iron or steel, footwear etc. By the end of 1952, the total urban population of China was around 72 million. In the modern world, China is the first nation to develop industrialisation without significant urbanisation. By the end of 1980, India realised that strong economic policy could increase the per capita income of the people, help in the bringing down the poverty level and improve the standard of living of the poor. So, India started economic reforms in 1991 which increased the growth rate of the country.

After the independence, India has made inadequate progress due to the fact that 21.9 percent of the population is still living below the national poverty line in 2011 but in China only 5.7 percent in 2015.¹

¹ Asian Development Bank, <http://adb.org/countries/prc/poverty>

Countries like India and China together contributes 30 percent of GDP in the World (US\$ constant PPP in 2002-03).²

In this chapter, the objective is to study the growth of industrialisation and development in India and China.

Following are the hypotheses

1. Industrialisation and rural- urban migration are positively correlated.
2. The greater a nation is industrialized, the more it is urbanised.
3. There is a positive relationship between industrialisation and development.
4. There is a negative relationship between growth rate and income inequalities.

Origin of Industrialisation

Great Britain was the first country to industrialise and became the first technological leader in the world. Developing countries like India and China entered into industrialisation after 1945. In the 19th century, manufacturing sector became the main engine of economic growth.

According to Gerchenkron, "The role of financial institutions and government policy was very important in the later stage of industrialisation because in the early stage, manufacturing activities was based on raw material which derived from agriculture sector but in the later stage of industrialisation, more sophisticated technology are used for the production of goods. Government and financial institutions directly invest in industries, development of infrastructure, active in technology acquisition and education".³

Manufacturing sector is considered to be the engine of growth because productivity is higher in the manufacturing sector than in agricultural sector. Manufacturing sector offers special opportunities for economies of scale, capital accumulation in developing countries like India and China.

Top Manufacturing Countries (1980-2020)

Developing countries have made their way more and more in the top 15 of global manufacturing countries. The United States (the world's biggest economy) is still the largest manufacturing economy. In 2010, China became the 2nd largest manufacturing

²World Bank 2004.

³Gerschenkron, A. 'Economic Backwardness in historical perspective' Cambridge, Harvard University Press, 1962

country and the rank of India was 10th (1/3 or 1/4 industrial output of China) in the world. Large developing economies are moving up global manufacturing sector. Top 15 manufacturers by share of global nominal manufacturing Gross value added are shown in following table.

Table 1: World's Top 15 Manufacturing Nations

Sr. No.	1980*	1990*	2000*	2010*	2016**	2020** (Projected)
1	United States	United States	United States	United States	China	United States
2	Germany	Japan	Japan	China	United States	China
3	Japan	Germany	Germany	Japan	Germany	Germany
4	United Kingdom	Italy	China	Germany	Japan	Japan
5	France	United Kingdom	United Kingdom	Italy	South Korea	India
6	Italy	France	Italy	Brazil	United Kingdom	South Korea
7	China	China	France	South Korea	Taiwan	Mexico
8	Brazil	Brazil	South Korea	France	Mexico	United Kingdom
9	Spain	Spain	Canada	United Kingdom	Canada	Taiwan
10	Canada	Canada	Mexico	India	Singapore	Canada
11	Mexico	South Korea	Spain	Russia	India	Singapore
12	Australia	Mexico	Brazil	Mexico	Switzerland	Viet man
13	Netherlands	Turkey	Taiwan	Indonesia	Sweden	Malaysia
14	Argentina	India	India	Spain	Thailand	Thailand
15	India	Taiwan	Turkey	Canada	Poland	Indonesia

Source: *represents IHS Global insight, Mckinsey Global institute analysis

** represents Data related to 2016, 2020, Deloitte Touche Tohmatsu limited and US council on competitiveness, 2016 Global Manufacturing competitiveness Index

Looking at the data, between the periods 1980 to 2016, it is clearly evident that in the beginning period (1980-2000), there were only three leading manufacturing countries (United States of America, Germany and Japan). By the year of 2016, China occupied the first position whereas India 11th position. Many other countries are also picking up in the race of manufacturing.

Table 2: Share of manufacturing in GDP in India and China, 1980-2014

Countries	1980	1985	1990	1995	2000	2005	2010	2014
India	19.1	18.9	19.1	20.4	18.1	18.2	17.5	16.4
China	40.0	34.4	32.3	33.4	31.8	32.1	31.5	32.0

Source: World development indicators, 2017

The output of manufacturing sector accounts for 32 percent in China and 16 percent in India. The share of manufacturing sector in GDP has been stable in China however, in India, it has fallen from 19 percent in 1980 to 16.4 percent in 2014. Manufacturing sector in India is not as strong as China because India did not follow the model of development.

Structure of Production and Labour Force

Industrialisation is the main employment generating sector because this sector helps in solving various problems such as poverty, inequality and unemployment etc in developing countries like India and China.

India has set an ambitious target of increasing the contribution of manufacturing output from 16 percent to 25 percent of GDP by 2025.⁴

(A) Structural Change and Emergence of Manufacturing

The structural change in different sectors like agriculture, industry, manufacturing and services in India and China from the period 1980-2014 is shown in following table. In 1980, 36.7 percent and 29.6 percent of GDP in India and China originated from the agriculture sector. But in 2014, it declined dramatically to 18.0 percent and 9.06 percent in India and China.

From 1980 to 2014, the share of manufacturing sector in China was double in comparison to India. In 1980, the share of manufacturing was only 19.1 percent of GDP in India compared to 39.9 percent in China. In 2014, the share of manufacturing in China was higher than in India (32 and 16 percent). The share of services in India and China was

⁴J S Shin, 'India is emerging as a manufacturing and R&D hub for Samsung' march 2015.

higher than the share of manufacturing sector (exceptional case of China in 1980). The structural change indicates the rise of industry that precedes the service sector.

Table 3: Structure of Production (1980-2014) (Gross value added in agriculture, industry, manufacturing and services as percentage of GDP at current prices)

Country	1980				1990				2000			
	A	I	M	S	A	I	M	S	A	I	M	S
India	36.7	29.0	19.1	34.3	30.1	31.6	19.1	38.3	23.9	31.0	18.1	45.1
China	29.6	48.0	39.9	22.3	26.6	41.0	32.3	32.3	14.7	45.5	31.8	39.8
Country	2010				2014							
	A	I	M	S	A	I	M	S				
India	18.9	32.4	17.5	49.7	18.0	30.2	16.4	51.8				
China	9.53	46.4	31.5	44.1	9.06	43.1	32.0	47.8				

Source: World Development Indicators 2017

Table 4: Compound growth rate of manufacturing sector in India and China

Year	Compound Growth Rate of China (%)	Compound Growth Rate of India (%)
1980-89	5.21	5.56
1990-99	14.8	5.66
2000-09	18.48	14.76
2010-13	14.67	7.032

Sources: World Development Indicators, 2014

The table represents the compound growth rate of India and China in Manufacturing value added. In the decade 1980-89, the compound growth rate in (MVA) India was more than that in China. From 1990 to 2013, the compound growth rate of manufacturing sector in China was higher than India.

(B) Employment in Different Sectors

When labour forces are transferred from low productivity (agriculture) to high productivity (industry) that increases the overall production, GDP and GDP per capita income. It is a major factor responsible for the development especially in developing countries. Employment in different sectors (manufacturing and services) is much higher than in agriculture sector in India and China.

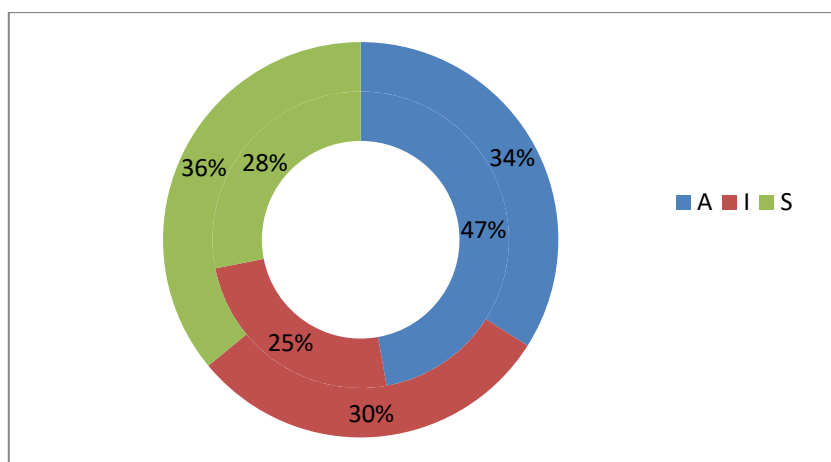
The employment in industry and service sector increased from 18 percent to 30 percent and 12 percent to 36 percent in China whereas in India, 12 percent to 25 percent and 16.5 percent to 28 percent respectively from 1980 to 2012.

Table 5: Employment in different sectors (% of Total Employment)

Country	1980			1994			2000		
	A	I	S	A	I	S	A	I	S
India	70	12	16.5	60.5	15.7	23.7	59.9	16.0	24.0
China	69.6	18	12.4	54.3	22.7	23.0	50	22.5	27.5
Country	2005			2010			2012		
	A	I	S	A	I	S	A	I	S
India	55.8	18.9	25.2	51.1	22.4	26.6	47.2	24.7	28.1
China	44.8	23.8	31.4	36.7	28.7	34.6	34.0	30.0	36.0

Source: World Development Indicators 2014

But, employment in agriculture sector has decreased in both countries. Employment growth is positively related to economic development but it depends upon labour market structure, regulations and policies. The share of employment in different sectors in 2012 has been shown in the following pie diagram:



Share of Employment in different sectors (2012)

Inner circle represents the percentage share of employment engaged in agriculture, industry and services in India whereas outer circle indicates China. Pie diagram shows that majority of population are involved in secondary and tertiary sector in China comparative to India.

(C) Unemployment Rate

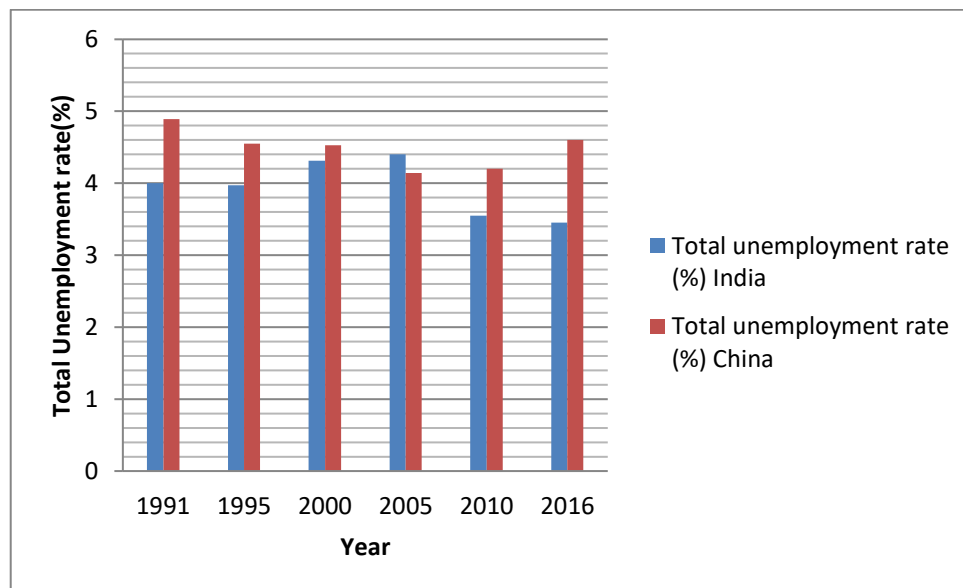
In India, after the economic reforms in 1991, was belief that the growth of employment should have increasing at an equal pace with growth of industries. But no. of studies show that employment has increased but it has not accelerated at the growth rate of industry because of technological and adoption of automation method. Following table indicates the unemployment rate in India and China.

Table 6: Unemployment rate (% of total labour force) in India and China

Year	Total unemployment rate (%)		Male (%)		Female (%)	
	India	China	India	China	India	China
1991	4.00	4.89	3.82	5.31	4.45	4.37
1995	3.97	4.55	3.92	4.98	4.09	4.01
2000	4.31	4.53	4.34	5.00	4.21	3.96
2005	4.40	4.14	4.14	4.57	5.01	3.59
2010	3.55	4.20	3.26	4.66	4.41	3.61
2016	3.45	4.60	3.34	5.29	3.81	3.72

Source: International labour organisation/ILOSTAT Database 2016

Table shows that from 1991 to 2016, total unemployment rate (except 2005), unemployment in male was high in China comparative to India but female unemployment rate was high in India than China.



Employment rate depends upon the output of structural occupation. To provide employment to unemployed workers; we need to accelerate different sectors, population growth, improved economic growth, standard of living, improved education and medical facilities etc that will help to reduce high unemployment rate. China faced an economic crisis during the period of 1998-2002; Government adopts policy measures to revive the economy (1) labour Market policies (2) Macro policies.

(D) Saving and Investment Rate

The saving and investment growth rate of India and China has significantly increased which is the result of their GDP, GDP per capita.

Table 7: Gross Investment, Saving and GDP Growth (%) in India and China

Year	Gross Investment (%)		Gross Saving (%)		GDP Growth (annual %)		GDP per capita (annual %)	
	India	China	India	China	India	China	India	China
1980	18	35	17	----	6.7	7.8	4.3	6.4
1985	23	38	22	34	5.3	13.6	2.9	11.9
1990	25	36	23	38	5.5	3.9	3.3	2.4
1995	26	42	26	43	7.6	11	5.5	9.7
2000	24	35	25	36	3.8	8.4	2.0	7.6
2005	34	42	34	47	9.3	11.4	7.5	10.7
2010	37	47	34	51	10.3	10.6	8.7	10.1
2014	33	48	32	50	6.9	7.7	6.2	6.7

Source: World Development Indicators 2014

Table represents that Gross Investment, Gross Saving, GDP growth and GDP per capita is high in China than India because people in China are very aware about their living standard, health facilities and education. In 2010, GDP growth rate, GDP per capita, Gross Investment and gross saving were highest in India comparative to other years. The highest growth rate of GDP and GDP per capita in China was 13.6 percent and 11.9 percent in 1985 but gross saving and investment is increasing year by year. Both countries India and China have increased their investment and saving level which is the result of higher GDP growth rate.

Exports

Exports are one of the main indicators of industrialisation and development. The overall growth can be generated by labour, capital, infrastructure and exports. The position of China was high compare to India in the case of manufacturing products. Manufacturing sector of China contributed 85 percent whereas India 42 percent of its total exports. During the period of 2000 to 2010, the exports of labour-intensive products in China has decreased from 39 percent to 26 percent and transport equipment, machinery etc has increased from 38 percent to 59 percent. But in India, it increased from 9 percent to 23 percent in machinery and transport equipment in 2000 to 2010. The export of Indian manufacturing product depends on unorganised resource intensive material.⁵

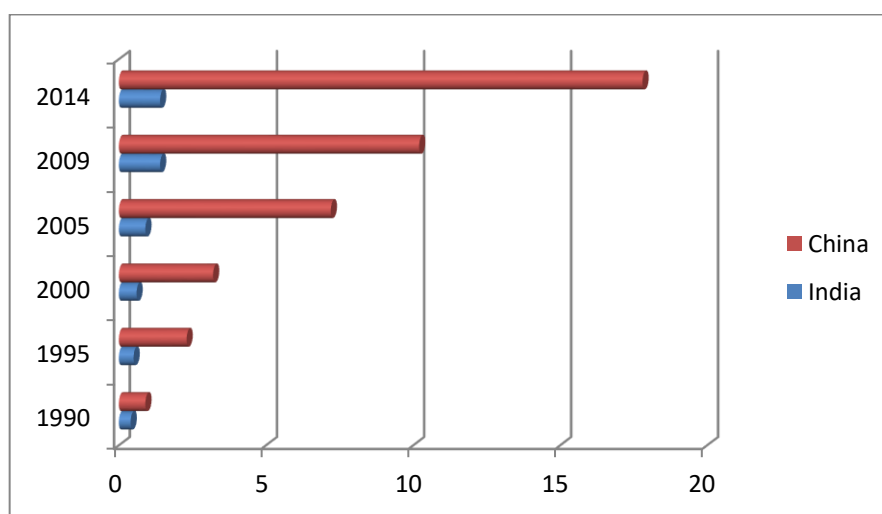
⁵Acharya, H. (2013). Employment growth by accelerated manufacturing in India – A comparative study and lessons to be learnt from China. MPRA Paper No.46697.

Table 8: Share of manufacturing exports in World exports (%)

Country	1990	1995	2000	2005	2009	2014
India	0.4	0.5	0.6	0.9	1.4	1.4
China	0.9	2.3	3.2	7.2	10.2	17.8

Source: UNComtrade database/ UNCTADSTAT 2015

On the globe scale, the share of total world exports in India and China was 0.4 percent and 0.9 percent in 1990 to increase from 1.4 percent and 17.8 percent in 2014. India is small player in globe exports comparison to China. The exports of India depend on availability of natural resources, labour intensive industries and large population but China is a larger exporter of sophisticated products, low costs (wages and labour intensive advantages) with increasing skills and innovation. In 2014, the share of world export of goods and services increased three fold (0.4 percent to 1.4 percent) in India and nine fold (0.9 percent to 17.8 percent) in China. China is ahead from India because of active FDI policy and transfer of technology. In 1980, policy makers of China transferred labour to the manufacturing sector. They supported small and medium size industries to grow their output. But India reserved some sectors for small and medium size industries which had shown limited competition, limited scale and regulation frameworks.



Foreign Direct Investment

FDI is a main component to promote productivity growth, exports and created jobs. India and China both countries are an attractive hub for foreign investment due to industrialisation. FDI inflow is more attracted in China than India. In 1970, the main focus of FDI was to increase the exports of manufacturing sectors. During the period 1990 to 2008, FDI inflow in China increased from USD 3.5 million to USD 108.3 billion but in India, it increased negligible level during the period 1990 to USD 40 billion. Between 2005 and

2008, China and India both received 60 percent and 21 percent of total FDI inflow into the manufacturing sector.⁶

FDI and low cost labour is the main force behind the exceptional growth in China. FDI has created employment opportunities, exports and productivity growth in India and China.

Year	FDI, net inflow (BoP, Current US\$)	
	India	China
1980	7,91,60,000	
1981	9,19,20,000	
1982	7,20,80,000	43,00,00,000
1983	56,40,000	63,60,00,000
1984	1,92,40,000	1,25,80,00,000
1985	10,60,90,000	1,65,90,00,000
1986	11,77,30,000	1,87,50,00,000
1987	21,23,20,000	2,31,40,00,000
1988	9,12,50,000	3,19,40,00,000
1989	25,21,00,000	3,39,30,00,000
1990	23,66,90,000	3,48,70,00,000
1991	7,35,37,638	4,36,60,00,000
1992	27,65,12,439	11,15,60,00,000
1993	55,03,70,025	27,51,50,00,000
1994	97,32,71,469	33,78,70,00,000
1995	2,14,36,28,110	35,84,92,00,000
1996	2,42,60,57,022	40,18,00,00,000
1997	3,57,73,30,042	44,23,70,00,000
1998	2,63,46,51,658	43,75,10,00,000
1999	2,16,85,91,054	38,75,30,00,000
2000	3,58,42,17,307	38,39,93,00,000
2001	5,47,19,47,158	44,24,10,00,000

⁶Acharya, H. (2013). Employment growth by accelerated manufacturing in India – A comparative study and lessons to be learnt from China. MPRA Paper No.46697.

2002	5,62,60,39,508	49,30,79,76,629
2003	4,32,27,47,673	49,45,68,47,102
2004	5,77,12,97,153	62,10,80,43,001
2005	7,26,94,07,226	1,11,21,02,25,749
2006	20,02,91,19,267	1,33,27,25,48,472
2007	25,22,77,40,887	1,69,38,98,42,758
2008	43,40,62,77,076	1,86,79,75,50,544
2009	35,58,13,72,930	1,67,07,08,08,699
2010	27,39,68,85,034	2,72,98,65,62,273
2011	36,49,86,54,598	3,31,59,17,10,742
2012	23,99,56,85,014.00	2,95,62,55,87,109
2013	28,15,30,31,270	3,47,84,87,40,397
2014	34,41,07,58,384	

Negative Impact on Industrialisation

In 2014, India and China were growing at the growth rate of 16.1 and 32 percent of GDP in manufacturing sector. The rapidly growing countries like India and China are causing several pollution problems in various forms of gases like CO₂ which is the result of higher energy consumption. The major driving forces towards higher energy consumption are high population growth, industrialisation, trade, number of vehicles etc.

Table 9: CO₂ Emission in India and China (Metric tons per capita)

Country	1980	1985	1990	1995	2000	2005	2011
India	0.5	0.6	0.8	1.0	1.1	1.3	1.7
China	1.5	1.9	2.2	2.8	2.7	4.4	6.7

Source: World Development Indicators 2014

High usage of fuel and coal, both countries India and china face many pollution problems. CO₂ Emission is high in China comparative to India.

Rapid Economic Growth and Industrialisation:

Environmental Kuznets curve states that there is an inverted 'U' relationship between income and pollution level. The upward movement of the curve represents the developing countries that move from agriculture phase to industrialisation phase. The downward shift of the curve captures the developed countries to increase imports of industrial goods and stable growth rate. India and China both countries are in the first phase. From 1950 to 2014, the share of agriculture in India and China has declined from 80

percent to 18 percent and 60 percent to 9.06 percent but industrial share in GDP went up in these countries. To generate power, India and China mostly depend on coal and fuel which are harmful for the health and environment.

Summary:

- In order to achieve faster growth of economic development, both countries India and China need to strength its own manufacturing sector.
- China struck the linear stage theory of development in which the economy moves from primary goods to industrial development and services. However, India neglected this theory of development. It moved directly from primary sector to service sector.
- Ease are doing business in China is far ahead of India.
- The exports of India are slower than China because service sector is dominant sector in India and skilled human capital is absorbed in this sector. India reserved some sectors for small and medium size industries which had shown limited competition, limited scale and regulation frameworks.
- Labour intensive manufacturing sector of China has grown much faster than India in terms of production, FDI and exports.
- The rank of China on the size of its GDP, GDP per capita is above than India.
- Flexible labour market, Simple labour rules and regulations and supply of cheap labour are available in China comparative to India.
- Growing population, urbanisation, strong per capita income and improved standard of living ensure that manufacturing sector will continue to grow for the coming decades.
- China is a larger exporter of sophisticated products, low costs (wages and labour intensive advantages) with increasing skills and innovation.
- FDI and low cost labour is the main force behind the exceptional growth in China. FDI has created employment opportunities, exports and productivity growth in India and China.
- To generate power, India and China mostly depend on coal and fuel which are harmful for the health and environment.
- The share of agriculture in % of GDP had declined in both countries like India and China but more than 30% of the labour force depended on agriculture sector.

Conclusion:

Manufacturing sector is the backbone of the economy as well as muscle behind national security. In the past, urbanisation was the result of industrialisation but in the 20th century, urbanisation is the consequences of some other forces such as development of technology, education, health facilities, over population, infrastructure etc. Urbanisation and industrialisation are not synonymous concept. Countries that are rich in natural resources have experienced urbanisation without industrialisation. The share of manufacturing sector in India is small relative to the size of China. To increase the manufacturing sector, India has to attract FDI, simple labour laws, protect labour force, development of education and communication technology etc.

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EXAMINING CONSUMER PURCHASE DECISIONS IN DIGITAL COMMERCE: INSIGHTS FROM TAM, UTAUT, AND TPB

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Abstract:

Digital technologies have transformed the retail landscape, reshaping how consumers search for information, compare options, and make purchase decisions. Quickcommerce platforms have emerged as a specialized form of digital retail, focusing on rapid delivery, hyperlocal sourcing, and simplified transactions. Platforms like Blinkit and JioMart Instamart have become increasingly relevant in India, especially in urban and semi-urban regions where consumers demand convenience and reliability.

This study uses the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the Theory of Planned Behavior (TPB) to investigate the factors affecting consumer purchase decisions in digital commerce. A structured questionnaire collected primary data from 200 urban and semi-urban consumers. Factors examined include perceived convenience, online reviews, brand trust, price sensitivity, social media influence, and payment security.

Results indicate that perceived convenience, brand trust, and online reviews significantly influence purchase decisions. Price sensitivity and payment security concerns are more pronounced among semi-urban consumers, suggesting regional differences in perceived risk and economic considerations. By integrating multiple theoretical frameworks, this research contributes to understanding digital consumer behavior and provides actionable insights for digital retailers targeting diverse markets.

Keywords: Digital Commerce, Consumer Purchase Decision, Quick Commerce, TAM, UTAUT, TPB, Urban and Semi-Urban Consumers

Introduction:

Digitalization is now a defining feature of modern economies, altering how consumers engage with products, services, and brands. The proliferation of internet-enabled devices and mobile networks has shifted traditional shopping to online experiences (Kotler *et al.*, 2021). Consumers increasingly rely on digital platforms for

information search, product evaluation, and purchase execution, modifying traditional decision-making processes.

In India, mobile payment systems like the Unified Payments Interface (UPI) have accelerated this shift by simplifying transactions and reducing cash dependence (Verma & Sinha, 2020). Digital commerce is spreading beyond metropolitan areas into semi-urban regions, creating opportunities and raising consumer expectations.

Quick-commerce platforms represent a notable development in digital retail. Unlike conventional e-commerce, these platforms prioritize speed, minimal effort, and hyperlocal fulfillment (Shankar *et al.*, 2021). Platforms like Blinkit and JioMart Instamart deliver essential items within minutes, appealing to time-conscious urban consumers. Semi-urban consumers are adopting these services rapidly, motivated by better connectivity, competitive pricing, and enhanced trust mechanisms.

Despite the growth of quick commerce, research examining purchase behavior in urban and semi-urban contexts remains limited. Moreover, many studies rely on a single theoretical model. To address this gap, this study integrates TAM, UTAUT, and TPB to analyze factors influencing digital purchase decisions.

Review of Literature

Consumer purchase behavior has historically been modeled as a sequential process: problem recognition, information search, evaluation of alternatives, purchase, and post-purchase assessment (Engel *et al.*, 1995). Digital platforms have compressed these stages, leveraging algorithmic recommendations, real-time reviews, and instant purchase options (Lemon & Verhoef, 2016).

TAM explains technology adoption via perceived usefulness and ease of use (Davis, 1989). In e-commerce, these factors translate to platform usability, straightforward navigation, and transaction efficiency (Laudon & Traver, 2022). Studies confirm that convenience and ease of use significantly increase online shopping engagement (Gefen *et al.*, 2003). UTAUT extends TAM by including social influence and facilitating conditions (Venkatesh *et al.*, 2003). Online reviews, peer recommendations, and social media shape consumer attitudes (Hajli, 2015), while reliable connectivity and secure payment systems support sustained use.

TPB links attitudes, subjective norms, and perceived behavioral control to intentions (Ajzen, 1991). In digital commerce, trust in platforms and payment security reduce perceived risk and increase consumer confidence (Pappas, 2016). Electronic word-of-mouth further affects purchase intentions (Chen & Xie, 2008). Research in emerging

markets shows that nonmetropolitan consumers often exhibit heightened price sensitivity and risk concerns (Singh & Sharma, 2019). However, quick-commerce adoption in these areas remains understudied.

Theoretical Framework

This study combines TAM, UTAUT, and TPB to provide a comprehensive view of digital purchase behavior.

- **Perceived convenience, ease of use, and delivery speed** reflect performance expectancy and perceived usefulness.
- **Online reviews and social media influence** represent subjective norms and social pressures.
- **Brand trust and payment security** address perceived risk and behavioral control.
- **Price sensitivity** captures the economic evaluation of value.

The conceptual model positions consumer purchase decisions as the dependent variable influenced by six independent constructs. Differences between urban and semi-urban consumers are also considered, as digital exposure, purchasing priorities, and risk perception may vary by region.

Conceptual Model

The conceptual model developed for the present study explains consumer purchase decisions in digital commerce environments through the integration of technological, social, trust-related, and economic factors. Drawing upon the Technology Acceptance Model, the Unified Theory of Acceptance and Use of Technology, and the Theory of Planned Behavior, the model positions consumer purchase decision as the dependent variable influenced by six independent constructs.

Perceived convenience reflects consumers' evaluation of the ease, speed, and effort associated with using digital commerce platforms. Online reviews and social media influence represent social and normative pressures that shape consumer attitudes and perceptions. Brand trust and payment security capture trust-based and risk-reduction mechanisms that enhance perceived behavioral control in online transactions. Price sensitivity reflects consumers' value-conscious evaluation of costs relative to perceived benefits. Collectively, these variables are hypothesized to exert a direct influence on consumer purchase decisions in digital quick-commerce contexts. The model also acknowledges contextual differences between urban and semi-urban consumers, suggesting that the relative strength of these relationships may vary across regions due to differences in digital exposure, purchasing priorities, and risk perception.

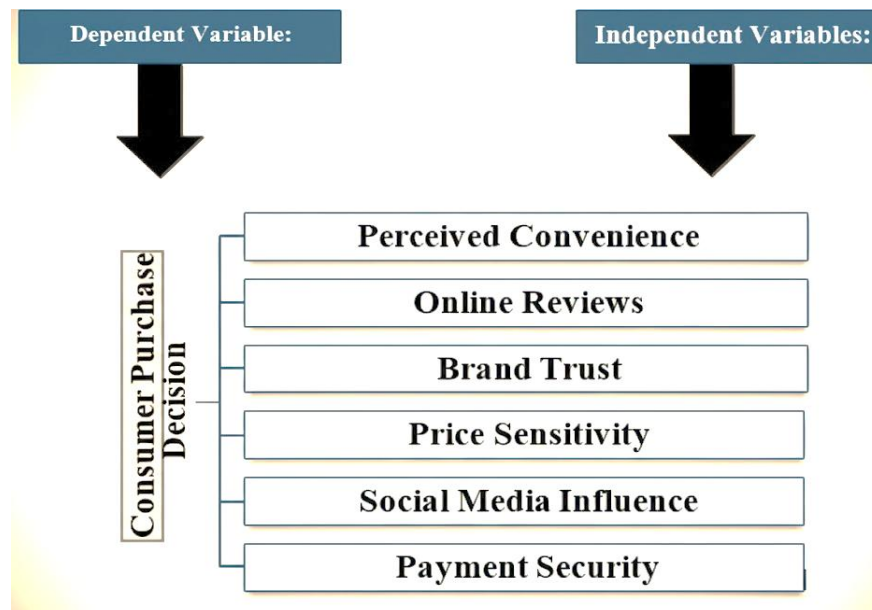


Figure 1: visually represents the hypothesized relationships between the independent variables and consumer purchase decision as derived from TAM, UTAUT and TPB

Table 1: Constructs and Theoretical Foundations

Construct	Theoretical Basis	Key References
Perceived Convenience	TAM, UTAUT	Davis (1989); Venkatesh <i>et al.</i> (2003)
Online Reviews	TPB	Chen & Xie (2008); Hajli (2015)
Brand Trust	TPB	Gefen <i>et al.</i> (2003); Pappas (2016)
Price Sensitivity	Value Theory	Singh & Sharma (2019)
Social Media Influence	UTAUT	Yadav & Rahman (2018)
Payment Security	TPB	Verma & Sinha (2020)

Research Methodology

A quantitative design was used to study consumer perceptions and behavior in digital commerce. Data were collected via a structured Google Forms questionnaire, targeting urban and semi-urban consumers.

- **Sample:** 200 respondents (110 urban, 90 semi-urban)
- **Sampling method:** Convenience sampling
- **Instrument:** Two-section questionnaire (demographics and 5-point Likert scale for constructs)
- **Data analysis:** Descriptive statistics, correlation analysis, and multiple regression analysis

Measurement items were adapted from established scales to ensure validity.

Data Analysis and Results:

Most respondents were aged 21–35, reflecting high digital engagement (Kumar & Gupta, 2020). Urban consumers frequently used quick-commerce platforms for daily essentials, while semi-urban consumers were increasingly adopting them due to promotions and reliable digital payments. Regression analysis showed that perceived convenience, online reviews, and brand trust significantly affected purchase decisions. Price sensitivity and payment security had a stronger impact on semi-urban consumers, highlighting their heightened economic and risk concerns.

Table 2: Multiple Regression Results for Consumer Purchase Decision

Variable	β	p-value
Perceived Convenience	0.41	0.000
Online Reviews	0.29	0.002
Brand Trust	0.31	0.001
Price Sensitivity	0.24	0.006
Payment Security	0.27	0.004

Discussion:

Findings support the integrated theoretical framework, showing that technology acceptance, social influence, and perceived control all shape digital purchase decisions. Convenience is the most influential factor, aligning with TAM and UTAUT, while online reviews and trust reinforce TPB assumptions. Variations between urban and semi-urban consumers highlight the need for localized digital strategies.

Conclusion:

Digital purchase decisions are driven by a mix of technological, social, and economic factors. Quick-commerce platforms have leveraged digital infrastructure to meet evolving consumer expectations, accelerating adoption in urban and semi-urban areas. Integrating TAM, UTAUT, and TPB provides a richer understanding of consumer behavior, offering insights for retailers and policymakers. Future research could explore rural markets or AI-driven personalization effects.

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SUSTAINABLE TOURISM AND CROCODILE ECOLOGY: BALANCING CONSERVATION, ECONOMY, AND HABITAT INTEGRITY

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Abstract:

Crocodile habitats represent some of the most biologically rich yet ecologically fragile ecosystems worldwide. With the rising popularity of wildlife tourism, areas inhabited by crocodiles—such as wetlands, rivers, marshes, and breeding centres—have become important tourism destinations. While this tourism contributes significantly to local economies and conservation funding, it also poses ecological pressures, including habitat disturbance, pollution, behavioural changes, and stress among crocodile populations. This paper explores how sustainable tourism models can protect crocodile ecology while simultaneously supporting economic development and preserving habitat integrity. Drawing on ecological science, community-based conservation, eco-tourism principles, and socio-economic frameworks, this research identifies strategies that ensure a harmonious balance between tourism growth and the survival of crocodile species. The paper concludes with a multidimensional sustainability framework applicable across India and other crocodile-inhabiting regions.

Keywords: Sustainable Tourism, Crocodile Ecology, Habitat Integrity, Eco-Tourism, Conservation Economy, Wildlife Management, Mugger Crocodile, Wetland Ecology, Biodiversity Protection.

1. Introduction:

Crocodiles are apex predators and keystone species, playing an essential role in maintaining the ecological balance of freshwater and brackish ecosystems. Their habitats—rivers, lakes, marshlands, reservoirs, and breeding centres—are increasingly being exposed to tourism-driven activities. In countries like India, Sri Lanka, Australia, and Thailand, crocodile tourism has become a major attraction, often influencing local livelihoods and regional economies.

However, unmanaged tourism can degrade water quality, alter nesting sites, increase human–crocodile conflict, and disrupt natural behaviours. Therefore, sustainable

tourism practices are needed to ensure that tourism enhances rather than harms crocodile conservation initiatives. This paper examines the interconnectedness of ecology, economy, and society in crocodile-based tourism and proposes a balanced approach to protect both biodiversity and development.

2. Crocodile Ecology and Habitat Requirements

Healthy crocodile populations depend on stable ecological conditions such as:

2.1 Water Quality

Water temperature, dissolved oxygen, pH, and pollutant levels directly influence crocodile physiology, breeding success, and prey availability. Polluted water bodies reduce hatchling survival and increase disease susceptibility.

2.2 Nesting and Basking Sites

Crocodiles require undisturbed riverbanks or marsh edges for nesting and basking. Increased tourist movement often leads to trampling, erosion, and noise that interfere with reproductive processes.

2.3 Prey Abundance and Ecosystem Stability

As apex predators, crocodiles help regulate fish populations and maintain trophic balance. Tourism-induced habitat disturbance may reduce prey species, indirectly affecting crocodile health.

2.4 Behavioural Sensitivity

Although crocodiles appear resilient, they are sensitive to continuous noise, boat movements, artificial lighting, and human crowding, which can alter feeding patterns and territory use.

3. Role of Tourism in Crocodile Conservation

While poorly managed tourism has negative impacts, responsible tourism can significantly support conservation:

3.1 Funding for Protected Areas

Eco-tourism generates revenue for habitat restoration, research, monitoring, and captive breeding programs such as those found in India's Crocodile Breeding Centres.

3.2 Community Livelihoods

Tourism provides jobs in guiding, hospitality, local crafts, and conservation outreach, reducing pressure on natural resources and encouraging wildlife protection.

3.3 Awareness and Education

Tourists exposed to crocodile habitats often become advocates for conservation. Interpretation centres and guided tours can communicate ecological messages effectively.

3.4 Human–Crocodile Conflict Reduction

When communities benefit economically from crocodiles, their tolerance increases, improving coexistence and reducing retaliatory killings.

4. Impacts of Unregulated Tourism on Crocodile Ecology

4.1 Habitat Degradation

Unmanaged footfall leads to vegetation loss, soil compaction, and erosion of nesting sites. Littering and wastewater discharge further degrade ecosystem quality.

4.2 Disturbance of Natural Behaviours

Frequent boat rides, loud noises, and camera flashes disrupt basking, mating, and feeding activities, sometimes pushing crocodiles away from preferred habitats.

4.3 Pollution and Water Quality Decline

Tourism waste increases nutrient loads, decreases oxygen levels, and introduces microplastics into water bodies—indirectly harming crocodile health.

4.4 Stress and Physiological Impacts

Prolonged exposure to human disturbance can elevate stress hormones in crocodiles, lowering reproductive success and affecting immunity.

4.5 Increase in Human–Crocodile Conflict

When tourists behave irresponsibly or feed crocodiles, it leads to habituation, making crocodiles more aggressive or dependent on human food.

5. Sustainable Tourism Strategies for Crocodile Habitats

5.1 Zoning and Controlled Access

Creating core zones with restricted entry protects sensitive nesting and breeding areas. Buffer zones can be used for guided tourism with capacity limits.

5.2 Eco-Friendly Infrastructure

Boardwalks, viewing towers, and controlled pathways reduce habitat disturbance. Solar lighting, biodegradable toilets, and waste segregation help maintain habitat integrity.

5.3 Community-Based Conservation Tourism

Local communities should be trained as nature guides, tour managers, and conservation educators. Their participation ensures long-term ecological stewardship.

5.4 Technology-Driven Monitoring

- Drones for monitoring nesting sites
- Camera traps for behavioural studies
- Water quality sensors for real-time ecological data

Such tools help maintain ecological standards while supporting informed management.

5.5 Regulations on Visitor Behaviour

Strict guidelines on noise, photography, feeding, littering, and proximity to crocodiles are essential. Awareness boards must communicate rules clearly.

5.6 Eco-Interpretation and Education Centres

Centres should highlight crocodile biology, the importance of wetlands, and responsible tourism practices.

5.7 Revenue Sharing Models

A percentage of tourism revenue should directly support habitat restoration, captive breeding, and research programs.

6. Case Studies (Global & Indian)

6.1 Bhitarkanika National Park, India

One of the largest populations of saltwater crocodiles thrives here due to regulated tourism, strict buffer zones, and community involvement.

6.2 Australia's Crocodile Tourism

Guided river cruises use eco-friendly engines, limit visitor numbers, and emphasize education, making tourism both profitable and sustainable.

6.3 Madras Crocodile Bank Trust (MCBT), Tamil Nadu

A leading conservation site combining research, captive breeding, awareness programs, and controlled tourism.

These examples show that well-managed tourism can coexist with strong crocodile populations.

7. A Balanced Sustainability Framework

A holistic framework should integrate:

- Ecological Dimension
- Habitat restoration
- Water quality monitoring
- Protection of nesting sites
- Scientific research
- Economic Dimension
- Eco-tourism revenue
- Community employment
- Conservation-based markets

- Social Dimension
- Awareness and education
- Local participation
- Reduction in conflict
- Cultural respect

This tri-dimensional model ensures long-lasting sustainability.

Conclusion:

Sustainable tourism offers immense potential for strengthening crocodile conservation while supporting local economies. However, this balance is only possible when tourism is carefully planned, community-oriented, and ecologically sensitive. Crocodiles are not just charismatic wildlife—they are indicators of wetland health, and their survival reflects the resilience of entire ecosystems. The future of crocodile-based tourism lies in innovative, science-driven, and community-empowered strategies that preserve habitat integrity while enriching human experiences. By integrating ecological protection with responsible tourism practices, regions can achieve a harmonious coexistence between people, wildlife, and the environment.

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SUSTAINABLE DEVELOPMENT PRACTICES AND POLICIES

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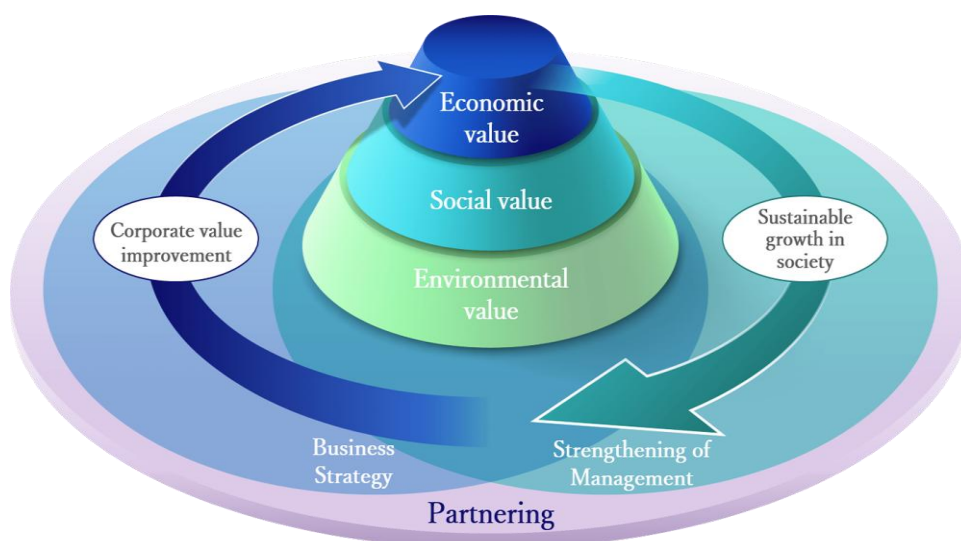
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Abstract:

Sustainability refers to the development which satisfy the needs of the present without compromising the ability of future generations to satisfy their own needs. With the development of this concept, a new term has been devised which reads as Sustainable Development Goals (SDGs). With this, the focus has been shifted more on economic development, social development and environmental protection for future generations. Basically, sustainable development looks after the protection of environment by helping in utilization of available natural resources (which are now scarce) in a very optimal manner so that wastages can be minimized. If with the advent of technology there has been increase in the overall development of the nation, its negative effects cannot be ignored either. The concept of sustainable development ensures to discover such means or substitutes which can keep the environment in balanced state. And for this purpose, there is a need for development of an integrated plan of action which can ensure that this development can actually be beneficial for the growth of any economy. In this study, different concepts have been charted out in such a way that is justifiable transparently.

Keywords: Sustainable Development, SDG, Green Jobs, AQI, Millennium Development Goals, Green Economy.



Introduction:

Sustainable Development refers to the process of optimally utilizing the available resources so that each and every corner of the society is satisfied. Resources are always scarce, especially natural resources which are God gifted to mankind and similar resources cannot be prepared artificially by any technology. Therefore, such resources are always under threat of being finished. No human being can deny this fact that presently, natural resources are deteriorating day-by-day and at a very fast pace which is unmatchable. The reason behind same is nothing else but technology. Every invention in the nation or across the globe has been done in order to flourish and make the lives of people easier. But this race of flourishing has taken another form which is benefiting many lives as well as giving rise to more dangerous situations on the contrary. The change in climatic conditions, temperatures, poisonous (AQI) air quality index, rising traffic congestion, increasing demand of variety of electronic gadgets etc...are some of the most popular reasons which has made the concept of sustainability a great matter of thought. The theory of sustainable development contains following objectives:

- It aims at providing balance in the growth of economy by formulating policies in the favor of different business houses.
- It helps in promoting social equality because all aspects of the society and every individual of the society forms an inseparable part of the policies of sustainable development.
- The main objective is related to the protection of environment for current and future generations.
- Sustainable development helps in preserving cultural diversity.
- It also aims to focus on promoting environmentally sustainable patterns of consumption.

The concept of SDGs was introduced at United Nations Conference on Sustainable Development in 2012. The SDGs were later on adapted at a UN Summit in September 2015 and officially came into effect on January 1, 2016. United Nations, Department of Economic and Social Affairs, Sustainable Development, has enlisted following 17 goals as Sustainable Development Goals:

1. No poverty
2. Zero hunger
3. Good health and well-being

4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice and strong institutions
17. Partnerships for the goals

All the above devised goals are the ones which covers all the aspects of the society in terms of conservation of environment, climatic action, development of commerce and industry etc.

Literature Review

The concept of SDGs was introduced at United Nations Conference on Sustainable Development in 2012. The SDGs were later on adapted at a UN Summit in September 2015 and officially came into effect on January1, 2016. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a blueprint for peace and prosperity for people and the planet, now and in the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership.

- **Earth Summit:** In June 1992, the Earth Summit in Rio de Janerio, Brazil, more than 178 countries adopted Agenda 21, a comprehensive plan of action in order to build a partnership for sustainable development to improve human lives and protect the environment.
- **Millennium Summit:** Member states adopted the Millennium Declaration unanimously at the Millennium Summit in Sept 2000 at UN Headquarters in New York. This Summit led to the elaboration of the Millennium Development Goals (MDGs) in order to reduce extreme poverty by 2015.

- **The Future We Want:** At the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro, Brazil, in June 2012, the member states adopted the outcome document “The Future We Want” in which they decided to launch a process for developing a set of SDGs to build upon the MDGs and to establish the UN High-level Political Forum on Sustainable Development. The Rio+20 also contained other measures like future programs of work in developing financing, small island developing states etc...for implementing sustainable development.

2015 was a landmark year for multilateralism and international policy shaping, with the adoption of several major agreements:

- Sendai Framework for Disaster Risk Reduction (March 2015)
- Addis Ababa Action Agenda on Financing for Development (July 2015)
- Transforming our world: the 2030 Agenda for Sustainable Development with its 17 SDGs was adopted at the UN Sustainable Development Summit in New York in September 2015.
- Paris Agreement on Climate Change (December 2015)

Many progress reports have been formed since 2016 and all the reports contain information regarding the status of sustainability achieved as compared to the targets set by each committee.

- SDG Progress Report (2025)
- SDG Progress Report (2024)
- SDG Progress Report (2023)
- SDG Progress Report (2022)
- SDG Progress Report (2021)
- SDG Progress Report (2020)
- SDG Progress Report (2019)
- SDG Progress Report (2018)
- SDG Progress Report (2017)
- SDG Progress Report (2016)

In addition to this, the Global Sustainable Development Report is produced once every four years to inform the quadrennial SDG review deliberations at the General

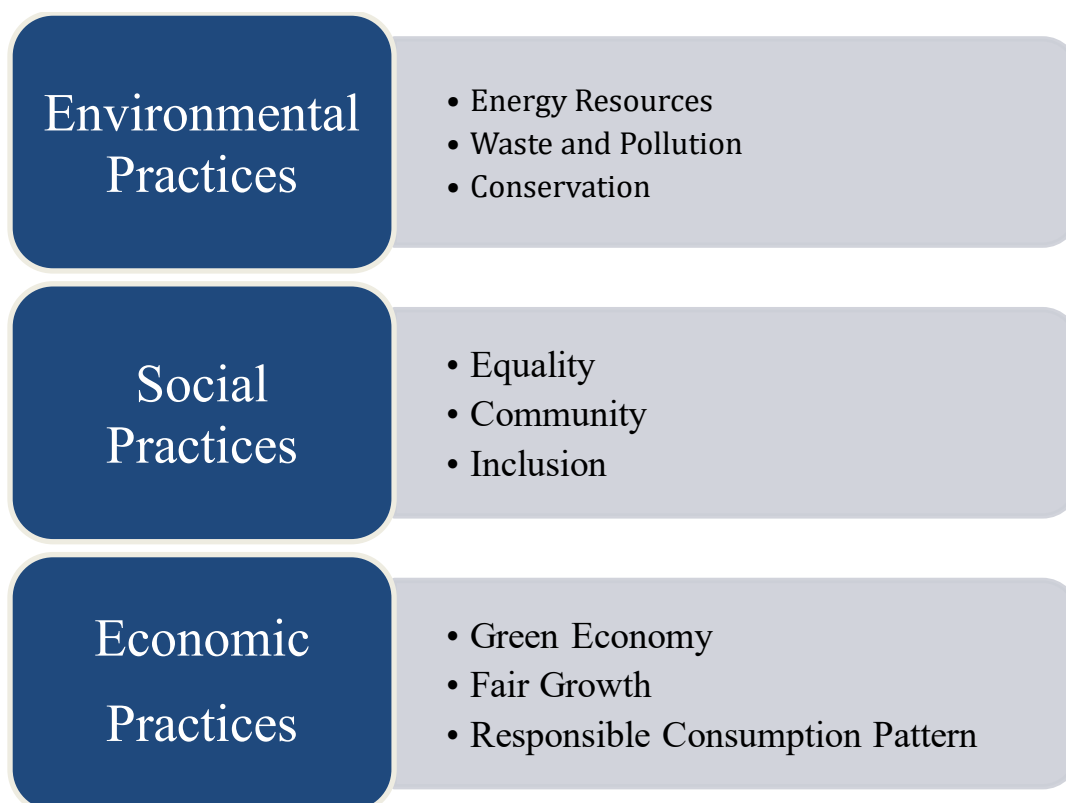
Assembly. It is written by an Independent Group of Scientists appointed by the Secretary-General.

Methodology

In order to complete this study, secondary method of data collection has been used. Different newspapers, magazines, journals, articles and research papers have been analyzed to conclude the status of sustainable development in present scenario.

Sustainable Development Practices

For the purpose of sustainable development, certain practices have been developed under different categories. Let us have a look over the same:



- **Environmental Practices** focuses on the proper utilization of the energy resources, be it wind energy, solar energy and other renewable sources of energy which may help in improving the transportation. Further, waste management is the crucial activity which needs a lot of attention because garbage dumps leads to pollution in the environment, thereby giving birth to many deadly diseases. Also there is a dire need of conserving our nature in the form of forests and greenery which is now taking shape of urban cities.
- **Social Practices** aims at creating equality in the society and among every caste and creed of people. It ensures that the development today does not hamper the interest

of the traditional businesses and they are also able to serve the nation, thereby earning a living for their families.

- **Economic Practices** highlight the overall growth of the economy by adopting measures like creating such consumption patterns which motivate the consumers not to waste the food items. It also aims at creating a green economy across the globe which in turn will eradicate all the evils (poverty, unemployment, inequality, pollution etc...) prevailing in the economy.

All the above mentioned practices are based on 4 pillars namely Balancing People, Planet, Prosperity and Peace for balanced growth. These are implemented in following phases:

- **Corporate Level** {companies use sustainability reporting and (CSR) corporate social responsibility) in order to keep a check on environmental and social aspects}.
- **Government Level** {national policies are formed to support sustainable development goals through initiatives in utilities}.
- **Individual Level** {motivating individuals to undertake actions like optimal utilization of resources so that overall goals can be achieved by involving every person of the society}.

Results:

As a result of sustainable development practices certain findings can be quoted. Practical examples of sustainable development includes solar energy (majority of people are relying upon solar energy like solar cookers are being used, solar panels have been installed in houses), wind energy (windmills are used at large scale and it can replace the cost of grid power), green space (building of parks and forest areas for wild habitat to survive in their space and Eco-system can be balanced properly), crop rotation (different plant crops are grown on the same land so that soil fertility can be maintained), carbon foot printing, reducing energy consumption (use of LED bulbs and tube lights), choosing eco-friendly hostels, hotels or homestays etc.

Sustainable Development Policies

Sustainable development policies refer to national and global strategies like those of UN's 17 SDGs which integrates economic growth, social inclusion and environmental protection to meet present needs without compromising future generations. Special focus has been laid on areas from poverty & hunger (SDGs 1,2) to clean water (SDG 6), clean energy (SDG 7), climate action (SDG 13), and innovation (SDG 9) with the help of initiatives

like India's Swachh Bharat Mission or global carbon pricing mechanisms. Such policies make use of tools like environmental regulations, economic incentives (carbon taxes, rebate), public awareness and international cooperation (like World Heritage Convention) in order to achieve balance.

UN 2030 Agenda & SDGs is a key global framework which actually is a universal blueprint with 17 Goals as mentioned in above pages and other 169 targets. These goals and targets guide every nation towards a sustainable future.

Policy Tools & Principles

- **Polluter Pays Principle:** Those contributing in causing pollution to bear the cleanup costs, often through Extended Producer Responsibility (EPR).
- **Economic Incentives:** rebates for reduced waste, variable charges for pollution, carbon trading and carbon credits.
- **Public Participation:** Motivating the general public regarding benefits of afforestation, conservation and awareness campaigns.
- **International Cooperation:** Signing of different agreements like the World Heritage Convention and Clean Development Mechanism so that global issues can be discussed.

Results:

Certain practical examples have been observed as a result of sustainable development policy including:

- **Swachh Bharat Mission:** It has helped in improving sanitation and waste management as a no. of public toilets are in operation in many states across India.
- **Jal Jeevan Mission:** This mission aims for providing piped water to all rural homes.
- **MGNREGA:** It stands for Mahatma Gandhi National Rural Employment Guarantee Act. It has taken the form of law in Indian economy which provides rural employment through public works, supporting livelihoods so that the problem of unemployment can be solved in the nation.
- **Coca Cola** company aims to use 35% to 40% recycled material as primary packaging including increasing recycled plastic use to 30% to 35% globally by 2035.
- **McDonald's** (in the year 2021) globally pledged to achieve net zero emissions by 2050 and also to join the United Nations Race to Zero Campaign. In addition to this, the new outlets of McDonald's are fully equipped with solar panels and LED lights, from kitchen to the car park, using less energy than fluorescent lights.

Conclusion:

The concept of sustainable development evolved from early environmental concerns which have been a matter of great importance. Environment comprises of surroundings around us be it natural or artificial habitat. With the introduction of technology, there has been increase in the deterioration of natural effects which always have been a support system for any living being on this planet. As there was race of becoming modern and at that phase of time, people were exploiting natural resources like they didn't mean anything for their survival. And now it is very sad to discover that the air in which we breathe is no longer compatible with our health. To quote this saying, New Delhi (the capital city of India) is the most dangerous city in which people are inhaling poisonous air due to very bad AQI (air quality index) and are falling prey to bronchitis infections, respiratory issues and that too which are becomes difficult to recover from. Worst AQI is the result of misuse or mismanagement of natural resources available with the nations. Keeping all these threats and modernization in mind, the concept of sustainability becomes more important to study and implement. Across the globe, many nations are striving hard to achieve the balance in the environment which has been disturbed badly. And for this purpose, the traditional methods of leading lives are taking new shapes such as planting more trees, encouraging cycling and walking, using natural solar energy to fulfill the required tasks etc.... With each passing day, the UN is taking appropriate steps in order to be sustainable and enjoy the human life as gifted by the almighty.

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BUILDING OF AGRARIAN CRISIS IN INDIA SINCE INDEPENDENCE: A REVIEW PAPER

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Abstract:

The performance of agricultural sector since Independence revealed two features. One was the slow growth of agricultural production and productivity and secondly perceptible inter-state differences in the agricultural growth rates. For the period, beginning with Independence and spanning the period of first four Five-Year plans, the annual growth rate of agricultural production was 2.7 per cent. This rate of growth was inadequate when compared with increasing demand of food, agricultural raw materials and agricultural exports. During the same period, the demand for food grains increased at the rate of 3 per cent per annum while the production of food grains increased at 2.4 per cent per annum. The deceleration in the growth of production was more disturbing feature of the agricultural scene during 60s. The present paper contains a brief review of different researches undertaken on Indian agricultural problems and building of agrarian crisis in the economy since Independence.

Keywords: Agricultural Growth, Productivity Stagnation, Inter-State Disparities, Food Grain Demand–Supply Gap, Agrarian Crisis

Introduction:

Agriculture is central to all strategies for the planned socio-economic development in India. The development of the agricultural sector is essential for self-sufficiency, household food security, equity in the distribution of income and wealth, etc. Agriculture is not just a profession; it is a tradition and a philosophy that shaped the economic life of the people. Agriculture plays a fundamental role in the country's development because it leads to rural economic development, improvement in the living standards of the populace, the eradication of poverty and malnutrition, and the achievement of several economy-wide goals for the overall development of the Indian economy. Since independence, farming sector had been facing several problems, and the genesis of this agrarian crisis lies in all these problems. The situation of Indian agriculture was bleak at the time of the Independence.

Development of Indian Agriculture and Building of Agrarian Crisis

The evolution and dynamics of agricultural development since independence has precipitated into an agrarian crisis. The land reforms introduced after independence were largely in favour of big land lords. Ghatak and Roy (2007) reviewed the considerable heterogeneity in the effect of land reforms on the productivity across the states, for which difference in intensity of implementation might be a possible reason. The land ceiling legislation had been held responsible for the negative effect. Also, the tenancy reforms increased the inequalities in the land holdings in Indian agriculture. Thus, these reforms had a marginal positive effect on the Indian economy.

The story of green revolution was also not different from these reforms as it focused on wheat and rice only. Also, it had increased regional imbalances and inequalities among rich and poor farmers. Chaudhary (2006) revealed that green revolution had introduced new technology of cultivation which led to capital intensive farming in India and this resulted in farmers' distress. Indian farmers were urged to switch to mechanised farming, buy better seed varieties, and apply chemical pesticides and fertilisers in order to boost output. Without a doubt, this raised output, but it also put a significant financial strain on farmers.

Kaur (2010) stated that Green Revolution made Punjabi farmers heavily dependent on the expensive inputs which are not affordable by the small and marginal farmers. Due to a lack of other job options, Punjab's small and marginal farmers continue to engage in the Green Revolution's economically and environmentally unsustainable farming methods, accruing significant agricultural debt. Agrarian concern, structural marginalisation, and social inequality are being made worse by the central government's disregard for the issue.

Thus, in 1980s the process of diversification started, which had the increased the production of non-food crops, whereas as the growth rate of food grains plummeted. The public investment also declined during 1980s. Chand and Mishra (1995) concluded that due to the strong complementarities between public and private capital creation in agriculture, the reduction in public sector capital formation in Indian agriculture was not only detrimental in and of itself, but it also caused a decline in private capital formation. This would indicate that the country's chances of agricultural expansion were bleak if the downward trend in public sector capital formation was not reversed.

Mishra (1996) noted that while the percentage of public capital formation in agriculture fell precipitously in the 1980s, capital formation in Indian agriculture grew at a

faster rate over the first three decades after independence. From 5% in the 1950s to 9% in the 1980s, the fixed capital formation to agricultural GDP ratio climbed steadily. However, this ratio was only kept at about 3% after the 1980s, and during that time, agriculture's part of the overall GDP also decreased.

According to Kannan and Sundaram (2011), India's cropping pattern has significantly changed from growing food grains to commercial crops. Between 1970–71 and 2007–08, the area planted to coarse cereals decreased by 13.3%. During the research period, the study also observed that pulses performed poorly in terms of area and production. The percentage of gross crop area planted to rice rose from 15.4% in 1962–1965 to 23% in 2003–2006. The area planted to wheat also almost doubled throughout these times. The annual growth in yield during 1967-68 to 2007-08 for major crops was low, yield per hectare of rice accounted 2.15 ton and of wheat is 2.71 ton which is less than USA and China.

The reforms of 1990s, further accentuated the present agrarian crisis. Ahluwalia (2002) studied that the impact of economic reforms in India presented a mixed picture. Although they must be complemented by labour market changes, the industrial and trade policy reforms had made significant progress. The reforms intended to promote private investment in infrastructure had been successful in certain regions but unsuccessful in others. While there has been progress in a number of financial sector reform areas, there are still some crucial problems with government control of the banks that need to be resolved.

Jodhka (2006) described the development and crisis phases of Punjab agriculture and the impact of globalization on agrarian economy. The author stated that there was a high growth rate of agricultural productivity since the advent of green revolution in mid 1960s. Towards the mid-1980s, the period of deceleration in agricultural growth started. He further stressed that free trade and transformation of technology and migration may not be good for the agricultural sector. Stagnation in productivity of this sector and high cost of cultivation, due to over use of commercial inputs are found to be the main causes of indebtedness among farmers. The agriculture sector had been adversely affected by the globalization policies. Gupta (2012) stated that FDI policy can remove some of the present limitations of infrastructure intermediaries, improper public distribution system and no global reach. But this policy killed local shops, and millions of jobs, create monopolistic power to raise prices, lead to asymmetrical growth in cities.

According to Roy (2017), it was anticipated that after economic changes were implemented, trade conditions would shift in favour of agriculture and prejudice against it would decline. This would make it possible for the farmers to make long-term changes to the land and buy equipment and agricultural tools that increase land production. Nevertheless, the actual performance of agriculture was not impressive after reforms were initiated. The importance of agricultural sector in income generating activity had been deteriorated since then and disparities in agricultural and other sectors have been increased.

Manifestations of Agrarian Crisis

In rural India, Vaidyanathan (2006) observed the widening gaps between the agricultural and non-agricultural sectors as well as the decline in the standard of public services. The Planning Commission was wrong, nevertheless, to believe that the current problem in agriculture would be resolved by accelerating the rise of manufacturing and services. Furthermore, the agricultural crisis was not caused by low levels of investment or import liberalisation, unlike what many people believe. To increase the agriculture sector by 4% annually, a whole new strategy was needed.

The primary cause of the agricultural crisis, according to Pillai's 2007 analysis, is that Indian agriculture has grown increasingly unprofitable and unviable. Furthermore, during the liberalisation phase, the Central government's reduction in real spending on agriculture and rural development has slowed the creation of jobs in rural areas and resulted in a drop in public investment in agriculture, including irrigation, agricultural research, and extension services. Reduced subsidies for power, gasoline, and fertiliser have caused agricultural input costs to skyrocket. The research also made various recommendations for resolving the agrarian issue, including preserving and advancing peasant farming, raising the standard of living for agricultural labourers, accelerating industrialisation, acquiring land, and preventing the diversion of fertile land to uses other than agriculture.

An analysis of Punjab's small and marginal farmers' depeasantization as a result of the agricultural crisis was attempted by Singh *et al.* (2009) and Singh and Bhogal (2014). The state had begun this procedure in the early 1990s as huge land holdings were growing and small land holdings were declining. Primary data served as the foundation for both investigations. Furthermore, the results showed that a sizable fraction of small and marginal farmers had been forced out of farming due to its unviability. The different reasons were low profits, land leased out due to high rent, joined other professions, sold

their lands due to high debt burden, drug addiction etc. Although, these farmers joined other occupations, but they were highly dissatisfied because the professions they joined were mostly the labour class or low-investment, low-earning, self-employment ventures for which their technical training was almost nil or rather very inadequate.

Additionally, Kumar *et al.* (2015) described India's escalating agricultural problem, First, as a result of farming's overall falling profitability. Second, farming is becoming a riskier business due to rising production technologies, financing, and market hazards. Third, because operational holdings are getting smaller, the average farming surplus is becoming negligible. Fourth, the inability to employ contemporary technology and agricultural equipment was caused by the rising apathy and lack of drive among India's young.

Factors Contributing to Agrarian Crisis

Gill (2005) conducted research and found a strong correlation between financial difficulties, debt, and suicide. According to this study, bad economic conditions increased debt and occasionally caused financial anxiety that resulted in suicide. Family conflicts, mostly brought on by debt or financial difficulties, accounted for 59.9% of the instances. Twenty-six percent of suicides were caused by pressure from commission agents or banks to refund debts and a fear of losing one's social standing. They were forced into a debt trap by high interest rates on loans and loan diversion for unproductive uses or agricultural failure, which increased the risk of suicide.

Rao and Suri (2006) and Aher (2007) concentrated on the agrarian crisis's aspects. According to the prior study, the cost of planting crops and obtaining the final harvest surpasses the cost of production. In a subsequent research, 75 farm households from two villages in Andhra Pradesh's Guntur district were visited. The study found that while debt and agricultural crises were the two main causes of farmer suicide, the causes varied by state.

Even the middle peasants have found themselves unable to repay the loans of usurers, Arthiyas, big capitalist type landlords, rich peasants, and banks due to the destruction of crops like cotton, potatoes, tomatoes, kinnu, and grapes, among others; the steadily declining yield per acre; the skyrocketing prices of agricultural inputs and consumer goods; and the lack of agricultural facilities (Amrit, 2005). Vasavi (2005) examined data from five Indian states where agricultural suicides have occurred since 1998: Andhra Pradesh, Karnataka, Kerala, Maharashtra, and Punjab. The essay emphasised

how a variety of novel hazards and conflicting societal patterns put farmers' livelihoods in precarious situations.

According to a 2005 study by Deshpande and Nageshprabhu, Andhra Pradesh had the highest rate of farmer debt (82%) and Uttaranchal had the lowest rate (less than 10%). Over 50% of farmers took out loans to finance capital projects or current farming expenses, 58% of which went towards farming and other agricultural operations, and the remaining proportion went towards other consumer requirements. The 0.01–1 hectare size class has the highest proportion of indebted farmers. Over 70% of farmers with less than two hectares of land were indebted.

Gill and Singh (2006) stated that structural transformation of Punjab economy reduced the importance of agrarian sector which has evolved into a grave crisis. This is because the surpluses are shifted to the industrial sector but the dependence of work force on agriculture is still very heavy. According to this study agriculture constituted 52.85 percent of GSDP in 1966-67 and dwindled to 39.22 in 2000-01. It has been examined that the major cause of farmer suicides is indebtedness.

Jeromi (2007) studied the extent of farm crisis, increasing indebtedness and various dimensions of farmers' suicides in Kerala. It was revealed in the study that the landholding size of less than one acre was marginally more profitable than the landholding size of above one acre, because of hiring of labour. About 38.9 per cent of farmers committed suicide due to this agrarian crisis and majority of farmers nearly 60 per cent of them had less than one acre land. The study also reported that the incidence of indebtedness in rural areas of Kerala state was higher than the national average.

Through a study of three villages, Nair and Menon (2007) investigated the causes and mechanisms of agricultural distress in Kerala. All segments of the agricultural community experienced extreme hardship as a result of the decline in crop output and the precipitous drop in prices. Households had to cut back on spending, diversify their sources of income, and look for work elsewhere in order to deal with these difficulties. Government initiatives in the areas of PDS, healthcare, education, and drinking water supply provided some respite.

Raghwan (2008) calculated and contrasted the paid costs of growing wheat in India during the 1970s and 1980s input subsidy system and following its repeal in the 1990s, when economic reforms were started. The analysis found that operating expenses are increasing while fixed costs are decreasing. Among the many expenses under the heading of operational costs are salary costs, which have not changed much during the 1990s; the

cost of chemical fertilisers has climbed to 6.2% annually; and the average cost of insecticides has increased from Rs. 25 per hectare in 1980 to 1,115 percent in 2004-05.

Tripathi (2013) attempted to investigate post-reform farm profitability, output, and agricultural pricing policy. Compared to the preceding decade, pricing policy received more attention in the post-reform era. The expenses and returns for paddy and wheat were thoroughly examined in the study. However, the previous policy regime of "low input low output price" was replaced by a regime of "high input high output prices" as a result of the dependence on price policy rather than non-price interventions like public investments. In an effort to deter ecologically unsustainable behaviours, the Indian government cut substantial input subsidies, but it simultaneously absolved itself of responsibility for the manufacture, acquisition, and delivery of these inputs at farm gates.

A research by Raju *et al.* (2015) evaluated the performance of several crops and cropping patterns in Punjab using market pricing, economic prices (net the effect of subsidies), and the valuation of natural resources. The unit-level statistics on cultivation costs during the 2010–11 triennial were utilised in the study. By accounting for both positive and negative environmental externalities, it offers information on the relative profitability of different crops with and without government assistance in the form of subsidies. The study has demonstrated that the relative profitability of different crops remains unchanged even after controlling for the impact of input subsidies, the environment, and natural resources.

In the Indian context, Bathla (2017) investigated the connection between income and government spending on irrigation and agricultural. Time series data on public spending on irrigation and agricultural R&D in 17 major states served as the study's foundation. The findings showed that insufficient public capital formation in the 1990s affected farmer investments and endangered agricultural development and technical advancement. Public expenditure caused major inter-state variances, and these differences had a positive and substantial effect on agricultural earnings. The report recommended increasing the amount of resources allocated to impoverished states and giving the agricultural sector the importance it deserves in fiscal policy.

Conclusion:

The review of literature shows that most of the studies are related to agrarian crisis i.e declaration in agricultural growth, farmers' distress, and implications of economic reforms on agricultural sector. These studies conclude that the genesis of agrarian crisis lies in the various problems which the farmers in Indian economy faced. Thus, the review

of literature provides academic base for formulation of objectives, helps in selecting the analytical tools of research, policy implications of the problems.

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COLONIAL RAILWAY AND THE COTTON TRADE IN BRITISH INDIA: ECONOMIC, SOCIAL AND REGIONAL IMPLICATIONS

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Abstract:

The development of railway in colonial India represented one of the most significant transformations in the economic history of the subcontinent. Introduced by the British during the mid-nineteenth century, railways were projected as symbols of progress, modernization and integration. However, beneath these claims lay powerful imperial economic motives. Among the various commodities influenced by railway expansion, cotton occupied a central position due to its critical importance for British textile industries. This paper examines the close relationship between colonial railway expansion and the cotton trade in British India, with special emphasis on the Bombay Presidency. It argues that railways were primarily constructed to facilitate the extraction and export of raw cotton from India to British industrial centres. The study explores how railways reduced transportation costs, expanded cotton cultivation, reorganized agrarian production and integrated Indian markets into the global capitalist system. At the same time, it critically analyses the adverse consequences of this process, including peasant indebtedness, decline of food crops, regional inequality and economic dependency. Based on historical and analytical methodology using secondary sources, the paper concludes that colonial railways functioned less as instruments of national development and more as tools of imperial exploitation, whose legacy continued to influence India's post-colonial economy.

Keywords: Cotton Trade, British India, Bombay Presidency, Commercial Agriculture, Economic Exploitation.

1. Introduction:

The nineteenth century marked a decisive phase in the economic and political transformation of India under British colonial rule. One of the most visible and enduring features of this transformation was the introduction of railway. The British colonial state project railway as a symbol of modernity, progress and civilizational advancement.

According to colonial officials, railway would unify the country, promote trade, prevent famines and introduce India to the benefits of industrial civilization. However, a closer historical examination reveals that railway development was deeply shaped by imperial economic priorities. Among the various sectors affected by railway expansion, the cotton trade assumed exceptional importance. Cotton was a crucial raw material for Britain's rapidly expanding textile industry, especially after the Industrial Revolution. British mills required vast and continuous supplies of cheap cotton to sustain production and profit. India, with its long tradition of cotton cultivation, appeared as a natural solution to this demand. Yet, before the railway, India lacked the infrastructure necessary to supply cotton efficiently to global markets. The introduction of railway radically altered this situation. Railway lines were strategically laid to connect cotton-growing interior regions with port cities, particularly Bombay. This reorientation transformed Indian agriculture, reshaped regional economies and tied India more firmly to the global capitalist system. This paper seeks to examine the role of colonial railways in expanding the cotton trade and to assess the broader economic, social and regional implications of this transformation.

The introduction of railways in British India during the nineteenth century marked a turning point in the economic history of the subcontinent. Among the many commodities that were transformed by the railway system, cotton occupied a central position. Cotton was not merely an agricultural product; it was the backbone of British industrial capitalism and a key link between Indian agrarian regions and British textile mills. The colonial railway network was designed and expanded primarily to serve such export-oriented interests, making cotton one of the earliest and most important beneficiaries of railway connectivity.

Before the advent of railways, the cotton trade in India was limited by poor transport facilities, seasonal constraints and high costs. Cotton grown in the Deccan, Central India, Berar and part of western India had to be transported by bullock carts over long distances to ports like Bombay. This made Indian cotton less competitive in the global market. The railway system, introduced from the 1850s onwards, dramatically reduced transport time and cost, thereby integrating cotton-producing regions with port cities and global markets. The Great Indian Peninsular Railway (GIPR), connecting the cotton hinterlands of the Bombay Presidency with the port of Bombay, played a crucial role in this transformation.

The significance of railways in the cotton trade became even more evident during the American Civil War (1861–1865), when supplies of raw cotton from the southern United States were disrupted. British textile industries turned to India as an alternative source, leading to what is often described as the “cotton boom” in India. Railways enabled the rapid movement of cotton from interior regions to ports, reinforcing India’s position as a supplier of raw materials to Britain. However, this integration was unequal and exploitative, shaped by colonial priorities rather than indigenous economic development. This paper seeks to examine how colonial railways influenced the cotton trade in British India by analysing their economic, social, and regional implications. While railways undoubtedly expanded markets and increased cotton production, they also intensified commercialization, indebtedness and regional inequalities. The focus on export crops like cotton often came at the cost of food crops, making rural society vulnerable to price fluctuations and famines. Moreover, the benefits of railway-led growth were unevenly distributed, favouring port cities, European trading firms and colonial revenues over Indian cultivators.

By situating the cotton trade within the broader framework of colonial railway expansion, this study argues that railways functioned not merely as instruments of modernization but as tools of colonial extraction. The paper highlights how railways reshaped agrarian relations, labour patterns, and regional economies, particularly in cotton-growing areas. Through this analysis, the paper contributes to a deeper understanding of the colonial economy and the structural roots of underdevelopment in India.

2. Literature Review:

The role of railways in colonial India has been the subject of extensive scholarly debate. Early colonial historians and British administrators portrayed railway as benevolent instruments of progress. Writers such as Sir William Acworth emphasized the civilizing mission of railways and their contribution to India’s economic growth. However, this optimistic interpretation has been strongly challenged by nationalist and Marxist historians.

Daniel Thorner (1955) was among the earliest scholars to critically examine railway investment in India. He argued that railways were not built to promote balanced economic development but to serve British commercial and strategic interest. According to Thorner,

railways primarily facilitated the export of raw materials like cotton while flooding Indian markets with British manufactured goods.

Ian Derbyshire (1987) further developed this argument by focusing on regional patterns of railway expansion. He demonstrated that railway lines were selectively constructed in areas with commercial potential, particularly cotton-producing regions, while many interior and subsistence-oriented areas remained neglected. This selective development intensified regional inequalities.

Amiya Kumar Bagchi (2010) offered a broader critique of colonial economic policies, emphasizing the concept of the “drain of wealth.” He argued that railways strengthened colonial extraction by reducing transportation costs and enabling British capital to dominate Indian markets. Bagchi highlighted how Indian agriculture became increasingly vulnerable to global price fluctuations.

Studies by Lakshmi Subramanian, Tirthankar Roy and others have explored the commercialization of agriculture under colonial rule. While acknowledging some short-term gains, these scholars emphasize the long-term social costs, including peasant indebtedness, land alienation and food insecurity.

Despite this rich literature, a focused analysis of the cotton–railway relationship remains essential. This paper builds on existing scholarship while offering an integrated assessment of economic, social, and regional consequences.

3. Objectives of the Study:

The specific objectives of this study are:

- i. To examine the relationship between colonial railway expansion and the cotton trade in British India
- ii. To analyse the role of railways in transforming cotton-producing regions
- iii. To assess the economic consequences of cotton commercialization
- iv. To evaluate the social impact on peasants and rural society
- v. To study regional imbalances created by railway-centred development
- vi. To critically assess colonial claims of modernization and development

4. Methodology:

The study adopts a historical and analytical research methodology. It is based entirely on secondary sources, including published books, scholarly journal articles, government reports, and historical economic analyses. The approach is qualitative rather than quantitative, focusing on interpretation and critical evaluation.

A comparative method has been employed to examine conditions before and after railway expansion. Regional analysis has been used to understand how railway development affected cotton-growing areas differently from non-commercial regions. The study also applies concepts from colonial economic theory, particularly dependency and drain of wealth.

5. Cotton Trade in India before the Railways:

Before the advent of railways, cotton cultivation existed largely within a traditional agrarian framework. Transport facilities were limited to bullock carts, pack animals, river routes, and coastal shipping. These methods were slow, expensive, and unreliable. During the monsoon season, roads became impassable, and cotton bales frequently deteriorated before reaching markets.



Due to these constraints, Indian cotton struggled to compete in international markets. American cotton, transported efficiently through better infrastructure, dominated British textile mills. Indian cotton was often criticized for inconsistent quality and delayed supply.

The absence of modern transport prevented large-scale commercialization. Cotton-growing regions such as Berar and the Deccan remained relatively isolated from ports. British officials increasingly recognized that without railway connectivity, India could not function as a reliable supplier of raw cotton.

6. Expansion of Railways and Cotton Regions:

6.1 Early Railway Development:

The opening of the Bombay–Thane railway line in 1853 marked the beginning of railway transport in India. Bombay was chosen deliberately because of its importance as a port city and cotton-export centre. Railway expansion soon followed inland, targeting cotton-producing districts.



Lines extended into Khandesh, Berar, Nagpur and the Central Provinces. These connections enabled cotton to be transported quickly and cheaply to Bombay port. Railway companies, often financed by British capital, benefited from guaranteed returns provided by the colonial government.

6.2 The American Civil War and Cotton Boom:

The American Civil War (1861–1865) proved to be a turning point. The disruption of cotton supplies from the United States caused a severe shortage in Britain, known as the Cotton Famine. British manufacturers urgently sought alternative sources, and India emerged as a major supplier.

Railways enabled India to respond rapidly. Cotton exports increased dramatically, prices rose, and cultivation expanded into new areas. The colonial government accelerated railway construction to meet wartime demand. Although the boom was temporary, it permanently altered India's agrarian economy.

7. Results: Economic Impact of Railways on Cotton Trade:

7.1 Reduction in Transport Costs:

One of the most significant outcomes of railway expansion was the drastic reduction in transportation costs. Railways replaced slow and expensive traditional methods, making large-scale cotton exports profitable.

7.2 Expansion of Commercial Agriculture:

Railways encouraged farmers to shift from subsistence crops to cotton. Market access, higher prices, and colonial policies promoted commercial farming. This marked a fundamental change in rural economic relations.

7.3 Growth of Port Cities and Markets:

Bombay emerged as the primary cotton-export hub of India. Railway connectivity stimulated the growth of markets, warehouses and financial institutions. Second centres like Nagpur and Ahmedabad also expanded.

8. Discussion:

8.1. Colonial Railways and the Cotton Trade in British India:

The expansion of railways in colonial India fundamentally altered the structure and functioning of the cotton trade. While earlier sections establish the historical background and outcomes, this discussion critically examines the mechanism, contradiction and long-term consequences of the railway-cotton relationship. It highlights how railway acted not

simply as carrier of cotton, but as instruments that reshaped agrarian production, market relation and regional hierarchies under colonial rule.

8.2. Railway as Instruments of Colonial Commercial Strategy:

Colonial railways were designed primarily to meet imperial economic needs rather than indigenous development goals. The routing of railway lines clearly reflects this priority. Lines were constructed to link cotton-growing regions directly with port cities such as Bombay, ensuring smooth and rapid export of raw cotton to British textile mills. This strategic alignment demonstrates that railway planning was deeply embedded in Britain's industrial requirements.

The American Civil War exposed Britain's vulnerability to disruptions in raw cotton supply, which led to increased dependence on Indian cotton. In response, railway expansion into the Deccan, Berar, and Central India accelerated. Railways thus acted as a supply-security mechanism, reducing transport uncertainty and stabilising exports for British manufacturers. However, this integration into global markets left Indian producers exposed to price fluctuations beyond their control.

8.3. Transformation of Agrarian Production Patterns:

The arrival of railways encouraged a shift from subsistence agriculture to commercial cotton cultivation. Easy access to markets and transport made cotton a profitable crop, especially during periods of high global demand. Colonial policies, including land revenue systems and credit arrangements, further pushed peasants towards cash-crop farming.

Yet, this transformation was fraught with risks. Cotton required specific climatic conditions and substantial investment in seeds and labour. Crop failures or price crashes often resulted in heavy debt for cultivators. Railways facilitated export even during local scarcity, reducing the availability of food grains in certain regions. Thus, while cotton cultivation expanded, rural stability weakened, increasing peasant vulnerability.

8.4. Market Integration and the Role of Intermediaries:

Railways integrated previously isolated rural areas into national and international markets. Cotton markets expanded rapidly, and commercial towns emerged along railway routes. However, peasants rarely accessed these markets directly. Instead, intermediaries—traders, commission agents, moneylenders, and European firms—dominated the cotton trade.

These groups benefited disproportionately from railway connectivity. They controlled storage, credit, and pricing, often exploiting cultivators through advance payments and unfavourable contracts. Railways strengthened this system by enabling large-scale movement of cotton, reinforcing unequal power relations within the rural economy. The promised benefits of “free trade” largely bypassed the actual producers.

8.5. Regional Imbalances and Spatial Inequality:

The railway–cotton nexus contributed significantly to uneven regional development. Regions with fertile soil and railway access experienced commercial growth, infrastructure development, and urbanisation. In contrast, areas not connected to major railway lines remained economically marginalised.

This spatial inequality was not accidental but a result of colonial priorities. Investment flowed into export-oriented regions, while areas producing food crops or lacking commercial value were neglected. The concentration of railway infrastructure in cotton zones reinforced regional disparities that persisted into the post-colonial era, influencing patterns of underdevelopment and migration.

8.6. Social Consequences and Rural Distress:

The social impact of railway-led cotton expansion was profound. Increased commercialisation intensified class divisions within rural society. Wealthier landholders adapted more easily, while small farmers and agricultural labourers faced growing insecurity. Indebtedness became widespread, often leading to land loss and dependence on wage labour.

Additionally, railway construction itself disrupted rural life through land acquisition and displacement. Traditional transport workers, such as cart drivers and river porters, lost livelihoods. Thus, while railways symbolised modern progress, they also generated social dislocation and economic insecurity.

8.7. Railway, Cotton and Colonial Dependency:

At a structural level, the cotton trade reinforced India’s position as a raw material supplier within the colonial economy. Railways strengthened this dependency by facilitating exports rather than encouraging domestic industrialisation. Indian textile industries remained underdeveloped due to discriminatory policies and competition from British manufactured goods.

This pattern created a classic colonial economic structure: extraction of raw materials, export through efficient transport networks, and import of finished goods.

Railways, therefore, must be understood as tools that deepened colonial dependency rather than instruments of balanced economic growth.

8.8. Overall Assessment:

The discussion makes it clear that colonial railways played a decisive role in shaping the cotton trade, but their impact was deeply contradictory. They improved connectivity and market access while simultaneously intensifying exploitation, inequality, and dependency. Understanding this complex relationship helps explain the long-term economic and social challenges faced by cotton-growing regions in India.

9. Long-Term Consequences:

Despite their exploitative origins, railways left a lasting legacy. They integrated markets, facilitated mobility and later supported Indian industrialization. The emergence of Indian-owned textile mills in Bombay and Ahmedabad owed much to railway connectivity.

However, the structural weaknesses created by colonial policies—such as dependence on exports and agrarian distress—continued to affect India after independence.

Conclusion:

The relationship between colonial railways and the cotton trade illustrates the economic logic of British imperialism in India. Railways were not constructed to promote balanced development but to serve imperial economic interest. By facilitating cotton exports, railways integrated India into the global capitalist economy on unequal terms. While railway modernized transport and expanded markets, they also deepened exploitation, intensified agrarian distress and created regional inequalities. The cotton–railway nexus thus represents both the transformative and destructive dimensions of colonial infrastructure. Understanding this relationship is essential for evaluating the long-term legacy of colonialism in India’s economic history.

The study of colonial railways and the cotton trade in British India reveals that railway development was neither a neutral nor a purely progressive force. Instead, it functioned as a powerful instrument of imperial economic control, shaping agricultural production, regional economies and social relations in ways that primarily served British industrial and commercial interest. Cotton, as a strategically vital raw material for Britain’s textile industry.

Colonial railways fundamentally altered the geography of the cotton trade. By linking interior cotton-producing regions directly to port cities such as Bombay, the rail network dismantled older systems of transport and integrated Indian agriculture into a global capitalist economy. This integration increased the volume and speed of cotton exports, reduced transport cost and stabilised supply lines for British manufacturers. From the colonial perspective, railways successfully transformed India into a reliable supplier of raw cotton, especially during moments of global crisis such as the American Civil War.

However, the apparent economic growth associated with the cotton–railway nexus concealed deep structural weaknesses. The expansion of cotton cultivation was achieved largely at the expense of food security and agrarian stability. Peasants were drawn into commercial farming under condition of uncertainty and exploitative credit systems. Railway facilitated the outward movement of cotton even during periods of scarcity, revealing the colonial state’s prioritisation of export revenue over local welfare. Thus, rather than protecting rural society, railway-driven commercialisation often intensified vulnerability and distress.

Socially, the impact of railways on the cotton economy deepened existing inequalities. While merchants, moneylenders and European trading firms benefited from improved connectivity and market integration, small cultivators and agricultural labourers bore the risks of market fluctuations and crop failures. Indebtedness, land alienation, and rural impoverishment became defining features of cotton-growing regions. The promise that railways would bring prosperity and modernisation to the countryside remained largely unrealised for the majority of the rural population.

Regionally, colonial railway planning produced a highly uneven pattern of development. Cotton-producing areas connected to railway lines experienced commercial expansion, urban growth, and greater administrative attention. In contrast, regions that lay outside the railway network were neglected, reinforcing spatial inequalities within colonial India. This selective development reflected imperial priorities rather than a comprehensive vision of national economic growth. The legacy of these regional imbalances continued to shape economic disparities in post-colonial India.

At a broader structural level, the railway–cotton relationship entrenched India’s subordinate position in the global economy. Railways strengthened an extractive economic model in which raw materials flowed out of the colony while manufactured goods flowed in. Indian industrial development was neither encouraged nor protected, ensuring

continued dependence on British manufacturing. In this sense, railways contributed significantly to what nationalist thinkers later described as the “drain of wealth” from India.

In retrospect, colonial railways must be understood as a double-edged phenomenon. Technologically, they represented a major advance in transportation and communication. Historically, however, their alignment with colonial commercial interests limited their developmental potential. The cotton trade illustrates how modern infrastructure, when controlled by an imperial power, can deepen economic dependency and social inequality rather than promote inclusive growth.

In conclusion, the history of colonial railways and the cotton trade underscores the importance of examining infrastructure within its political and economic context. Railways did not merely transport cotton; they restructured Indian agriculture, reshaped regional economies, and reinforced colonial domination. A critical understanding of this relationship not only enriches our interpretation of India’s colonial past but also offers valuable insights into contemporary debates on development, globalisation, and the unequal distribution of economic benefits.

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PERCEIVED COGNITIVE COMPETENCY AS A CONCEPTUAL PREDICTOR OF ACADEMIC RESILIENCE AMONG SECONDARY SCHOOL STUDENTS

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Abstract:

In an era marked by rapid educational reforms, academic pressure, and diverse learner needs, the concept of academic resilience has gained significant importance. Academic resilience enables students to adapt positively to academic challenges, stress, and setbacks. Among the various psychological factors influencing resilience, students' self-beliefs about their learning abilities play a central role. Perceived cognitive competency refers to learners' subjective evaluation of their intellectual abilities, understanding capacity, and problem-solving skills. This conceptual qualitative paper critically examines perceived cognitive competency as a foundational predictor of academic resilience among secondary school students. Drawing upon theoretical perspectives such as perceived competence theory, self-efficacy theory, constructivism, and resilience frameworks, the paper develops a conceptual understanding of how cognitive self-beliefs shape students' adaptive academic behaviors. The discussion is contextualized within the competency-based and learner-centric vision of the National Education Policy (NEP) 2020. The paper concludes that strengthening perceived cognitive competency can serve as a sustainable pathway to promoting academic resilience and holistic development among adolescents.

Keywords: Perceived Cognitive Competency, Academic Resilience, Secondary Education, Self-belief, NEP 2020, Conceptual Study.

Introduction:

The contemporary educational landscape is characterized by increasing academic demands, heightened competition, and evolving expectations from learners. Secondary school students, in particular, experience substantial academic pressure due to examinations, curriculum load, performance evaluation, and future career concerns. These challenges often result in stress, anxiety, and disengagement, making the development of academic resilience a critical educational priority.

Academic resilience refers to students' ability to withstand academic difficulties, recover from setbacks, and continue striving toward learning goals despite adversity.

While traditional educational approaches have emphasized cognitive ability and academic achievement, recent educational research highlights the importance of psychological factors that enable students to cope with challenges effectively.

Among these psychological factors, perceived cognitive competency has emerged as a significant determinant of students' academic behavior. It refers not to actual intellectual ability but to students' belief in their capacity to understand concepts, learn effectively, and solve academic problems. Students who perceive themselves as cognitively competent are more confident, persistent, and adaptive in learning situations.

The National Education Policy (NEP) 2020 advocates a shift from rote memorization to competency-based education, critical thinking, and experiential learning. This shift places students' self-perceptions of learning ability at the center of educational success. In this context, understanding how perceived cognitive competency contributes to academic resilience becomes essential.

This paper adopts a qualitative conceptual approach to explore the theoretical linkage between perceived cognitive competency and academic resilience among secondary school students.

Conceptualizing Perceived Cognitive Competency

Perceived cognitive competency originates from the broader construct of perceived competence and academic self-concept. Harter (1982) described perceived competence as individuals' evaluations of their effectiveness across various domains, including cognitive or scholastic functioning.

From a qualitative standpoint, perceived cognitive competency is a subjective psychological construct shaped by personal experiences, social interactions, and educational contexts. It develops over time through classroom experiences, feedback from teachers, parental expectations, peer comparisons, and academic success or failure.

Students with high perceived cognitive competency believe that:

- They are capable of understanding academic content
- Learning difficulties can be overcome through effort
- Mistakes are part of the learning process

Conversely, students with low perceived cognitive competency often internalize failure, doubt their intellectual abilities, and avoid challenging academic tasks.

Importantly, perceived cognitive competency is dynamic and malleable rather than fixed. Supportive pedagogical practices, constructive feedback, and mastery-oriented learning environments can significantly enhance students' cognitive self-beliefs.

Academic Resilience: A Qualitative and Process-Oriented View

Academic resilience is best understood as a dynamic process rather than a static trait. It involves continuous interaction between the learner and the academic environment. Martin and Marsh (2006) conceptualized academic resilience as students' ability to cope with academic adversity while maintaining motivation and performance.

From a qualitative perspective, academic resilience encompasses:

- Emotional regulation during academic stress
- Adaptive coping strategies
- Positive attribution of success and failure
- Persistence and goal commitment

Resilient students interpret academic challenges as opportunities for growth rather than as threats to self-worth. They are more likely to seek help, adjust learning strategies, and remain engaged despite difficulties.

Academic resilience is influenced by both protective factors (such as self-belief and motivation) and risk factors (such as academic failure and stress). Among internal protective factors, perceived cognitive competency plays a crucial role by shaping how students interpret and respond to academic challenges.

Theoretical Foundations Linking Perceived Cognitive Competency and Academic Resilience

1. Self-Efficacy Theory

Bandura's (1997) self-efficacy theory provides a strong theoretical basis for linking perceived cognitive competency and academic resilience. According to this theory, individuals' beliefs about their capabilities influence their thought patterns, emotional responses, and behavioral actions.

Students with strong perceived cognitive competency exhibit high academic self-efficacy. They are more likely to:

- Persist when faced with academic difficulty
- Invest effort in challenging tasks
- Recover quickly from failure
- These behaviors are central components of academic resilience.

2. Constructivist Perspective

Constructivist theory emphasizes that learners actively construct knowledge and meaning based on experiences. Perceived cognitive competency is constructed through repeated interactions with learning tasks and instructional environments.

When students experience success and receive positive reinforcement, their cognitive self-beliefs strengthen. These beliefs, in turn, promote resilience by encouraging students to engage actively with learning challenges.

3. Resilience Theory

Resilience theory posits that protective factors mitigate the negative impact of adversity. Positive self-beliefs, including perceived cognitive competency, function as internal protective resources that buffer students against academic stress and failure.

Thus, perceived cognitive competency can be viewed as a psychological shield that enhances students' capacity to adapt and thrive academically.

Perceived Cognitive Competency as a Conceptual Predictor of Academic Resilience

Conceptually, perceived cognitive competency precedes and influences academic resilience. Students who believe in their cognitive abilities are more likely to:

- Approach academic tasks with confidence
- Use effective problem-solving strategies
- Regulate emotions during failure
- Maintain motivation and perseverance

These behaviours collectively contribute to resilient academic functioning. Therefore, perceived cognitive competency can be conceptualized as a predictive cognitive belief that fosters resilience in academic contexts.

Contextual Relevance in the Framework of NEP 2020

The National Education Policy 2020 emphasizes:

- Competency-based education
- Critical and creative thinking
- Learner autonomy
- Holistic development

These principles require students to actively engage with learning rather than passively memorize information. Such engagement is only possible when students perceive themselves as capable learners.

Strengthening perceived cognitive competency aligns directly with NEP 2020 by empowering students to take ownership of learning, adapt to challenges, and develop lifelong learning skills. Academic resilience, in this context, becomes a natural outcome of strong cognitive self-beliefs.

Educational Implications

- Teachers should adopt mastery-oriented teaching strategies that emphasize understanding over performance.
- Classroom practices should normalize errors as learning opportunities to build cognitive confidence.
- Parents should reinforce effort, persistence, and learning strategies rather than focusing solely on marks.
- Schools should integrate socio-emotional learning programs that enhance self-belief and resilience.

Conclusion:

This conceptual qualitative paper underscores the pivotal role of perceived cognitive competency in fostering academic resilience among secondary school students. Students' beliefs about their cognitive abilities significantly shape how they respond to academic challenges, stress, and failure. By nurturing positive cognitive self-beliefs, educators can strengthen students' resilience and promote holistic development. In alignment with NEP 2020, perceived cognitive competency should be recognized as a foundational element in building resilient, confident, and adaptive learners.

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ONLINE SHOPPING BEHAVIOR OF WORKING WOMEN: A LITERATURE REVIEW

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Abstract:

Advanced technology & internet have changed people's lives drastically. People prefer to shop through online rather than traditional shopping style & this trend is accelerating at a fast pace. This systematic analysis aims to examine & evaluate the online shopping behavior of women, a group that holds a significant impact in the worldwide e-commerce industry. In this analysis, previous literature regarding women's online shopping behaviour is studied & different researchers' ideas are put forth in a systematic manner. This past literature was reviewed which impelled the researcher to find that women play a major role in shopping whether it is online or offline. In this study, the researcher has explored the online shopping pattern of working women. Trust & privacy of information are found as the vital factors that impede them to shop online while on the other side price & convenience play a prime role as motivating factors. Positive word of mouth from friends & family are also of utmost importance in shaping their purchase decisions. The overall goal of this research is to achieve a better understanding of online shopping pattern exhibited by working women in India.

Keywords: Technology, Internet, E-Commerce, Working Women, Online Shopping Behaviour.

Introduction:

Internet technology has changed the consumption habits of people drastically. According to 2008 Nielsen study, there has been fivefold increase in the number of people using internet in Asia from 1999 to 2009. While on the other side, traditional media like newspapers, magazines, radio have started losing their position & are declining rapidly (JC Deacux Oneworld, Global Adspend Forecast, April 2012). Internet is not only being utilized for the communication (e-mail, chat, messaging) or community building (social networking) but also for transaction purposes (e-commerce).

In today's world of technology, online shopping has evolved a lot & also changed in leaps & bounds (Sakpal & Soni, 2019). People's daily life is influenced by internet more so

as compared to the past (Hsieh *et al.*, 2013). People are getting used to virtual experience from physical experience, adapting to online purchases (Rao, Hymavathi & Rao, 2018). Online shopping is the third most popular internet activity followed by e-mail usage & instant messaging & web browsing (Lee & Zhang, 2002).

In recent years India has experienced a boom in internet & smartphone penetration. India's digital sector is so much strengthened now that it is expected to reach US \$ 1 Trillion by 2030 (IBEF, www.ibef.org). The future of e-commerce in India is promising, with projections indicating annual growth rates of 18% through 2025. By 2030, India is anticipated to emerge as the third largest consumer market globally, underlining the vast opportunities & potential that lie ahead of the e-commerce sector in the country (Dewangi Sharma, 2024).

Women are powerful consumers in the online purchasing as they regulate about 50% purchase of household products (Manoranjan & Maheshwari, 2023). Women consumers feel good and seek pleasure while purchasing in the digital marketing. In the modern times, women are well educated & excel in their professions. They have become financially independent. Online shopping has become the part of the lives of working women as they are more conscious about their personal grooming (Al Khurdi & Alshuridah, 2021).

Shopping has been thought to relieve stress for women after long day at work. Women's consumer behavior is characterized by a desire to acquire goods & services that are actually lacking or unnecessary as well as by a desire to satisfy worldly pleasures. It is not just a matter of obtaining tangible products but also about the experience, enjoyment & entertainment (Martineau, 1958; Tauber, 1972). Babin *et al.* (1994) classified shoppers into utilitarian & hedonic. Utilitarian shoppers like to save the time and effort while shopping but enjoyment of the activity is more important for hedonic shoppers (Bellenger & Korgaonkar, 1980).

Today most of the women are getting financial liberty due to education & employment. With the increased freedom in finances, women's tendency for online shopping has been increasing. With the increased use of the internet & growing trend of online shopping, working women believe that shopping online can save their time when compared to going to supermarket/mall for shopping (Anugrah, Al basyir). According to the projections by the Internet & Mobile Association of India (IAMAI), India is anticipated to have a remarkable 900 million active internet users by 2025 (IBEF, 2023). A noteworthy pattern in this expansion is the significant involvement of women in online purchasing,

comprising a substantial proportion of the nation's online shoppers. So, understanding the factors & pattern that influence women's online purchasing behavior are crucial as their involvement in online shopping continues to grow (Lakshmi, Bose & Ravi, 2024).

Objective of the Paper:

The main objectives of this research paper are to understand the online shopping behavior of working women & also to find out the major motivating factors & hindering factors for online shopping.

Methodology:

This study follows an exploratory research design. A secondary form of data collection method has been adopted for the study which includes various sources like research papers, articles, journals, books & information from websites. Several databases like Google scholar, Scopus, Researchgate were used to explore research articles & papers.

Literature Review:

Gaur & Purankar (2025) presented a literature based study, which looks at the main factors influencing women's online purchasing habits. The study consulted major databases Google Scholar, Elsevier, Scopus and Researchgate to search for the articles relating to working women's behaviour for online shopping of apparels. Results revealed that women's purchasing behaviour is highly motivated by peer groups. Reviews of friends and relatives referrals from their co-workers and buyers reviews play a major role shaping their decision for fashion purchases. User-friendly websites and timely customer services promote trust which motivates women consumers for online shopping. Fashion trend awareness is also important for style conscious working women. It is concluded that online fashion buying behaviour is influenced by social dynamics, behavioural empowerment and digital experience.

Bala (2024) carried out a study to gain insights into impulsive buying behaviour among working women in Karnal. The study investigated the impact of e-marketing online payments, emotional buying, lifestyle & status, and online shopping on impulsive purchases by women. The study covered 150 working women from whom primary data was gathered through questionnaire. The study was conducted in Karnal region in Haryana. Collected data was analysed with regression analysis and the study found that 72.4% of participants admitted that they had made impulsive purchases and 81.3% of participant stated that internet shopping promotes impulsive purchases. All the independent variables (lifestyle and status, online payments, online shopping, emotional

buying, and E-marketing) had a significant influence on working women's impulsive buying.

Laksmi, Bose and Ravi (2024) conducted a comprehensive literature review and developed a framework to investigate the factors influencing the online buying behavior of women in India. The research specifically aimed to assess the effects of psychological, social, cultural, economic, privacy and security, and technological elements on the purchasing choices of female shoppers. Additionally, the study highlighted the challenges women face when shopping online, particularly in the categories of apparel and cosmetics. The research, conducted in Visakhapatnam, India, revealed that Indian women tend to be more price-sensitive compared to their global peers. Moreover, issues of privacy and security are significant concerns for female consumers in India when engaging in online shopping. The research indicated that robust digital infrastructure, strict regulations, and improved digital literacy for women can address security and trust concerns, thereby promoting increased participation of women in online shopping.

Nivetha & Vijayalakshmi (2024) explored how consumers behave when buying cosmetic products on Amazon. Their study aimed to uncover what influences buyers' sense of self satisfaction & how loyal they feel toward Amazon as a shopping platform. Primary data collected from 200 respondents and secondary Data was analysed with the help of various statistical tools and the results revealed that consumers decision to buy cosmetics are highly influenced by the quality of products and price is also a significant factor for quality conscious consumers.

Packiyam (2024) in his empirical study tried to investigate Chennai Customers' online buying habits & the elements that impact them. The researcher also examined customers' challenges when participating in online buying & assesses the level of satisfaction among customers about online purchases. Employing the analytical approach, the study conducted on the data collected from 110 respondents from the city of Chennai & secondary sources also. The study showed that age, gender, education & income strongly influences internet purchasing trends online shopping is growing popular among younger & more educated consumers due to ease, product diversity & competitive price. The study suggested that firms can customise their service according to the customers' tastes & choices & boost their satisfaction.

Namrata Singh *et al.* (2024) carried out a study to identify the demographic traits of online female shoppers, and their shopping habits. Study concluded that although shoppers considered online shopping, a better decision than physical shopping, but they found it

expensive as well. Female shoppers considered security element in payment systems for online shopping the most. Because of that online fraud risk, most of the shoppers preferred cash on delivery option for payment in online shopping. Besides security, delay in deliveries and delivery of wrong or bad product are also the major concerns for them.

Singh (2024) in his study examined about the Consumer's buying behaviour in context of online shopping of fashion products specifically apparels during Covid period and normal times. Researcher also tried to investigate how much consumers are aware about online shopping behaviour towards fashion products. Results of the study revealed that level of awareness of consumer towards online shopping significantly affected their buying behaviour for fashion items. It was discovered that buying behaviour significantly varies with gender, age, education, occupation, marital status & family monthly income also.

Sadhukhan & Sonali (2024) in their study emphasised to find out the relationship of fashion involvement with two types of buying behaviour, namely, compulsive and impulsive, buying in working and non-working married women. The study involved married female participants of 25 to 60 years of age. On the basis of monthly income, three groups were performed namely, higher salaried group, low salaried group and housewife group with monthly pocket money. So, participants were recruited in each group results indicated that in each of three groups, both compulsive and impulsive buying behaviours were positively related with fashion involvement. Also, participants of three groups with higher fashion involvement were found to be significantly higher in compulsive buying as well as in impulsive buying, than those with low fashion involvement.

Mayee *et al.* (2023) With the more prevalent use of computers, e-commerce has become the most important & popular online activity. This is because of a rapid advancement in technology which has created a lucrative market for firms to expand their businesses through online. So many of the firms have started business through online also. Female population could be a major targeted consumer segment as they are becoming financially independent. So this study focused to determine the variables affecting women's online shopping habits. Along with this the study also reveals a major hindrance that prevents women consumers from shopping online. The study came up with the conclusion that majority of female online shoppers are the youngest & the most preferred product by female online shoppers is clothing. Respondents have positive experiences with the online shopping.

Dhanalakshmi & Komalavalli (2022) explained that women generally enjoy shopping more than men. They are actively participating in taking shopping decisions for themselves and their family members also because of their financial prudence. So, the study was aimed to identify the online shopping pattern of working women and factors affecting their shopping behaviour for apparel through online. The study was conducted on 213 working women in Chennai city and study revealed that working women find online shopping more convenient due to time constraints and they are more comfortable with the usage of technology for shopping as well. Apart from that online shopping is first convenient also, and they prefer it as it provides complete details about the products.

Saxena (2022) explored the online clothing shopping habits of Indian women, focusing on their preferences, motivations, and challenges. Drawing from survey responses in urban and semi-urban areas, the research highlights that ease of access, broad product selection, and competitive pricing are the main drivers behind online purchases. Elements like visual appeal, compelling product descriptions, and influencer endorsements play a crucial role in shaping buying decisions. However, issues such as unclear sizing, delayed shipments, and confusion around return procedures act as major barriers. The study also reveals a growing reliance on mobile apps over desktop websites, with platforms like Instagram and WhatsApp fueling the rise of social commerce. Generational differences are evident—young women tend to shop more impulsively, while older women approach purchases with greater caution. To better meet consumer expectations and build trust, the study recommends that online fashion retailers invest in virtual try-on technologies, simplify return processes, and offer personalized sizing options.

In the research carried out by Imran *et al.* (2022) it was tried to examine the online shopping patterns of employed and unemployed women in the urban area of Rawalpindi district. The findings of the study pointed out the clear differences between the two groups in terms of shopping frequency & spending habits. However, the study found no meaningful statistical difference about the clothing preferences of both the groups. Working & non-working women both showed similar choices in apparel.

Alwani, Yadav & Pradhan (2021) conducted a study of consumer behaviour towards online shopping in Vadodara. The objectives of the study were to identify consumer perceptions towards online shopping, their preference towards different websites, their perceptions towards mode of payment and their online buying behaviour. The study involved minimum of hundred responses from people of different age groups from Vadodara city. Primary data was collected from the respondents through structured

questionnaire. The study conducted that the consumers who were well aware of shopping mostly prefer online in all the categories, whether it be clothes, electronic products, grocery etc. It also showed that online shopping is highly convenient time saving as well as cost-effective. Also, major barriers were also identified that affect consumer behaviour and they were safety of payments, high shipping cost and warranty claims of products.

Singh & Pathak (2021) emphasised in their study that online shopping has become a way of life for most of people, especially working women. They investigated the variables affecting purchasing conduct of ladies towards marked tights and the different issues faced by women during online shopping. The study was focused on female spy behaviour during the purchase of apparels in Lucknow. The research indicated that shift in buying behaviour towards online is positive due to reasons like discount schemes, quality of products, privacy and cash on delivery. Besides factors like culture, tradition and occasion, also play a major role in female buying behaviour.

According to Raman (2021), online shopping growth rate of food, jewellery, ticketing, and perfumes/cosmetics is higher and they all have higher women consumers and these consumers play a major role in growth of online shopping. Raman conducted a study with a focus on consumer buying behaviour towards online shopping with special reference to women's apparels. The study comprised a sample of 250 women consumers from two major cities of Malaysia- Kuala Lumpur and Klang Valley. Five factors were labelled for the study- availability of product attributes, security and safety, easy to use website interface, low prices with discount offers and awareness of online shopping. Findings show that the online shopping provides a wide variety of apparels with various size options that allows women to buy apparels through online. When it comes to buying women's apparel online, respondents place a high value on the safety and security of the transactions, so this factor highly influence their shopping behaviour. Apart from this, easy to use website interface and prices with good discount offer also play a significant role. The study suggests to the E-retailers that they should focus on product attributes, safety and security of their customers, making the website more user-friendly and create more awareness among users to attract more buyers.

Ahuja (2021) conducted a research study on buying behaviour of working women through online shopping. The research was focused to identify and get insights into the main factors that women consider while purchasing online and the influence of these factors on working women when they shop online. Level of awareness of online shopping amongst the working women was also considered to study. Study covered 500 working

women from Raipur city. Primary data was collected by personal interviews and questionnaire. The findings revealed that 43.6% of working women shop online because of convenience and 38.8% shop online as it is time saving. It was also found that majority of working women purchase clothes from online platforms. Regarding payment method, maximum working women prefer cash on delivery mode of payment for online shopping. Buyers' reviews also influence the buying decisions as reported by majority of the working women consumers.

Muthupriya & Sivakumar (2020) Women are the most powerful consumers in India as they control 50% of the household purchase spending. With the increasing use of technology & internet, e-commerce has increased hastily in the recent years. Working women prefer online shopping due to various reasons. Most of the working women willingly choose online shopping because of product availability which is not available locally. Customer retention is more important which is influenced by satisfaction, trust & service quality. Past customers feedbacks & reviews affect the potential customers' purchase decisions & behaviour.

Fasih, Shoukat & Khan (2020) in their study analyzed the online shopping behaviour of professional women in Pakistan & also to develop an e-shopping framework for professional women to enhance online shopping trends in Pakistan. The study included the professional women associated with different business institutes. A random number of 30 respondents were chosen and data was collected from them with semi-structured questionnaire. The study found out that online shopping is preferred over traditional shopping due to the convenience benefit & time-saving. Secondly, online shopping provided a number of local & international brands at competitive prices which is not a characteristic in traditional shopping. Seller credibility was also found to be a major factor influencing the online purchase decision. Further, buyers also prefer delivery within 3 days to one week along with an exchange/return option to increase their confidence level in online purchase.

Partuti, Kambuna & Dwiyanti (2019) carried out a study to analyse the influence of online shopping on consumption behaviour of female workers in Cilegon city of Indonesia. Cultural factors and psychological factors were taken as independent factors and consumer behaviour as dependent variable. The study involved 50 respondents from whom data was collected with questionnaire. Hypothesis testing was analysed with t-test, F- test and R Square test to determine the effect of independent periods on dependent variables. The study found that cultural factors and psychological factors did not significantly influence

female workers' consumption behaviour and very weak correlation was found between dependent and independent variable.

Singh, Moolcandani & Bhatia (2019) in their study tried to examine the different factors influencing online buying behaviour among women consumers. the study used the primary data collected with the help of a structured questionnaire from a sample of 400 women customers from NCR region of India. The questionnaire comprised of statements relating to the different aspects of online buying behaviour. the statements were framed after an extensive literature review and EFA was adopted to identify the latent factors . The study identified the eight factors i.e. Perceived services, perceived ease of use, perceived usefulness, intention to purchase, perceived expectation, perceived expected & actual, service gap & repurchase intention indicating the different aspects of the online shopping behaviour of women customers.

Gowda & Chaudhary (2018) Online shopping has become an important part of daily lives of working women especially. Indian online market is projected to reach 175 million by 2020. Major factors responsible for this increase are greater penetration of internet technology, increasing use of smartphones, flexible delivery options, increasing disposable incomes etc. All these factors have contributed to augment working women to shop more through online. A study conducted by Google suggested that e-commerce would drive 25% of the total organized retail sales in India by 2020. The study focuses to analyse the buying pattern of women consumers in india & to understand the major factors influencing online shopping. 241 women consumers were taken as the subjects of the study & the study concluded that most of the women prefer buying apparels online through mobile phones. Major proportion of online shoppers belong to the youngest age category between 18-24 years. Along with this, 25-34 years age group is also the most attractive for sellers as this group constitutes a greater percentage of population which is working and financially independent.

Ozturk & Ceylan (2016) in their study attempted to identify the tendencies of the female consumers working in public sector in Turkey to shop through online & the effect of these tendencies on intention to purchase. For the study, primary data was collected from 500 female consumers working in public sector in Turkey by survey technique, however 35 respondents didn't give complete information, so those questionnaires were dropped and remaining 465 questionnaires were considered for the study. The data was analysed with percentage analysis, ANOVA test & multiple regression analysis. Results showed that there was no significant difference between age & marital status of the participants and their

tendencies to shop through internet while significant difference was found between educational status & income level of participants and their tendencies to shop online. Further it was also concluded that instrumentalist value, hedonic value, security & intention to research affected the intentions of the consumers to purchase goods & services through online.

Discussions:

Above literature review highlights the most commonly cited reasons for shopping online are price & convenience (Dhanalakshmi & Komalavalli, 2022). The facility of shopping without leaving the home & doorstep delivery of products is of great interest to many shoppers especially working women as they lack ample time to shop for their needs due to their work schedules. Reasonable pricing structure of the products available online is also a great feature influencing people for online shopping. It has also been found that people not only shop because they need the products or services but they shop also to get relieved from stress. Shopping gives women a sense of relief & also destresses them. Working women are a potential consumer segment for the sellers. There has been a growing tendency towards online shopping among women in India. The implication for online retailers & sellers is that they should focus on making their experience of online shopping more accommodating & user friendly. Literature reveals the positive (ease of use, convenience, usefulness, variety of options, doorstep delivery) as well as negative aspects (trust issues, privacy of information, online fraud) of online shopping (Lakshmi, Bose & Ravi, 2024). So, the retailers should give more attention to make their websites or apps more trustworthy & reliable as it will help them to tap major potential from the market (Rasman, 2021). The study of literature also suggests that the products which are usually bought by women in online shopping are apparels, beauty products & jewellery (Mayee et al, 2023; Ahuja, 2021). Word of mouth from friends & family (Gaur & Purankar, 2025) also influence their online shopping decisions.

Conclusion:

Women are major influencers & are involved in actual purchasing decisions. So, it is essential for e-tailers to target such a sizeable segment of consumers. Sellers should adopt different methods to attract new customers & retain existing one (Muthupriya & Sivakumar, 2020). The results emphasize that online shopping landscape has been increasing in India & it is impacting purchasing decisions of women across all different age groups, employment sectors & different geographical locations. The study concludes that there is effect of age, income, occupation, marital status, location (Packiyam, 2024; Singh,

2024; Ozturk & Ceylan, 2016) on intention to shop online for female consumers. This area about working women is under researched yet. So, it is important to explore this field more as shopping though online is becoming today's normal especially for working women.

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IMPACT OF SOCIAL MEDIA MARKETING ON CONSUMER PURCHASE DECISION

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Abstract:

Social media's explosive growth has drastically changed consumer decision-making and marketing communication tactics. By fostering interactive engagement and building trusted relationships, social media marketing has become a crucial tool for businesses to influence consumer awareness, opinions, and willingness to buy. This chapter synthesizes theoretical perspectives and empirical data from previous scholarly works to provide a critical analysis of social media marketing's impact on consumer purchasing decisions. The material value, word-of-mouth online (e-WOM), influencer advertising, engagement with the brand, perceived reliability, and consumer confidence are important factors that are being examined in connection to the consumer's path to a purchase. The chapter illustrates how social media tactics result in quantifiable consumer responses using real-world industry illustrations from both international and Indian brands.

Keywords: Social Media Marketing, Electronic Word of Mouth (WOM), Digital Consumer Behaviour, Consumer Purchase Decision, Digital Marketing, Brand Engagement.

Introduction:

The field of marketing is being profoundly altered by the rise of technology, with networking platforms now having a major impact on how consumers act. Instagram, Facebook, YouTube, Platform X (formerly Twitter), LinkedIn, and other platforms have developed from simple communication tools into effective marketing channels. Using online social networks to market goods and services, build relationships with customers, and influence their purchasing decisions is known as social media marketing. Today's consumers have more autonomy than earlier in their lives, have become more informed, and are more connected. They actively research goods and view feedback, observe result tests, and communicate with companies on social channels prior to completing a purchase. Modern and particular communication programs are slowly adding to or even replacing conventional forms of advertising like television and print media.

As a result, understanding how social media marketing influences customer buying choices has emerged as a crucial field of research for scholars and professionals alike. This review aims to identify the main ways that social media influence customer habits, in addition to exploring the manner in which marketing on social media shapes customer purchasing choices. The increasing prominence of social media for brands and the growing adoption of technological devices make these studies especially pertinent.

Literature Review

Multimedia marketing and consumer buying patterns have recently been extensively studied through advertising research. Previous studies consistently demonstrate that social media's capacity to promote open and even interactive interaction has a crucial impact on customer perceptions, brand beliefs, and purchase intentions. Mangold and Faulds emphasized social media's capacity to integrate consumer-to-consumer interactions with company-generated content, viewing it as an inverted part of the marketing combination. Additional research indicates that trustworthy, entertaining, and vocational network content promotes client satisfaction and reputation. Online word-of-mouth has become a more common topic in digital media studies. Studies have shown the examination sites, consumer ratings, and recommendations from other consumers have a bigger influence on purchasing decisions than traditional commercials, especially for product groups like technology, fashion, and airline tickets that require a high level of customer involvement. Consumers perceive e-WOM as more genuine rather than more politically driven, which reduces perceived risks and uncertainties. Relevance serves as one of social media marketing's strongest characteristics, it improves direct communication between businesses and consumers and makes it simple for businesses to draw in new clients. Customers share their genuine feedback with the public on social media, which boosts the company's goodwill and trust. Customization To create toward the desired consumers, the company's spokesman may prepare a customized advertisement. Cost-effective social media marketing efforts are less expensive and yield much higher profits, making them a very cost-effective way to draw clients. Worldwide reach It is very advantageous for brands to be fortunate enough to effortlessly record the entire world. Social media advertising has been a significant area of research. Another significant body of literature focuses on brand-consumer interaction on online platforms. Participating actively via the internet discussions for brands, suggestions, and feedback has fostered long-term connections and an overwhelming sense of commitment. Scientific evidence

shows that higher levels of engagement are associated with greater brand loyalty and a higher likelihood of repeat purchases.

Internet sales require creating and disseminating content on different kinds of social media in order to achieve marketing and branding goals. Influencer collaborations, content marketing, social media marketing, and community management are examples of this. This results of the study show that online voices identified as bloggers have a big influence on purchase intentions due to your believed similarity to others who follow them, proficiency, and credibility. Further research indicates that trust additionally plays an intermediary position surrounding the rapport with regard to advertisement as well as customers who make purchases. The importance of the brand-consumer relationship on websites and apps has been heightened by recent studies.

Research Methodology

This study reviews the last years papers and researches, articles related to impact of social media on consumer behaviour, The methodology used in this study is conceptual and descriptive. It is based on secondary data about online marketing as well as consumer habits that have been collected through published studies, papers, novels, scientific publications, conference proceedings, and reliable internet sources. In order to have a thorough grasp of the subject, the study examines and summarizes an array of available scholarship using a qualitative methodology.

Objectives

- To understand the core idea and components of internet marketing.
- to examine how consumers decide what to buy.
- to look into how different phases of customer buying choices are impacted by social media marketing.
- To determine important elements that influence consumer purchasing behaviour through the internet, like e-wom, influencer marketing, and trust.
- to provide suggestions to feed effective internet marketing tactics that have useful executive implications.

Consumer Purchase Decision Process

Prior to and after purchasing something, shoppers go through a number of mental as well as personality phases in the decision-making process. These phases include determining a need, obtaining information, weighing options, deciding what to buy, and acting after the purchase. Every step of this process is influenced by internet publicity, as it

provides vendor interactions, peer insights, and real-time data. The integration of media advertisements into the framework of buying decisions is depicted in Figure 1.



Figure1: Media advertisements and buying decisions

It emphasizes social media's ongoing impact as opposed to a one-time intervention, highlighting its strategic significance in modern marketing ongoing impact as opposed to a one-time intervention, highlighting its strategic significance in modern marketing.

Impact of Social Media Marketing on Consumer Purchase Decision

- **Impact on Knowledge Acquisition and Understanding**

During the period prior to buying, online social media platforms serve as essential data centres. Short-form videos, popular articles, and paid advertisements, as well as content made by brands, all greatly increase product awareness and spark consumer interest. To create excitement and awareness prior to a device's public debut, business enterprises like Apple and Samsung, for instance, resort to launching videos and streaming events on platforms such as YouTube and Instagram. In a similar vein, Indian companies like Nykaa and Boat apply internet video reviews alongside Instagram stories to apprise customers about the features and advantages of their products.

- **Electronic Word-of-Mouth's (e-WOM) Function:**

Consumer perceptions and purchasing decisions are significantly influenced by electronic word-of-mouth. Customers may express their ulterior encounters in places like Google Shopping Reviews and Instagram comments. Good feedback on TripAdvisor, for instance, may significantly increase reservation desires in the tourism sector. Negative e-WOM, on the other hand, quickly destroys the image of a company, emphasising the conflicting nature of social media communication

- **Influencer Marketing's Impact:**

Influencer marketing has evolved into a tactical strategy for influencing consumer purchasing choices. While Indian companies like Mama-earth and Sugar Skincare work

with celebrities in the beauty industry to increase connection and authenticity, companies like Nike work with international athletes and fitness celebrities to bolster performance credibility. According to research, client confidence and intention to buy are greatly influenced by the legitimacy of the influencer and perceived expertise, especially among a younger generation.

- **Building Relationships, Trust, and Consumer Activity:**

The ability of social media to communicate in both directions fosters strong brand-consumer relationships and increases trust. Brands' perceived response time rises when these businesses deliver immediate answers to audience inquiry, send focused messages, and run proactive campaigns. For instance, Zomato's astute and timely Twitter platform outreach method has improved brand recognition and generated viewership, which has had a positive impact on ordering patterns and cultivated brand loyalty.

- **Impact on Post-Purchase Conduct and Selling Planning:**

Continuous use of social media influences both the initial decisions made about purchases and the actions taken afterward. Customers actively participate in the digital word-of-mouth (e-WOM) cycle by regularly sharing their recommendations, reviews, and experiences. Through Twitter hashtag campaigns, entrepreneurs like the Starbucks Company promote user-generated content, which strengthens community-driven support for the business and repeated purchases.

Advantages of Social Media Marketing for Business

- **Increased Knowledge of Consumers:**

Social media marketing is essential for greatly increasing consumer awareness of brands and products. Businesses can engage with customers in the initial problem-recognition stage through influencer partnerships, carefully targeted ads, and the production of captivating content. This guarantees that when a demand for a purchase arrives, that company is given top priority.

- **Enhanced Information Availability:**

Customers can easily access product details, reviews, comparisons, and examples through social media platforms. By lowering uncertainty and enabling better purchasing choices, this simple-to-locate expertise helps customers through the information-seeking and assessment phases.

- **Effect through Electronic Word-of-Mouth (e-WOM):**

The use of social media individual endorsements, posts by consumers, and internet judgments drastically impact consumer.

- **Building Authority and Faith:**

Industries may gain their customers' confidence by engaging in active brand interaction, communicating openly, and posting genuine content on social media. In order to turn a prospective purchase into a real transaction, trust is essential.

- **Individualized Marketing and Targeting Capabilities:**

Social media gives companies the ability to send tailored messages based on data on demographics, customer needs, and habits. This degree of relevance improves customer involvement and has a favourable impact on purchase decisions.

- **Improved Brand-Consumer Relationships:**

Two-way communication becomes easier with interactive elements like message boards, real-time broadcasting, and comment sections. Increased branding and feelings for the company are fostered by higher involvement levels, and these factors are crucial in influencing consumer purchase intentions.

- **Impact on Customer Loyalty as Well as Purchase Intention:**

Positive as well as consistent social media communication strengthens consumers' perceptions of a brand. Long-term business success is helped by happy and involved audience members who will be more likely to be inclined to purchase after purchase and recommend the brand.

Challenges and Recommendations:

Challenges

- **Social Media Marketing Difficulties** Social media marketing has many benefits, but it also has some drawbacks.
- successfully handling negative comments and online criticism.
- preserving a constant level of content delivery and quality.
- calculating a return on investment with accuracy.
- ensuring knowledge privacy and security.
- adjusting to quickly changing market trends and algorithms.

Recommendations

- For better customer memory as they make purchases, businesses should continue expressing their brands consistently on all social media platforms.

- To increase client engagement and loyalty, companies should concentrate on media that is interactive (questionnaires, demo reels, interactive sessions).
- In order to strengthen consumer trust and confidence, brands should make sure that consumer concerns and issues are promptly addressed.
- To enhance credibility and social influence on purchasing decisions, organizations should promote user-generated content. Businesses should closely monitor social media sentiment to understand evolving customer expectations and preferences.
- To maintain consumer trust, ethical practices such as transparency in campaigns and the clear disclosure of advertisements should be followed.

Conclusion:

Social media marketing influences awareness, information search, alternative evaluation, and behaviour following a purchase, any of which have an important influence on the purchasing choices of customers. The purchasing decision of customers is greatly influenced by things like e-WOM, influencer marketing, audience trust, and brand engagement. Businesses must incorporate successful digital advertisements into their general campaigns because consumers depend more and more on these platforms for goods-specific information and recommendations. The study comes to an agreement that social media communication is an asset of strategy that influences customer buying choices in today's digital world instead of becoming just an advertising instrument.

Companies need to use effective, moral, and practical electronic promotion strategies to create a sustainable competitive edge and enduring client loyalty as clients utilize these platforms more and more for good information and fellow consumers' recommendations.

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ROLE OF SOCIAL MEDIA IN RECRUITMENTS PROCESS

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Abstract:

The rapid growth of social media has significantly transformed traditional recruitment practices, making it an essential tool for modern organizations. Social media platforms such as LinkedIn, Facebook, Twitter, and Instagram enable employers to reach a wider and more diverse talent pool at a comparatively lower cost and in less time. This research paper examines the role of social media in recruitment by analyzing how organizations use social networking sites to attract, screen, and select potential candidates. It highlights the advantages of social media recruitment, including improved employer branding, faster communication, and access to passive job seekers, while also addressing challenges such as privacy concerns, reliability of information, and ethical issues. The study emphasizes that effective use of social media in recruitment can enhance organizational competitiveness by improving the quality of hiring decisions. Overall, social media has emerged as a strategic recruitment tool that reshapes the interaction between employers and job seekers in the digital era.

Keywords: Social Media Recruitment, E-Recruitment, Employer Branding, Talent Acquisition, Digital Hiring Strategies.

Introduction:

Recruitment is a critical function of human resource management that focuses on attracting and selecting suitable candidates for organizational roles. With advancements in digital technology, traditional recruitment methods such as newspaper advertisements and employment agencies are increasingly being replaced or supplemented by online recruitment tools. Among these, social media has gained immense importance due to its widespread usage and interactive nature. Social media platforms allow organizations to promote job vacancies, showcase organizational culture, and engage directly with potential candidates. At the same time, job seekers use these platforms to search for employment opportunities and build professional networks. The integration of social media into recruitment has not only changed the way organizations hire employees but has also influenced employer–employee relationships. Therefore, studying the role of social media

in recruitment is essential to understand its impact, benefits, and limitations in contemporary human resource practices.

Objectives of the Study

- To study the concept and significance of social media in the recruitment process.
- To analyze the role of social media platforms in attracting and selecting potential candidates.
- To identify the benefits of using social media as a recruitment tool for organizations.
- To examine the challenges and limitations associated with social media recruitment.
- To understand the impact of social media recruitment on organizational hiring effectiveness.

Research Methodology

This study follows a simple and easy method to understand the role of social media in the recruitment process.

- The present study is descriptive in nature. It describes the role, importance, and impact of social media in recruitment.
- The study is based on secondary data. Information has been collected from textbooks, research papers, journals, websites, and online articles related to human resource management and social media recruitment.
- Data has been collected through review of existing literature available on the internet and academic sources.
- A qualitative approach has been used to understand concepts, opinions, and trends related to social media recruitment.
- The study is limited to secondary data only. The results depend on available information and may not represent all organizations.

Importance of Social Media in the Recruitment Process

Social media plays a vital role in the modern recruitment process by transforming the way organizations attract, engage, and select potential employees. Its importance can be explained as follows:

1. Wider Reach to Talent Pool

Social media platforms enable organizations to reach a large and diverse audience across different geographical locations. Recruiters can connect not only with active job seekers but also with passive candidates who may not be actively looking for jobs.

2. Cost-Effective Recruitment

Compared to traditional recruitment methods such as newspaper advertisements and recruitment agencies, social media recruitment is more economical. Many platforms allow free or low-cost job postings, reducing overall hiring expenses.

3. Faster Hiring Process

Social media speeds up the recruitment process by enabling instant communication between recruiters and candidates. Vacancies can be posted quickly, and responses from candidates are received in real time, leading to faster shortlisting and selection.

4. Employer Branding

Organizations use social media to promote their culture, values, and work environment. A strong employer brand helps attract skilled and talented candidates and creates a positive image of the organization in the job market.

5. Better Candidate Screening

Recruiters can review candidates' professional profiles, skills, achievements, and online presence. This helps in gaining additional insights into candidates' suitability for a particular job role.

6. Improved Engagement and Interaction

Social media allows two-way communication, enabling organizations to interact with candidates, answer queries, and build long-term relationships. This improves candidate experience and engagement throughout the recruitment process.

7. Access to Real-Time Information

Social media provides up-to-date information about candidates and job trends. Recruiters can stay informed about market demands, emerging skills, and competitor hiring practices.

Thus, social media has become an essential recruitment tool that enhances efficiency, effectiveness, and strategic decision-making in human resource management.

Role of Social Media Platforms in Attracting and Selecting Potential Candidates

Social media platforms play a significant role in modern recruitment by helping organizations attract, engage, and select potential candidates efficiently. With the increasing use of platforms such as LinkedIn, Facebook, Instagram, X (Twitter), and even YouTube, recruitment has become faster, more interactive, and more targeted.

1. Attracting Potential Candidates

Social media enables organizations to reach a large and diverse talent pool at a low cost. Companies can post job vacancies, share career-related content, promote employer branding, and showcase workplace culture through posts, stories, and videos. This helps attract both active job seekers and passive candidates who may not be actively searching but are open to new opportunities.

2. Employer Branding

Through regular updates, employee testimonials, achievements, and behind-the-scenes content, companies can build a strong employer brand. A positive and transparent online presence increases trust and makes the organization more appealing to potential candidates.

3. Targeted Recruitment

Social media platforms offer advanced targeting options based on skills, location, education, experience, and interests. Recruiters can run paid advertisements or targeted job posts to reach suitable candidates, improving the quality of applications received.

4. Screening and Shortlisting Candidates

Recruiters often review candidates' social media profiles to gain additional insights into their professional background, skills, communication style, and cultural fit. Platforms like LinkedIn are especially useful for verifying qualifications, endorsements, and work experience, which supports effective shortlisting.

5. Improved Communication and Engagement

Social media allows direct and quick interaction between recruiters and candidates through messages, comments, and live sessions. This improves candidate engagement, clarifies job-related queries, and enhances the overall recruitment experience.

6. Cost and Time Efficiency

Compared to traditional recruitment methods, social media recruitment reduces hiring costs and time. Vacancies can be filled faster due to wider reach, instant communication, and easy sharing of job information.

7. Data and Analytics Support

Social media platforms provide analytics on post reach, engagement, and candidate responses. Recruiters can analyze this data to improve recruitment strategies and make better hiring decisions.

Benefits of Using Social Media as a Recruitment Tool

- 1. Wider Reach to Talent Pool:** Social media platforms like LinkedIn, Facebook, Instagram, and X enable organizations to reach a large and diverse audience across different locations, skills, and experience levels, including both active and passive job seekers.
- 2. Cost-Effective Recruitment:** Recruiting through social media reduces costs related to newspaper ads, recruitment agencies, and job portals. Many platforms allow free job postings or low-cost targeted advertisements.
- 3. Faster Hiring Process:** Vacancies can be posted instantly, and applications can be received quickly, helping organizations shorten the recruitment cycle and fill positions faster.
- 4. Access to Passive Candidates:** Social media helps recruiters identify and approach passive candidates—those not actively looking for jobs but open to better opportunities—who are often highly skilled.
- 5. Employer Branding:** Organizations can showcase their work culture, values, achievements, and employee experiences, improving employer brand image and attracting quality candidates.
- 6. Better Candidate Screening:** Recruiters can review candidates' professional profiles, skills, portfolios, and online behavior, enabling better assessment of cultural fit and professionalism.
- 7. Targeted Recruitment:** Advanced filters and algorithms allow organizations to target candidates based on skills, education, experience, location, and interests, improving hiring accuracy.
- 8. Improved Candidate Engagement:** Social media supports two-way communication, allowing recruiters to interact with candidates, answer queries, and build relationships before hiring.
- 9. Attracts Young and Tech-Savvy Talent:** Platforms like Instagram and LinkedIn are especially effective for attracting millennials and Gen Z, who actively use social media for career opportunities.
- 10. Data and Analytics Support:** Social media platforms provide analytics and insights on job post performance, engagement, and applicant response, helping organizations improve recruitment strategies.

Challenges of Social Media Recruitment

1. **Large Volume of Unqualified Applications:** Social media often attracts a high number of applicants, many of whom may not meet job requirements, increasing screening time and workload for HR teams.
2. **Risk of Bias and Discrimination:** Recruiters may unintentionally form opinions based on a candidate's personal photos, opinions, religion, or lifestyle, leading to biased or unfair hiring decisions.
3. **Privacy and Ethical Concerns:** Using personal information from social media profiles can raise privacy issues and may violate data protection laws if not handled properly.
4. **Inaccurate or Misleading Information:** Candidates may exaggerate skills or experience on social media profiles, making it difficult to verify the authenticity of information.
5. **Limited Reach for Certain Job Roles:** Social media recruitment may not be effective for senior positions, blue-collar jobs, or candidates in rural areas with limited internet access.
6. **Damage to Employer Reputation:** Negative comments, poor online reviews, or delayed responses can harm the organization's employer brand publicly.
7. **Time-Consuming Management:** Managing multiple platforms, responding to messages, and updating content requires continuous time and effort from HR professionals.
8. **Overdependence on Technology:** Technical issues, algorithm changes, or platform restrictions can reduce visibility of job postings without warning.
9. **Legal and Compliance Risks:** Improper use of social media in hiring may lead to legal challenges related to discrimination, equal employment opportunity, or data misuse.
10. **Not a Complete Replacement for Traditional Recruitment:** Social media recruitment alone may not provide comprehensive assessment, making interviews, tests, and background verification still necessary.

Impact of Social Media Recruitment on Organizational Hiring Effectiveness

Social media recruitment has significantly transformed how organizations attract, assess, and hire talent. Its impact on organizational hiring effectiveness can be understood through several key dimensions:

1. **Wider Talent Reach:** Social media platforms such as LinkedIn, Facebook, Instagram, and X (Twitter) enable organizations to reach a large and diverse pool of candidates across geographical boundaries. This increases the chances of finding candidates with the right skills and cultural fit, thereby improving hiring effectiveness.
2. **Improved Quality of Candidates:** By reviewing candidates' professional profiles, portfolios, recommendations, and online behavior, recruiters can gain deeper insights beyond resumes. This helps in shortlisting more suitable and competent candidates, leading to better hiring decisions.
3. **Faster Recruitment Process:** Social media allows real-time communication and instant job postings. Vacancies can be shared quickly, applications received faster, and interactions with candidates become more direct, reducing time-to-hire.
4. **Cost-Effective Hiring:** Compared to traditional recruitment methods (newspaper ads, job portals, recruitment agencies), social media recruitment is relatively low-cost. Many platforms offer free or low-cost job postings, reducing overall recruitment expenses while maintaining effectiveness.
5. **Enhanced Employer Branding:** Active social media presence helps organizations showcase their culture, values, achievements, and work environment. A strong employer brand attracts high-quality candidates who align with organizational goals, improving retention and performance after hiring.
6. **Better Candidate Engagement:** Social media enables two-way interaction with potential candidates through comments, messages, and content sharing. Higher engagement builds interest and trust, increasing the likelihood of successful hiring.
7. **Data-Driven Recruitment Decisions:** Recruiters can analyze metrics such as post reach, engagement rates, click-through rates, and application conversions. These insights help refine recruitment strategies and improve hiring outcomes over time.
8. **Higher Retention and Job Fit:** Candidates hired through social media often have a clearer understanding of the organization before joining. This realistic job preview improves job satisfaction and reduces early turnover, enhancing long-term hiring effectiveness.

Conclusion:

The study concludes that social media plays a significant role in transforming the recruitment process in modern organizations. It has made recruitment faster, more cost-effective, and more interactive compared to traditional methods. Through social media

platforms, organizations can reach a wider talent pool, strengthen employer branding, and engage with potential candidates more effectively. Social media also helps recruiters access passive job seekers and gain additional insights into candidates' skills and professional backgrounds. However, challenges such as privacy concerns, authenticity of information, and ethical issues must be carefully managed. Overall, when used strategically and responsibly, social media enhances the effectiveness of recruitment and contributes positively to organizational growth and competitiveness.

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