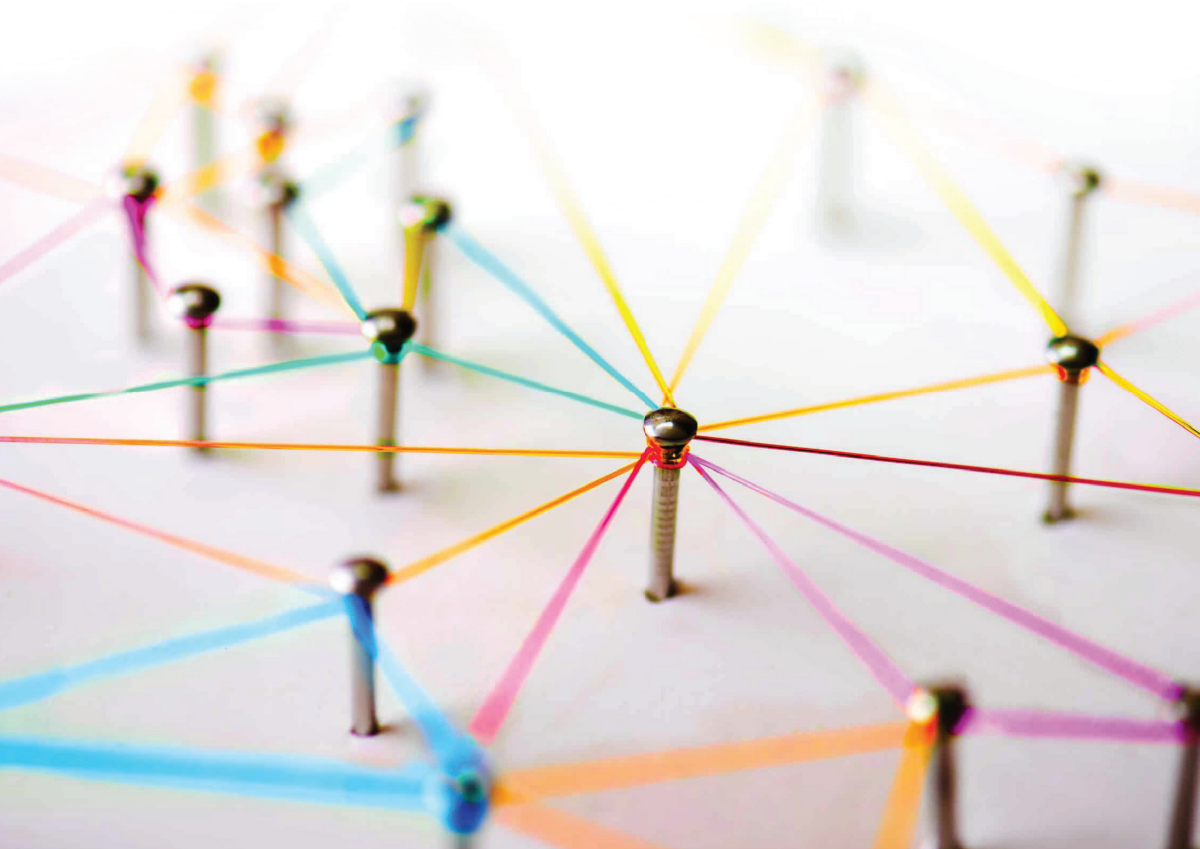


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# BIMTECH Business Perspectives



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## About the Journal

*BIMTECH Business Perspectives* is a scholarly Open Access journal of Birla Institute of Management Technology, India. The journal publishes original contribution in the functional areas of business management (see Aims and Scope). Furthermore, the journal is a platform for interdisciplinary studies that provide both empirical evidence and nuanced perspectives on business management in the national, regional, and global contexts. The contexts include, but not limited to, the contemporary economic, political, social, technological, and environmental challenges facing business stakeholders.

The journal brings out two issues per year, and it follows a double-anonymized peer-review process. All contributions should be well written in English. Submission to the journal should be relevant to one or more business and allied disciplines and backed by suitable methodology, sound analysis, practical perspectives, and managerial or policy implications.

To this end, *BIMTECH Business Perspectives* invites contributions from both the academic community and business practitioners. The journal publishes and disseminates original articles, review essays, perspectives, book reviews, interviews and invited pieces. Special theme-focused and/or guest-edited issues are also planned.

## Aims and Scope

The objectives of *BIMTECH Business Perspectives*, the journal, are to encourage and publish research in the field of business management. The terms business and management are both broadly defined. While the former encompasses both discipline and business problem-based research, the latter includes the management of firms, groups, industries, regulatory bodies, government, and other institutions. The journal has a special focus on emerging and functional areas of business management. Consistent with the policy, the journal publishes peer-reviewed research in financial markets, emerging economies, entrepreneurship and start-ups, emerging technology and innovation in business functions, consumer behaviour, human behaviour in management decisions, risk management, supply chain management, business strategy, and other domains having a direct or indirect bearing on business management. The journal encourages both quantitative and qualitative research methods to unearth relevant findings. The journal aims to nurture a debate among individuals and groups, which have keen interest in business and managerial processes. The journal encourages inter-disciplinary studies that may lead to new understanding of business and management functions. The journal welcomes research papers examining dynamics of business management in the backdrop of changes in the global business environment. The journal serves as a platform that connects thought-leaders and researchers from diverse fields to address crucial business and management issues. Published twice a year (June and December), *BIMTECH Business Perspectives* is an official publication of Birla Institute of Management Technology (BIMTECH), Greater Noida, India. The journal has been publishing in its current form since 2019. Prior to 2019, the journal was known as *Business Perspectives*, which had a publication history of more than a decade.

If you wish to contact the editors of the journal *BIMTECH Business Perspectives*, please email at [editor@bimtech.ac.in](mailto:editor@bimtech.ac.in)

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# Message from Editor

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We are pleased to bring out the June 2023 issue (Volume 4, Issue 1) of *BIMTECH Business Perspectives* in partnership with Sage under the Spectrum programme. With the support of contributors, reviewers and readers, the journal has reached the fourth year of its journey. The journey so far, we believe, has put a significant imprint on business and management research. We aim to take the journal to reach further heights with contribution of all stakeholders.

In terms of research focus, we continuously aim for improvements by emphasising on current and relevant issues faced in the business and management domain. With the passage of time, we have renewed our focus to encourage original research involving emerging and functional areas of business management including, but not limited to, financial markets, emerging economies, entrepreneurship and startups, emerging technology and innovation in business functions, consumer behaviour, human behaviour in management decisions, risk management, supply chain management, and business strategy. We encourage both quantitative and qualitative research methods as well mixed methods approach in answering research questions.

We are committed to timely review and publication of manuscripts submitted to the journal. Contributors to the journal can expect to receive a reply from editor's desk within one week of submission and the first round of reviews within six weeks. Subsequent reviews wherever required is done in a time-bound manner. A final decision on the submitted manuscript can be expected within six months.

This issue of *BIMTECH Business Perspectives* carries four research articles and an interview. The research articles are as follows:

1. 'A Bibliometric Analysis of 25 Years of Workplace Deviant Behaviour Research'
2. 'Green HRM: An Empirical Study on Validation of Measurement Scale in Indian Environment'
3. 'Influence of Social and Economic Factors on Impulse Buying: A Research Framework'
4. 'Democratising Healthcare in India: Opportunities and Challenges'

The articles have significant relevance in the business management and economic domains. The interview is entitled *Entrepreneurship Education for Social Impact*. We have included the interview of Ms. Rupangi Sharma, the author of *Young*

*Indian Innovators, Entrepreneurs and Change-Makers* from EFG Learning, which is aimed at highlighting the role of entrepreneurship and innovation by youths in the evolving landscape of school and college education, as well as identifying the significance of youth innovation in the Indian startup ecosystem.

In the past three volumes, we have published articles on a variety of issues. These topics range from currency market and its interactions, economic performance, valuation, consumer brand identification, consumer behaviour, impact of job burnout, revenge buying behaviour, consumer attitude towards green products, tourism, brand equity, volatility of banking sector, among others. With every successive issue we endeavour to serve the research fraternity and contribute to knowledge production in the identified discipline, which encompasses several functional and cross-functional areas.

We would like to place on record our gratitude to chief editorial advisor, Director BIMTECH, and the editorial board members from diverse fields for providing direction and guidance for the growth and development of the journal. We also thank the authors who have entrusted their faith in the journal from different parts of the world. Our reviewers who are spread across geographies have contributed to every successive issue and we are grateful for their contributions.

We sincerely hope that our readers will find contemporary insights from the content included in this issue. Any comments and suggestions may be sent to the editor by email ([editor@bimtech.ac.in](mailto:editor@bimtech.ac.in)).

**Khanindra Ch. Das**

*Editor, BIMTECH Business Perspectives*

# A Bibliometric Analysis of 25 years of Workplace Deviant Behavior Research

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Nikita Jain<sup>1</sup> and Rekha Dhingra<sup>1</sup>

## Abstract

Workplace deviant includes any act that is significantly different from what is considered acceptable by prescribed norms. Deviant workplace conduct is not uncommon and is a regular phenomenon in the workplace. It can be found in all sorts of businesses and at all levels of management. Thus, there is a need for study in this area. The publication of workplace deviant behavior has grown steadily, and the trends have been increasing consistently. As a result, the study focuses on examining the scientific literature on workplace deviant behavior research. The purpose of this study is to evaluate the evolution of the concept. It also aims at analyzing which academics, countries, and journals are most interested in this area, the most relevant affiliations and collaborations, and which research has the greatest influence. Based on the “keywords” search results, the Scopus Database was used to compile literature on workplace behavior from 1997 to 2022. This study included 357 papers that were relevant for the analysis from the Scopus Database. The findings revealed that research into workplace deviant behavior has been strengthened during the last few years. This research draws upon findings and current information to give readers a glimpse into the future of workplace behavior research.

## Keywords

Workplace deviant behavior, bibliometric analysis, constructive deviant, destructive deviant, positive workplace deviant behavior, negative workplace deviant behavior

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## Introduction

A diverse workforce has become a part of business organization (Kuklytė, 2018). Therefore, workplace includes an ample series of behaviors, which influence individuals and the company. Moreover, employee's behavior at work determines whether the company succeeds or fails. Thus, the organization has to make sure that the employee behavior must be within the prescribed norms to achieve the desired objectives. But sometimes the behavior is not as prescribed in the norms and then it is called "deviant." Deviant can be divided into two categories: constructive and destructive.

### *Constructive Deviant Behavior*

Positive deviant which is also known as constructive deviant includes the deliberate infringement of organizational principles for the betterment of the business. Enhancing good deviant behavior in the workplace is critical because it allows employees to provide better solutions to problems than others in high-risk scenarios. Although it violates organizational policy, an employee's positive deviant behavior aids the organization in achieving innovative results. Human resources who act on constructive deviant can add to the usefulness of their work, develop service, and enhance organizational performance (Mertens et al., 2016). Furthermore, the workforce concerned with constructive deviant can depict as active change agents who assist the business in altering to change and novel environmental restraints in the vivacious humankind marketplace (Robbins & Galperin, 2010). "Positive deviant behavior" must be creditable and focus on actions carried out with good intentions, regardless of the consequence. Positively deviant employees challenge the status quo to improve organizational systems' effectiveness and efficiency (Mertens et al., 2016; Vadera et al., 2013), get a better answer to significant troubles with existing resources, and assist the organization in adapting to change and environmental restrictions (Mertens et al., 2016; Vadera et al., 2013).

### *Destructive Deviant Behavior*

Negative deviant which is also known as destructive deviant includes the deliberate infringement of the organizational principles for the breakdown of the organization. "Negative deviant behavior" is an increasing topic of distress in enterprises worldwide; as such activities can be costly in the direction of their bottom line. Negative deviant entails damage, rumor spreading, business sabotage, or otherwise, unlawful organizational action that has adverse effects on the firm. Employee delinquencies such as not following the supervisor's guidelines, knowingly slowing the work sequence, arriving behind schedule, doing the minor robberies, not regarding colleagues with respect, and acting ruthlessly with colleagues are instances of "negative deviant behaviors" (Robbins & Galperin, 2010). It is vital to distinguish between unethical activity and negative deviant behavior since the earlier includes engaging in a breach of society set of laws,

and at the same time the second includes breach of primary corporate principles (Appelbaum et al., 2007).

To summarize, constructive deviant is proactive in nature and involves behaviors such as breaching organizational rules to develop a new product or ignore a supervisor's instruction to assist a coworker. In conclusion, both productive and destructive deviants are linked in the organization (Robbins & Galperin, 2010). However, because the effects of both deviant actions are different, there is a narrow line between them. While destructive deviant is detrimental to the organization and its people, constructive deviation earns the organization praise. As a result, businesses must constantly explore strategies to reduce harmful deviant and increase positive deviant among their workforce.

However, empirical research was used to evaluate the proposed link; that is why this study uses a Bibliometric approach, which analyzes the literature on workplace deviant behavior articles. As a result, the research answers the subsequent research questions:

1. What is the contemporary publishing trend in workplace deviant behavior?
2. In terms of notable authors, countries, subject areas, journals, and organizations, who are the leading contributors to the creation of information and knowledge in this field?
3. What are the inherent linkages among the most commonly used author keywords that may reveal the conceptual structure of workplace deviant behavior?

The following sections make up the current article: introduction, concept origin, research methodology, final results, discussion, and conclusion. The results provide a complete analysis of the year of publication, publication sources, institution distribution, topic area as well as the shift in its structure.

## Origin of Workplace Deviant

This section gives a quick overview of organizational deviant and its evolution over time, as well as the historical roots of the related idea of deviant behaviors. It was first interpreted by "Robinson and Bennett", 1995 as "Voluntary behavior that breaches significant organizational norms and thereby undermines the functioning of an organization, its members, or both." Vandalism, stealing, spreading gossip, sabotage, withdrawal, absenteeism, restraining effort, unethical decision-making process, abusive supervision, and negative feelings such as aggression or anxiety are examples of deviant behavior. There are different types of deviant behavior (see Table 1).

Robinson and Bennett (1995) referred to the four classes of deviant behavior:

1. Production deviant is associated with wrongdoing such as leaving before time with no consent, endorsing or taking part in gambling on work grounds, transmission and wasting time by surfing the internet throughout job hours.

**Table 1.** Four Types of Deviant in a Workplace by Robinson and Bennett (1995).

S. No.	Type of Deviant	Examples
1.	Production deviant	<ul style="list-style-type: none"> <li>• Leaving before time</li> <li>• Taking too many breaks</li> <li>• Working slowly on purpose</li> <li>• Wastage of resources</li> </ul>
2.	Property deviant	<ul style="list-style-type: none"> <li>• Destroying equipment</li> <li>• Lying about working time</li> <li>• Destroying equipment</li> </ul>
3.	Political deviant	<ul style="list-style-type: none"> <li>• Showing bias</li> <li>• Making unpleasant remarks about coworkers</li> </ul>
4.	Personal aggression	<ul style="list-style-type: none"> <li>• Harassment at work physically or verbally</li> <li>• Trying to steal from colleagues</li> </ul>

2. Property deviant is associated with wrongdoing such as acquiring office materials without consent, meddling, misrepresenting or faking of attendance card, and illicit employing company equipment.
3. Political deviant is associated with wrongdoing such as gossiping and spreading buzz.
4. Personal aggression is associated with wrongdoing like making hateful or awful statements regarding an employee and behaving impolitely with the boss.

Sometimes workplace deviant can also be for good cause and is beneficial for the organization. In this case, employee opts for creativity and innovation which is not prescribed in the organization's norms. Positive deviant is described as any intentional violation of rules that benefits coworkers or an organization (Robbins & Galperin, 2010). Generally, it can be seen that constructively deviant employees have superior problem-solving techniques although they share identical resources and face challenges as the other workforce. Frequently, the main rationale for their accomplishment is basically that they complete things differently and even break rules and disobey processes to complete tasks quicker, at low cost, and way smarter (Uddin et al., 2017).

Positive workplace deviant is described as "deliberate behaviors that depart in honorable ways from the norms of a referent group" (Spreitzer & Sonenshein, 2004).

Three forms of constructive deviant behaviors have been identified and shown in Table 2.

- The term "innovative organizational constructive deviant behavior" refers to new ideas and unconventional approaches to aid a company. These behaviors include looking for contemporary ways to complete daily actions and finding productive and ingenious solutions to difficulties.
- "Challenging organizational constructive deviant behavior" refers to acts that openly challenge the organization's established norms and disobey the rules to benefit the organization. Breaking and bending the rules to

**Table 2.** Three Types of Deviant in a Positive Workplace by Galperin (2002).

S. No.	Type of Deviant	Examples
1.	Innovative organizational constructive deviant	<ul style="list-style-type: none"> <li>• New ideas and approaches to aid a company</li> <li>• New ways to complete everyday activities</li> <li>• Creative solutions to difficulties</li> </ul>
2.	Challenging organizational constructive deviant	<ul style="list-style-type: none"> <li>• Challenge the organization's established for the benefit of the organization</li> <li>• Violating and twisting of the rules to complete a work</li> <li>• Disobeying the company norms to solve a customer's problem</li> </ul>
3.	Interpersonal constructive deviant	<ul style="list-style-type: none"> <li>• Oriented toward individuals, like breaking rules or disclosing misconduct to colleagues</li> </ul>

complete a work, as well as violating company protocols to solve a customer's problem, are examples of such behaviors.

- "Interpersonal constructive deviant behavior" comprises acts oriented to individuals, such as breach of rules or disclosing unlawful activity to colleagues.

Previous studies (Baharom et al., 2017) conducted a systematic review on workplace deviant aims to understand the dynamics of deviant workplace conduct and highlight the idea of deviant workplace behavior through a review of related prior research. The systematic analysis of leadership is the main emphasis of this study. This study supports the theoretical and empirical basis for transformational leadership's moderating effect on the association between individual and deviant workplace behavior. The study also studied the cost associated with workplace deviant behavior. Moreover, to provide an insightful comprehension of the link between interpersonal and organizational deviant behavior and to assess the size and generalizability of relationships within their nomological networks, the study combined an exploratory meta-analytic approach with the horizontal contrasting method of theoretical elaboration. The findings showed a significant correlation between interpersonal and organizational deviant behavior.

Furthermore, Pletzer et al. (2020) conducted a meta-analysis of the associations between workplace deviant and all "Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, and Openness to Experience (HEXACO) domains and facets." The findings of this study show that: (a) the "HEXACO" has modest to high-level criterion validity for workplace deviant behavior; (b) the slight aspect has higher criterion validity for workplace deviant behavior than the extensive area; (c) the "Honesty-Humility" domain masks different relationships connecting its side with the significantly stronger relationship of Fairness aspect with workplace deviant behavior than "Greed Avoidance and Modesty"; and (d) merely, the Fairness aspect is Together; the findings evince that HEXACO aspects can perform better in the prediction of Workplace deviant than broad domains.

Thus, after analyzing previous studies, it can be concluded that systematic and meta-analysis has been conducted on workplace deviant behavior. However, there is no bibliometric analysis undertaken on this topic. Thus, there arises a need to conduct a bibliometric analysis on the same. This research analyzes bibliometric factors for studies on workplace deviant behavior. It summarizes previous research works and makes the findings more visible. It highlights the gaps in the linked literature as well as the areas where future research should concentrate.

## Research Methodology

The study used bibliometric analysis to examine workplace deviant behavior in the organization. The bibliometric (Güneş et al., 2017) is an instrument for examining numeric and analytical methodologies as well as implicit information in scientific works. Under this analysis, statistical and mathematical tools are applied to books (Broadus, 1987). Bibliometric reviews are projected to be published in international journals, where the majority of study results will be quoted by other researchers in the future (Tibaná-Herrera et al., 2018). Moreover, it also provides an extensive variety of information, which allows researchers to get information about the trends in publishing on a certain topic (Esen et al., 2020) As a result, it was used in the research to gain a better knowledge of deviant in the organization.

### Search Criteria

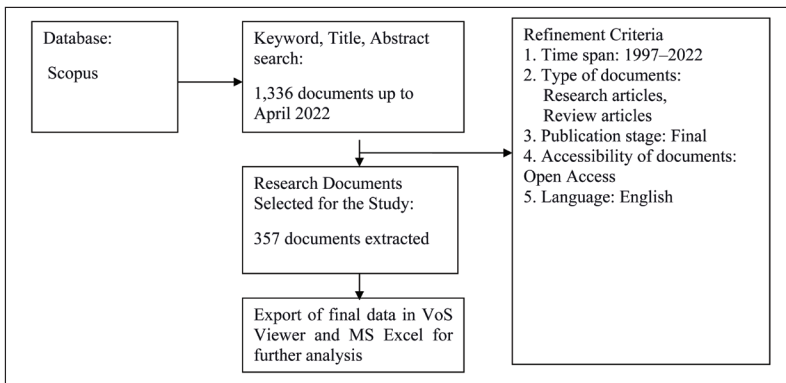
The research string adopted to search the articles was: TITLE-ABS-KEY (“Workplace Deviant Behavior”) OR (“Workplace Deviant Behaviour”) OR (“Workplace Incivility”) OR (“Counter Productive Work Behavior”) OR (“Destructive Deviant”) OR (“Constructive Deviant”) OR (“Organizational Deviant”) OR (“Positive Deviant”) OR (“Negative Deviant”).

### Choosing a Database and Gathering of Data

The two main and most complete databases for large-scale bibliometric analyses and methods of research evaluation are WoS and Scopus (Pranckutė, 2021). However, in social science research, Scopus database provides a comprehensive view of the articles (Pham-Duc et al., 2022). These data were collected from Scopus. The research yielded 1,336 publications in the Scopus database. But 357 papers (conference papers and book chapters are not included) from Scopus were selected because they were appropriate for the study. The details are provided in Figure 1.

The following inclusion criteria were adopted:

- The research papers must be openly accessible.
- It must be Research Articles or Review Articles.
- It must be written in the English language.
- Keywords, titles, and abstracts must all include search terms.



**Figure 1.** Methodology Adopted to Extract the Documents for Analysis.

The following exclusion criteria were adopted:

- Book chapters and conference proceedings were not included.
- Although one or more of these keywords were listed in the article's keyword area, papers that do not explore or contain Workplace Deviant inside the paper.
- After evaluating the abstract and, in some circumstances, the whole text of the paper, the decision to exclude it was made.
- Papers not written in the English language were not included.

### *Data Quality*

The Scopus database was employed to collect the data. Scopus has the most comprehensive abstract and citation database (Chadegani et al., 2013). Moreover, in the Social Sciences area, Scopus database provides wide-ranging documents. The year, subject area, author name, document type, keywords, nation, affiliation, and language are all included in the database. We narrowed our search for web accessibility studies by title to focus on the most relevant scholarly works in the field. As a result, quality data was obtained. Moreover, only review and research articles are included in the study because these articles are more rigorously peer-reviewed, thus it can maintain the data quality.

### *Data Analysis*

Microsoft Excel and Vosviewer were used for data analysis. Division of articles based on year, subject wise, author wise, country wise and top 10 most cited publications were analyzed using MS Excel, and Tag clouds were created in Vosviewer to highlight the distribution of publications by country and the frequency of keywords in the articles.

## Results

The analysis of content of the article provides more detailed information on the process. The bibliometric analysis techniques can be divided into two types as shown in Figure 2.

### Performance Analysis

It analyses the contributions made by study participants to a certain field. The distinguishing feature of the bibliometric analysis is its descriptive nature. The results include an analysis of the year of publication, nations, journals, and citations of the selected articles. It includes the following.

#### Evolution of Publication

The number of relevant papers climbed slightly in 2010, but dramatically afterwards as shown in Figure 3. In 2019, it was expected that the number of publications would rise even further. Jones (1988) published first deviant study in 1988, titled

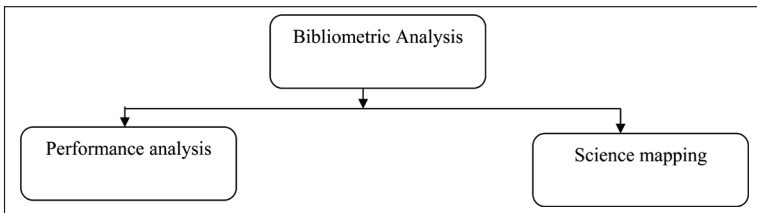


Figure 2. Overview of Analysis.

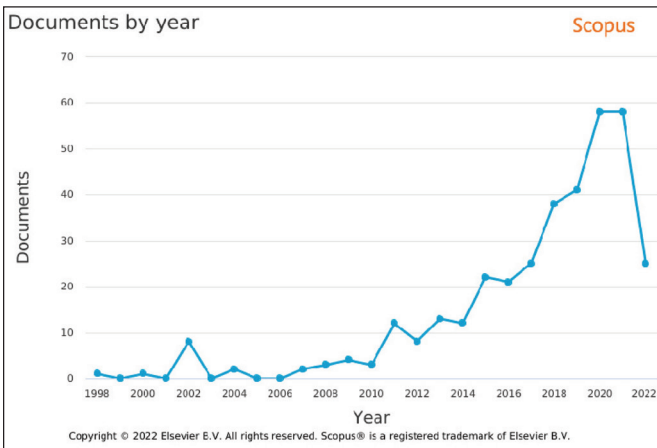


Figure 3. The Growth of Workplace Deviant Behavior Publications, 1997–2022.

“Random acts of kindness: A teaching tool for positive deviant.” But the study that the first introduced the term Workplace Deviant Behavior was “**Development of a measure of workplace deviant**” by Bennett and Robinson in the year 2000.

#### *Top 10 Most Cited Papers in the Scopus Database*

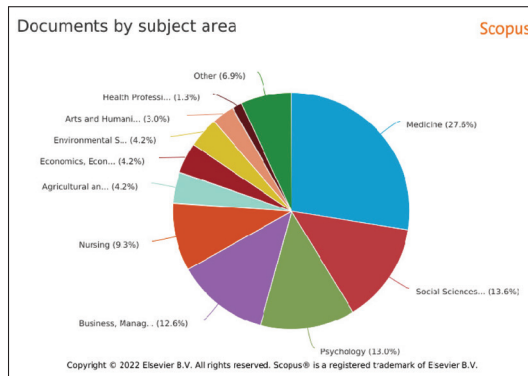
Based on the Scopus database, Table 3 shows the top 10 most cited papers (based on the number of citations of the particular articles). The most cited document was Bennett and Robinson’s (2000) “Development of a measure of workplace deviant” as the concept of workplace deviant behavior was first coined by “Bennett and Robinson.”

**Table 3.** Top 10 Most Cited Papers in the Scopus Database.

S. No.	Document Title	Authors	Year	Source	Cited By
1.	Development of a measure of workplace deviant	Bennett and Robinson	2000	<i>Journal of Applied Psychology</i>	1537
2.	The power of positive deviant	Marsh et al.	2004	<i>British Medical Journal</i>	329
3.	Research in action: Using positive deviant to improve quality of health care	Bradley et al.	2009	<i>Implementation Science</i>	279
4.	How management style moderates the relationship between abusive supervision and workplace deviant: An uncertainty management theory perspective	Thau et al.	2009	<i>Organizational Behavior and Human Decision Processes</i>	226
5.	Sticking out like a sore thumb: Employee dissimilarity and deviant at work	Liao et al.	2004	<i>Personnel Psychology</i>	219
6.	Undeserved loss: The spread of legitimacy loss to innocent organizations in response to reported corporate deviant	Jonsson et al.	2009	<i>Administrative Science Quarterly</i>	214
7.	Coworker incivility and incivility targets’ work effort and counterproductive work behaviors: The moderating role of supervisor social support	Sakurai and Jex	2012	<i>Journal of Occupational Health Psychology</i>	149
8.	Constructive deviant in organizations: Integrating and moving forward	Vadera et al.	2013	<i>Journal of Management</i>	135
9.	Territoriality, task performance, and workplace deviant: Empirical evidence on role of knowledge hiding	Singh	2019	<i>Journal of Business Research</i>	130
10.	Chronic health conditions and internet behavioral interventions: A review of factors to enhance user engagement	Schubart et al.	2011	<i>CIN—Computers Informatics Nursing</i>	109

### Subject Analysis

The current document also organizes the articles according to their fields of study. Figure 4 represents the publications of workplace deviant behavior from different subjects. The majority of the publications are from the Social Sciences (13.6%) followed by Psychology (13%) and Business Management (12.6%). Table 4 represents the top subjects that are contributing in the workplace deviance behavior. The majority of the publications are from Medicine (164), followed by Social Sciences (81) and Psychology (77).



**Figure 4.** Subject Analysis.

**Table 4.** Top Subjects.

Subject Area	Publication
Medicine	164
Social Sciences	81
Psychology	77
Business, Management and Accounting	75
Nursing	55
Agricultural and Biological Sciences	25
Economics, Econometrics and Finance	25
Environmental Science	25
Arts and Humanities	18
Health Professions	8
Biochemistry, Genetics and Molecular Biology	7
Computer Science	7
Multidisciplinary	7
Energy	6
Decision Sciences	4
Immunology and Microbiology	4
Engineering	2
Pharmacology, Toxicology and Pharmaceutics	2
Earth and Planetary Sciences	1
Neuroscience	1
	357

**Table 5.** Most Contributing Journal.

Source	TP	TC	CPP
<i>Frontiers in Psychology</i>	20	32	1.6
<i>International Journal of Environmental Research and Public Health</i>	14	16	1.142
<i>Food and Nutrition Bulletin</i>	11	70	6.36
<i>BMC Health Services Research</i>	8	48	6
<i>BMJ Open</i>	7	89	12.71
<i>Sustainability (Switzerland)</i>	6	61	10.167
<i>PLOS One</i>	5	62	12.4
<i>Journal of Applied Psychology</i>	4	9	2.25
<i>BMJ Quality and Safety</i>	4	60	15
<i>Journal of Organizational Behavior</i>	4	112	28
<i>Journal of Occupational Health Psychology</i>	4	138	34.5
<i>BMC Public Health</i>	4	55	13.75

**Notes:** TP = Total publications, TC = Total citation, CPP = Citation per publication.

#### Source Analysis

Table 5 shows the most contributing journal in the workplace deviant behavior publication. Out of 42 journals, the study considers only the top 12 journals. The selection criteria include journals with at least four total publications.

Based on Table 5, *Frontiers in Psychology*, *International Journal of Environment Research and Public Health* and *Food & Nutrition Bulletin* are the top most journals in the field of workplace deviant behavior with TP 20, 14, and 11. Although *Frontiers in Psychology* tops with the highest number of publications, it did not get the top citations. However, the top cited publication with TC 138 is the *Journal of Occupational Health Psychology*. As a result, the number of publications did not correspond to the number of citations.

#### Geographical Distribution of Publication

Table 6 shows a list of the top 15 countries contributing to workplace deviant behavior publications. The United States leads with 157 publications, followed by the United Kingdom (50), and Australia (29). Figure 5 depicts the countries who have published at least eight publications.

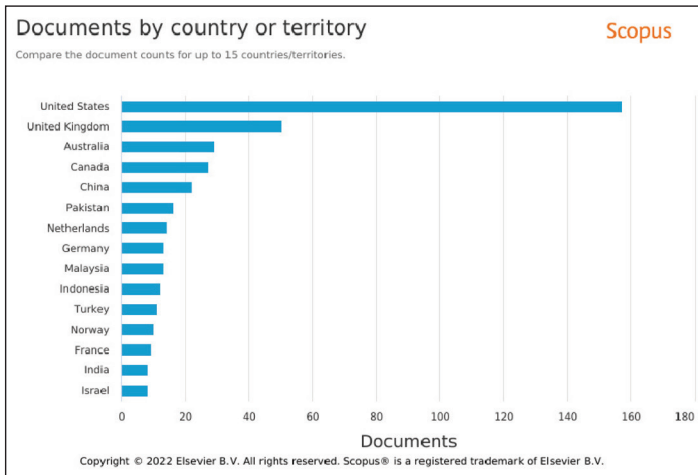
**Table 6.** Top 15 Countries Contributing to Workplace Deviant Behavior Publications.

Country/Territory	
United States	157
United Kingdom	50
Australia	29
Canada	27
China	22
Pakistan	16
Netherlands	14
Germany	13

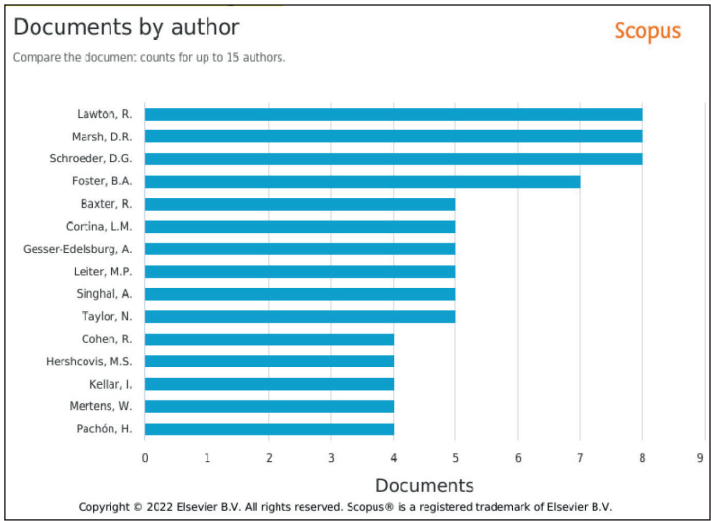
(Table 6 continued)

(Table 6 continued)

Country/Territory	
Malaysia	13
Indonesia	12
Turkey	11
Norway	10
France	9
India	8
Israel	8

**Figure 5.** Geographical Analysis.**Table 7.** Authorship Analysis.

Author Name	Publication
R. Lawton	8
D. R. Marsh	8
D. G. Schroeder	8
B. A. Foster	7
R. Baxter	5
L. M. Cortina	5
A. Gesser-Edelsburg	5
M. P. Leiter	5
A. Singhal	5
N. Taylor	5
R. Cohen	4
M. S. Hershcovis	4
I. Kellar	4
W. Mertens	4
H. Pachón	4



**Figure 6.** Analysis of Authors.

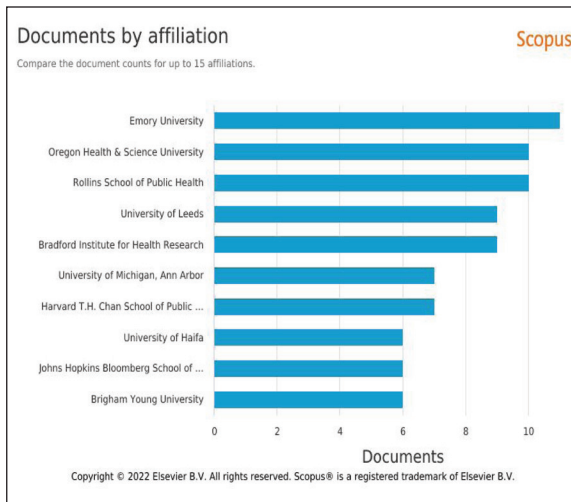
The most engaged authors in publishing articles on workplace deviant behavior are also examined in this study. Figure 6 depicts the authors who have published at least four publications. Lawton, Foster and Baxter are top authors on the list with eight publications on workplace deviant behavior. The details of number of publications with the corresponding authors are provided in Table 7.

*Affiliation Analysis*

Table 8 displays the top 10 institutions that made publications on workplace deviant behavior. Emory University is ranked first, followed by Oregon Health & Science University and Rollins School of Public health. Notably, publications on workplace deviant behavior may be found throughout the world, not only in one location which can be depicted in the table below. Figure 7 depicts the institutions who have published at least six publications.

**Table 8.** Top 10 Institutions Contributing Publications on Workplace Deviant Behavior.

	University	Country
1.	Emory University	Georgia
2.	Oregon Health & Science University	Portland
3.	Rollins School of Public Health	USA
4.	University of Leeds	England
5.	Bradford Institute for Health Research	UK
6.	University of Michigan, Ann Arbor	Michigan
7.	Harvard T. H. Chan School of Public Health	Boston
8.	University of Haifa	Israel
9.	Johns Hopkins Bloomberg School of Public Health	USA
10.	Brigham Young University	USA



**Figure 7.** Affiliation Analysis.

## Science Mapping

It analyses the relationship between the components of a certain field. The approach focuses on the structural relationships and intellectual interactions between research components. It includes the following.

### Keyword Analysis

When combined, keywords can even reveal the most popular study areas in a given field. A keyword analysis is conducted on the assumption that the keyword depicts the content of the research document. Vosviewer software was used to make keyword co-occurrence since it provides a strong graphical user interface (Cobo et al., 2011). Figure 8 shows keyword co-occurrence by selecting the occurrence of terms that appeared at least three times. Out of 2,571 keywords, 479 met the threshold represented by 3 clusters in different colors. The thickest node for workplace deviant behavior keywords belongs to cluster 1 which includes 84 items. The most utilized keywords include positive deviant, workplace, and incivility (see Table 9).

## Conclusion

The current research presents a bibliometric review to acquire a better knowledge of workplace deviant behavior. The goal is to obtain a better understanding and insight into current publishing patterns. An examination of workplace deviant behavior includes literature's trends, forecasts, historical analysis, and contributions. The study examined 357 papers published in indexed journals in the Scopus database between 1997 and 2022 using bibliometric and descriptive approaches. Previous research on the subject began in 1997 and it has been steadily increasing since then. The number of publications increased in 2020



and leadership (Uddin et al., 2017) and performance (Porath et al., 2015) and organization culture (Di Stefano et al., 2019). These findings are similar to those of the current study, which emphasizes that workplace deviant behavior research is primarily associated with positive deviant, incivility, management and leadership according to the author's keyword.

Thus, it can be concluded that this research will provide a deeper understanding of workplace deviant literature, as well as important insights and a more comprehensive picture of the topic from a bibliometric approach based on numerical data.

The database utilized is one of the recognized limitations of the study. Consequently, despite Scopus being the most comprehensive database, unindexed journals abound and should not be overlooked. Furthermore, only papers with the phrase "workplace deviant behavior" in the headline were examined for this study. Future research should broaden the scope of the search query to include other databases such as Google Scholar, Web of Science, and Dimensions. Integrating each of these datasets could lead to even more fascinating and valuable outcomes.

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The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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# Green HRM: An Empirical Study on Validation of Measurement Scale in Indian Environment

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## Abstract

Most firms have been infusing environmental management practices in their organisational operations as green human resource management (GHRM). This study aims to validate the constructs under the GHRM in the Indian environment. The study conducted on four functions of GHRM reveals that green performance management, green compensation management, green health and safety and green involvement support an organisation in achieving its green goals. This study uses a two-stage methodology of data analysis by using AMOS. The current study explores the varied dimensions of organisational management, paving the way for future research on green human resource practices in the Indian diaspora.

## Keywords

Human resource management, environmental management, performance management, sustainable environment, green health and safety

## Introduction

In the present scenario, debates on sustainability have led to the implementation of green practices in every sector (Aboramadan, 2022; Afum et al., 2021; Kim

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et al., 2019). Organisations must tackle environmental problems, which are a global concern and must change their strategies accordingly (Bahuguna et al., 2022; Paillé et al., 2014). The exclusivity and uniqueness of the human resources practices at a firm and their optimum utilisation help create a unique advantage over others. The organisations are now infusing green practices into the human resource department under the purview of green human resource management (GHRM). Moreover, environmentally sustainable management methods are linked with human resources through green environmental human resource management to combat rising environmental challenges (Tanova & Bayighomog, 2022). The changing times warrant the need to alter the concepts of human resource management concerning sustainable environmental practices (Paulet et al., 2021). The inclusion of GHRM is considered imperative for the successful application of sustainability practices (Ahmad, 2015). GHRM comprises a multitude of positive implications for firms, notably bringing in new hires and improving employee retention (Muster & Schrader, 2011), cutting expenses and gaining a competitive advantage (Carmona-Moreno et al., 2012), strengthening a firm's overall performance in the environment (Kim et al., 2019), boosting overall effectiveness, improving the sustainability of the business and improving overall employee well-being and productivity (Gholami et al., 2016). GHRM practices promote environmentalism, further boosting employee morale and satisfaction (Mampra, 2013; Paulet et al., 2021). The sustainable operations formulating GHRM may also merge with the CSR initiatives of the firm as well.

A firm needs to ensure that its management strategies are guided by environmental guidelines and initiatives being put in place to combat environmental issues. This approach to green management needs to be embraced by organisations (Lee et al., 2009). When the varied human resource functions accompanied by sustainability are integrated with organisational strategies, it constitutes GHRM. Encouraging and fostering environmentally friendly attitudes among employees can be achieved by incorporating positive environmental values through the various dimensions of the company's HR functions (Pellegrini et al., 2018).

In order to promote and encourage pro-environment performances by the employees, the new recruits should be accoladed through continuous reward systems acknowledging their environmental performances in the organisation.

Although few researchers did study varied theoretical aspects of GHRM in the Indian context, empirical studies conducted on GHRM practices in Indian organisations remain scant. Moreover, the majority of such research was confined to the Indian automobile sector (Chaudhary, 2019). Thereby, this research explores the significant aspects of GHRM across different industries in India. The scale used in the study has been adopted from Shah (2019), which was tested with the enlisted Pakistan Stock Exchange companies. Although, in the past, considerable literature has covered different aspects of human resource management. However, the more significant consensus remains that there is a dearth of studies focusing on the effectual application of GHRM strategies ensuring the fulfilment of sustainability objectives in the organisation (Ahmad, 2015). Earlier, GHRM was tested by using 21 items studied by Chaudhary (2019) by assessing the items developed by Dumont et al. (2017) and Tang et al. (2018). Furthermore, Shah (2019) developed

a scale of 81 items measuring seven GHRM practices which our current study has assessed to test in the Indian environment.

This study aims to analyse corporations' strategies to promote sustainable environmental management programmes by examining how they develop human resource policies and implement various processes related to GHRM. The data for this analysis were collected from organisations across multiple industries. This study has been conducted on various industries ranging from telecom, media, education, dairy sector and manufacturing sector. In the following sections of the study research design and the measures' validation, a discussion of the findings and conclusions are presented.

## Literature Review

After an extensive review of available literature on GHRM, researchers explored that corporates are developing HR policies for going green. Since 1990, several studies have been conducted examining an organisation's environmental monitoring and policies (Hale, 1995).

HRM comprises four significant functions: motivation, staffing, training and development and maintenance (Decenzo et al., 2016). With the help of a literature review, an attempt has been made to align HRM functions with the Green approach.

### *Green Performance Management (GPM)*

GPM is considered as a fundamental HRM practice to encourage sustainable operations and environmental development in an organisation. GPM aims to integrate different management processes for sustainable development to improve organisational performance. It is argued that an employee's job performance should also be evaluated based on criteria formulated to measure his contribution to the green policies of the firm. Besides, the feedback interviews of the employees should focus on their involvement in green projects of the organisation (Opatha & Arulrajah, 2014). If the management emphasises including the employee's contribution to the organisation's sustainable practices as the appraisal criteria, it may entice them to adopt such practices at an advanced level. GPM invokes the use of natural resources whilst organising and executing organisational activities. In addition, it comprises conducting events assimilating the environmental objectives with the firm's events. Tata Group has incorporated green information systems and auditing for measuring environmental performance and obtaining helpful information on environmental management.

### *Green Compensation and Reward System*

In order to facilitate the smooth processing of the organisational activities and fulfilling environmental objectives, the firms can initiate a reward system for the employees. Using considerable compensation as a tool to acknowledge the efforts of the employees to meet their sustainability goals can help to boost their morale

(Ahmad, 2015). As part of the management strategy, organisations are increasingly developing reward systems to promote environmentally sustainable programmes. According to a survey conducted by CIPD/KPMG in the UK, 8% of companies were providing awards and financial incentives for green behaviours (Phillips, 2009). These practices have been found to motivate employees to participate in eco-initiatives. It has been suggested that specific sustainable programmes should be incorporated into the compensation system, offering employees benefits that reward them for their behaviour change.

Payment elements can be linked to eco-performance, adding flexibility to the compensation system. Using monetary and non-monetary incentives to commemorate the green efforts of employees is imperative for organisational growth (Opatha & Arulrajah, 2014).

### *Green Health and Safety (GHS)*

The organisations work in collusion with the government's policies and the workers' associations to ensure employees' overall health and safety at the workplace. The management devises policies to reduce occupational injuries and health hazards at work. There have been a lot of focused studies on different approaches to improving Occupational Safety and Health (OSH) in the industry. Past researchers have investigated various occupational hazards affecting workers' health and well-being (Aburumman et al., 2019; Samano-Rios et al., 2019). According to the International Labour Organisation, 'We continue to live through a global health crisis and face ongoing OSH risks in the world of work, and hence we must move toward building a solid safety and health culture at all levels' (Kim et al., 2016). The Green approach on OSH can help solve many work-related injuries due to stress and job-related sickness.

### *Green Employee Involvement*

The involvement of green workers in GHRM can be defined as creating an environment that improves employee engagement and morale (Chaudhary, 2019). Employee engagement entails seeking the recommendation of the personnel for developing effective, sustainable approaches and policies for organisational development. Green engagement encourages continuous employee feedback to enhance the current environmental plans and strategies. Green employee engagement can motivate employees and enhance their cooperation in organisational growth. Organisations can consider employee involvement as a part of their CSR initiative, which also exhibits the employees' commitment towards their work goals (Davies & Crane, 2010). Phillips (2009) says employee involvement in green HR practices can help prevent workplace pollution. One way to encourage employee involvement is by promoting and rewarding eco-intrapreneurs. Through their innovative mindset, they can use the existing financial, human and natural resources to add value to company products or

services (Mandip, 2012). Employee involvement in organisational greening has been found to improve critical environmental management outcomes, primarily reducing waste and pollution at the workplace (Ansari et al., 2020; Carballo-Penela et al., 2022; Florida & Davidson, 2001).

## **Research Methodology**

### *Measures*

HRM functions can be mainly grouped into staffing, motivation, training and development and maintenance. GHRM consists of initiating and acknowledging the green performances of the employee and introducing training ideas to fulfil the firm's environmental objectives. It involves informing employees of their sustainability-oriented workplace goals and rewarding them accordingly for the same (Clair et al., 1996). The organisation can measure and improve the green performance of the employees through non-monetary incentives. Training programmes aligning the employee objectives with the organisational goals can be initiated (Jabbour & Santos, 2008). The mentioned components of GHRM are classified under six main heads recruitment, training and development, performance appraisal, reward management, employment relations and exit (Cherian & Jacob, 2012; Renwick et al., 2008). Numerous studies asserted rewards systems and involvement, training and performance management, and recruitment and selection as essential practices under GHRM (Prasad, 2013; Sudin, 2011). Based on the varied definitions and components of GHRM, a list of dimensions were finalised for the study.

### *Proposed Dimensions*

GHRM was assessed using 35 items taken from Shah (2019). The dimensions that have been considered for the study are GPM, Green Compensation Management (GCM), GHS and Green Involvement (GI). The items were measured using a 5-point Likert scale where 1 = Strongly disagree and 5 = Strongly agree. The dimensions and their measurement items are shown in Table 1.

### *Data Collection*

The data were collected from different industries in India because it is one of the leading developing countries facing environmental pollution problems. Three cities (New Delhi, Agra and Gurugram) were chosen as the sampling frame.

Individuals living in these areas are considered socio-environmentally conscious and are expected to be aware of prevailing green issues in the organisations. New Delhi (the capital of India) has been recorded as the highest polluted city in the country, followed by nearby places Gurugram and Agra. The data were collected from various industries across various sectors such as Automobile, Banking,

**Table 1.** Dimensions of GHRM with the Items.

Dimensions	Measuring Items
GPM	<p>GPM 1: Our company establishes green targets, objectives and duties for each employee across the organisation.</p> <p>GPM 2: In my company, managers have established goals to attain green targets incorporated in periodic evaluations.</p> <p>GPM 3: My company focuses on the communication of green goals.</p> <p>GPM 4: My company uses green performance indicators in our performance evaluation.</p> <p>GPM 5: My company uses green performance standards as a yardstick in the performance evaluation of the workforce at all levels.</p> <p>GPM 6: The use of green criteria to evaluate performance.</p> <p>GPM 7: We constantly assess and record green incidents in the workplace.</p> <p>GPM 8: My company keeps track of non-compliance or not meeting green objectives.</p> <p>GPM 9: My company considers green incidents while evaluating employee performance.</p> <p>GPM 10: My company reinforces compliance with meeting environmental goals.</p> <p>GPM 11: Our company performance management system uses disincentives for non-compliance or not achieving environmental management targets.</p> <p>GPM 12: Identification of 'Green Superstars' (remarkably talented individuals who perform beyond the standards) and distribution of prizes based on their green contributions.</p>
GCM	<p>GCM 1: My company uses monetary rewards for the green accomplishments of individuals in the organisation.</p> <p>GCM 2: Our compensation system recognises and rewards contributions to environmental protection.</p> <p>GCM 3: Our company compensates for green skills acquisition and accomplishments by individuals.</p> <p>GCM 4: Our company uses monetary rewards for contributions to environmental management, such as salary increases, cash incentives, bonuses and so forth.</p> <p>GCM 5: My company rewards green skills acquisition.</p> <p>GCM 6: My company rewards for learning green curricula.</p> <p>GCM 7: My company uses non-monetary rewards for contributions to environmental management, such as paid time off, special leave and gifts to employees and their families.</p>
GHS	<p>GCM 8: My company provides green benefits such as transportation and travelling allowance.</p> <p>GCM 9: My company provides financial or tax incentives to its employees.</p> <p>GCM 10: My organisation uses recognition-based rewards in environmental management for the workforce.</p> <p>GCM 11: My organisation recognises green initiatives of employees via organisation-wide publicity and public praise.</p> <p>GCM 12: My company appreciates the green initiatives of employees.</p> <p>GHS 1: My organisation provides a green workplace for all.</p>

*(Table 1 continued)*

(Table 1 continued)

Dimensions	Measuring Items
GI	GHS 2: My organisation takes green initiatives to decrease worker anxiety and work-related sickness instigated by harmful work settings.
	GHS 3: My organisation develops and executes strategies to sustain a favourable work setting to avoid several fitness problems to develop the health and safety of the workplace.
	GI 1: Our company has a robust progressive vision to direct the individual's activities in environmental protection.
	GI 2: Employees participate in quality enhancement and problem-solving in environmental problems in our company.
	GI 3: My company offers a shared culture of learning for green awareness and behaviour.
	GI 4: My company encourages GI.
	GI 5: In our firm, employees are offered opportunities to participate in environmental management practices.
	GI 6: My company has established a focused communication structure, which permits workers to share ideas on worker skills and motivation.
GI 7: My company promotes feedback, training and excellence in communications.	
GI 8: My organisation has procedures for helplines and green whistle-blowing.	

**Source:** Items adapted from the study by Shah (2019).

Dairy, Education, Manufacturing, Media and Entertainment, Retail, Telecom, Service and Pharmaceutical. A questionnaire was developed using Google Forms and mailed to employees working at the managerial level. Respondents mainly comprised of top-level management, as senior management is expected to be involved in implementing various practices, including GHRM. The managerial level respondents comprised of Deputy General Manager (DGM), General Manager (GM), Senior Manager and middle-level managers. The study comprised of 573 responses after discarding the outliers. The exploratory factor analysis (EFA) sample comprised of 180 respondents (47 females and 133 males), and the CFA sample comprised 393, with 56.9% male participants and 43.1% female participants. Among the respondents, 11 (2.7%) were DGM, 30 (7.6%) were GM, 180 (45.8%) were Senior Managers and 172 (43.7%) were Managers. A total of 70.9% of respondents were postgraduates and 29% were graduates. Demographic details for study 2, that is, CFA, are presented in Table 2.

## Data Analysis and Results

### Study-1 Exploratory Factor Analysis

To explore the underlying dimensions of the scale, an EFA using principal component analysis (Hotelling, 1933) was performed on 180 respondents prior to final data collection. SPSS version 24 was used to operationalise EFA with Kaiser Normalisation (Kaiser & Rice, 1974).

**Table 2.** Demographic Details of Respondents.

Measure	Items	Frequency	%
Age	>45	92	23.4
	40–45	66	16.7
	30–40	163	41.4
	<30	72	18.3
Education	Graduation	114	29.0
	Postgraduation	279	70.9
Gender	Male	224	56.9
	Female	169	43.1
Designation	DGM	11	2.7
	GM	30	7.6
	Senior manager	180	45.8
	Manager	172	43.7
Industry type	Automotive	33	8.3
	Banking	40	10.1
	Dairy	24	6.1
	Education	31	7.8
	Human resources	47	11.9
	Manufacturing	38	9.6
	Media & entertainment	22	5.5
	Pharmaceuticals	14	3.5
	Retail	48	12.2
	Service sector	49	12.4
Telecom	47	11.9	

The eigenvalue of 1 as a cutoff value was considered for the extraction of items. Hair et al. (2006) suggested that a cutoff value of 0.6 was used to retain the items. EFA results helped in the exploration of four underlying constructs, namely GPM, GCM, GHS and GI. None of the items had cross-loadings or was loaded on multiple factors.

The items were found to be loaded with sufficient loadings with their respective constructs. GPM1 had the highest loading (0.898), and the lowest loading was exhibited by GI8 (0.694)—none of the items loaded on multiple factors, indicating discriminant validity. The items loaded significantly, and the  $t$ -values ( $p < .001$ ) indicated the construct's unidimensionality. Table 3 summarises the factor loadings for the 35-item scale.

## Study-2 Measurement Model Assessment (Confirmatory Factor Analysis)

### First-order Analysis

Structural equation modelling was used to conduct the first-order analysis. The results in the first-order model for the four dimensions, GPM, GCM, GHS and GI, were analysed through the goodness-of-fit criteria. All the model-fit indices were  $CMIN/df = 1.536$ ,  $RMSEA = 0.056$ ,  $CFI = 0.95$  and  $NFI = 0.928$ .

**Table 3.** Results of Exploratory Factor Analysis.

Component Matrix	Components			
	1	2	3	4
GPM1	0.898			
GPM2	0.841			
GPM3	0.846			
GPM4	0.859			
GPM5	0.812			
GPM6	0.841			
GPM7	0.835			
GPM8	0.856			
GPM9	0.859			
GPM10	0.855			
GPM11	0.784			
GPM12	0.728			
GCM1		0.819		
GCM2		0.779		
GCM3		0.719		
GCM4		0.788		
GCM5		0.749		
GCM6		0.758		
GCM7		0.770		
GCM8		0.764		
GCM9		0.747		
GCM10		0.789		
GCM11		0.762		
GCM12		0.713		
GHS 1				0.814
GHS 2				0.817
GHS 3				0.755
GI1			0.714	
GI2			0.705	
GI3			0.725	
GI4			0.728	
GI5			0.715	
GI6			0.725	
GI7			0.717	
GI8			0.694	

For first-order analysis, loadings of the first item in every dimension were set to 1.0 to standardise the results for the other items. GCM 5 (0.88) followed by GCM 6 (0.86), both the items got the highest loading. In contrast, the lowest loading was on that of GHS 1 (0.60). The highest correlation was between GPM and GI ( $r = 0.88$ ) followed by GPM and GCM ( $r = 0.86$ ) and GCM and GHS ( $r = 0.84$ ). Therefore, the results showed that the correlation between the constructs is relatively good.

### Reliability and Validity Analysis

The study's construct reliability was assessed through Cronbach's alpha ( $\alpha$ ) co-efficient for internal reliability and critical ratio (CR) for composite reliability (Awang, 2012). Cronbach's alpha values were found to be greater than 0.7, depicting the internal reliability of the measurement scale. CR for the study was above the threshold value of 0.60, as reported by Hu and Bentler (1999), demonstrating the construct's composite reliability. Both measures indicated that the scale had good reliability.

To prevent multicollinearity issues, discriminant validity must be assessed in any research involving latent variables. Fornell and Larcker's criterion is used for the same (Ab Hamid et al., 2017). The convergent validity was confirmed by computing the average variance extracted (AVE) for the sub-constructs of the scale (Fornell & Larcker, 1981). AVE, which is greater than 0.50, is considered acceptable (Hu & Bentler, 1999). All the sub-constructs demonstrated AVE values greater than the traditional value of 0.50, indicating the convergent validity of the scale. Additionally, Chin et al. (1997) retorted that the factor loading of the items should be significant and greater than 0.60. The factor loadings of all the items were significant and greater than 0.60, further supporting the scale's convergent validity (refer to Table 4).

### Second-order Analysis

Second-order factor analysis was conducted by inserting a latent factor GHRM to understand the correlation between the four dimensions with the latent construct GHRM, all model-fit indices were applied to find the goodness of fit, and the values satisfied the criteria. Several indices of second-order analysis were more significant than in the first-order model (Doll et al., 1994). The goodness-of-fit values were above the threshold values with  $CMIN/df = 1.589$ ,  $RMSEA = 0.058$ ,  $CFI = 0.95$  and  $NFI = 0.916$ . Therefore, the second-order model is a necessary test and better justifies GHRM as a second-order construct. For standardised factor loadings of all the items, the first item in each sub-construct was constrained to 1. The results show that the second-order analysis of GHRM is highly justified and explains the first-order analysis. GCM was loaded significantly with highest factor loading (please refer to Table 4) followed by GHS and GI, and the lowest loading was GHS (0.660–0.710).

**Table 4.** CR Values and Items Factor Loadings.

Dimensions	Factor Loadings	Cronbach's $\alpha$	CR	AVE
GPM	0.666–0.690	0.964	0.965	0.698
GCM	0.800–0.740	0.949	0.944	0.583
GHS	0.600–0.720	0.736	0.838	0.633
GI	0.660–0.710	0.906	0.893	0.512

**Source:** Prepared by researcher.

## Discussion

The findings revealed that GHRM comprised dimensions, such as performance management, compensation, employee involvement and employee health and safety. A 35-item scale can measure these functions. Many previous studies have been conducted on various other HR practices and functions (Mishra et al., 2014; Paillé et al., 2014; Renwick et al., 2008). However, this study has been conducted using the four effective HR practices functions because performance management, compensation, employee participation and health and safety represent sustainable and environmental practices of the employees at the workplace (Ojo & Raman, 2019). Shah (2019) developed a scale having dimensions such as GI, green recruitment and selection, GPM, green labour relations and green training and development. The research confirmed that GHRM would connote performance management as the GHRM dimension since training employees and tracking their progress concerning organisational goals remain imperative for GHRM. Involving employees in the green practices of the firm and honing their skills and abilities to achieve the organisational and personal environmental goals makes GHRM more effective. The study also validates the inclusion of GCM in GHRM. Motivating the employees for timely completion of their green tasks by granting them continual rewards would constitute an essential component of GHRM. Since GHRM entails invoking the employees' interests in environmental practices, compensating them through monetary and non-monetary incentives can keep the employees enthusiastic about participating in GHRM practices. The research study corroborates that GHRM would also include GHS, thereby inducing the management to initiate health and safety programmes for the employees which guarantee a robust green workplace.

## Implications

### *Theoretical Implications*

The present research also discusses some theoretical implications. To the best of our knowledge, this remains one of the first studies to validate a developed GHRM scale in the Indian environment. However, many studies have empirically developed scales using the various dimensions of GHRM and have also been tested in other countries and industries. However, no previous studies have validated the scale in Indian industries. Therefore, we specifically address the research gap of testing the scale in industries such as India's textiles, telecom, dairy and media & entertainment sectors. The present study results can be generalised to emerging economies where a sustainable green environment remains an issue of concern.

The various constructs of the above study have been thoroughly analysed with the help of an extensive literature review, and their theoretical implications are thus explained. This study adds to the existing body of knowledge of GHRM by validating the components which establish the environmental management of the employees in an organisation. The study has examined the varied tenets of the

GHRM, which help organisations convert their employees into a green workforce in order to achieve environmental sustainability goals. The study revealed that GPM should be included in the GHRM as the construct, which involves appraising employees of their green objectives and laying down plans to help them achieve these objectives. Since GHRM entails invoking the employees' interests in environmental practices, compensating them through monetary and non-monetary incentives through GCM can keep the employees enthusiastic about participating in GHRM practices. The study also supported the incorporation of GI in the scale while measuring GHRM. In order to successfully implement the GHRM practices, the organisation ought to communicate the firm's vision concerning environmental sustainability to its employees. Participation in the GHRM practices can only be ensured by encouraging the employees to seek knowledge about green practices and environmental behaviour at work to keep them involved and inspired in green work life. GHRM cannot exclude health and safety policies which help the organisation improve the overall productivity of their employees by creating a stress-free wholesome working environment for them.

### *Managerial Implications*

The findings emphasise that organisations must inculcate and develop an understanding of green competencies among their employees. In GPM, employees must be assessed based on attaining green goals. These green goals can only be achieved when the organisation sets up green objectives for all its workforce (Clair et al., 1996). Such objectives can help the employees to align their behaviours accordingly. GCS is an organisation's strategic approach to encouraging employees to attain sustainable green goals (Jyoti, 2019). According to Karami (2013), a compensation system, preferably a non-financial one, would constructively impact the employees' performance. Indian organisations should strive to create an environment that helps employees to work in a stress-free and safe environment and attain GHS. Our findings also reveal that GHS correlates highly with GHRM at 0.93. GI, such as employees' participation in environmental decisions, is also an essential dimension of GHRM. For effective implementation of environmental strategies, the participation of the employees in the environmental processes and activities undertaken by the firm is imperative. Engaging employees with the firm's sustainability initiatives remain challenging for the firms (Haddock-Millar et al., 2016; Singh et al., 2020). The results also show the highest correlation between GHRM with GI. Policies related to employee engagement towards environmental concern helps in motivating employees. Such policies related to employee engagement towards environmental concerns motivate employees (Niati et al., 2022).

### **Limitations and Future Research**

The study was conducted to assess the different dimensions of the GHRM in an emerging economy; however, the study did face a few limitations. No study is

without its limitations, but the limitations serve as an avenue for further research. *First*, the study had confined itself to studying specific dimensions of the GHRM construct, and future research may also explore the impact and significance of other dimensions of GHRM. *Second*, the research findings point out that there can be other contexts in which the study could be conducted. The study could be conducted by linking the concept of GHRM with different functional departments such as Operations, Marketing and Finance.

*Lastly*, the research did not include several HR dimensions such as green recruitment, green training and development which may provide an exciting insight into the study. Future research studies investigate these factors to have an insightful and extensive understanding of GHRM in India. Thus, future research could continue to dig deeper to understand the multidimensional nature of GHRM.

### Declaration of Conflicting Interests

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# Influence of Social and Economic Factors on Impulse Buying: A Research Framework

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## Abstract

The research aims to identify several social and economic factors expected to influence consumers' impulsive buying. This research has adopted a scoping literature review approach to reach its findings and conclusions. The author has used keywords related to the area of study to shortlist various articles published by researchers. Also, an extensive iterative search approach is adopted to identify various research works published in established peer-reviewed national and international journals. All the research articles that pertain to this study's specific aim are included; the rest are excluded from the study. The authors have performed an in-depth study of these papers to understand all the parameters. The authors have performed analysis of the results and findings of the reviewed research articles to identify economic and social factors that influence consumers' impulse buying.

## Keywords

Impulse buying, consumer's buying behaviour, social factors, economic factors, research framework

## Introduction

It is common for consumers to buy something unplanned whenever they are exposed to a buying stimulus during their visit to a supermarket, a convenience

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store, a hypermarket or a mega mart. Rook and Gardner (1993) identified this unplanned behaviour of purchasing involving a quick decision-making process as impulse buying. Such behaviour can be attributed to consumers' tendency to gain immediate gratification through at-this-moment product acquisition. Researchers opined that consumers' impulse buying is driven by a sudden and intense urge to acquire a product or avail of a service (Block & Morwitz, 1999). Further, Kacen and Lee (2002) described customers' impulsive buying behaviour as more arousing and irresistible but less deliberative than planned purchasing behaviour. For more than seven decades, consumer behaviour researchers have contemplated the impulsive buying behaviour of consumers and have described this as a buying process that lacks planning (Applebaum, 1951; Clover, 1950). Later, researchers put forward various reasons that govern individuals' impulse buying activity. The notable factors identified by researchers include hedonic motivations (Rook, 1987; Rook & Hoch, 1985), materialistic aspirations (Atulkar & Kesari, 2018a; Chancellor & Lyubomirsky, 2011; Podoshen & Andrzejewski, 2012) and emotions (Piron, 1991). In addition to these factors, researchers have posited various stimulus factors that influence consumers' impulsive buying behaviour. Through the research continuum, multiple researchers have identified and studied the external, internal and situational stimulus factors that influence impulse buying (Belk, 1985; Moore & Berger, 2015; Sen & Nayak, 2021). Although impulse buying is approached and studied in light of several psychological and behavioural factors, research on identifying various social and economic factors that can influence an individual's impulse buying process is rare.

In the modern day of business, practitioners are witnessing substantial dynamic changes in consumers' buying habits, the reason for which is primarily attributed to social and economic factors.

The primary objective of this study was to provide a thorough analysis of the literature on impulse buying, highlighting any gaps or opportunities for future research. This analysis aims to offer readers and marketers a fresh perspective on impulse buying and encourage them to explore new ideas. Additionally, the study aimed to identify the social and economic factors that influence unplanned purchases among consumers to assist both practitioners and the research community. It would allow the practitioners to understand the importance of certain social and economic factors that affect consumers' impulsivity during the buying process. Hence, it would be possible for marketers to devise marketing strategies keeping these factors in mind. Further, this study's findings address the research gaps where studies on the involvement of social and economic factors in influencing a consumer's impulsive buying are rare.

The significance of this study is that it takes up the task of identifying the relevant social and economic factors that influence impulse buying, research that is either not undertaken or is very scarce. The significant outcome of this study is the proposition of a research framework that paves the avenues for consumer researchers in the future to test the model and reach generalisable results empirically.

This study adopts a scoping review of the literature approach in identifying the gaps in the research continuum. Subsequently, it proposes a research framework based on the propositions that are posited in this study.

## Literature Review

### *Impulse Buying*

Researchers have defined impulse buying as an action without conscious recognition or an expressed buying intention (Engel & Blackwell, 1982). Later, Bayley and Nancarrow (1998) described impulse buying as sudden, hedonically complex and compelling buying behaviour. The researchers further opine that the velocity of the action or set of activities involved in the impulse buying process fends off a contemplative and conscious consideration of alternative searches.

The phenomenon of impulse buying, therefore, can be ubiquitously described as an unplanned or spontaneous buying process. Rook and Fischer (1995) opined that almost anything could be bought out of impulse. An impulse purchase can include anything from brand-new goods to well-known products offered at surprisingly low prices (Tinne, 2010).

Consumer researchers further state that a consumer gets involved in a sudden unplanned purchase because the individual is not actively looking for a particular product, has the intention of purchasing it or has no pre-shopping plan before the purchase (Lee, 2008; Rook, 1987; Sharma et al., 2010).

Before Rook's (1987) study, descriptions of impulse buying were primarily concerned with the product type in question during a purchase. Later, consumer researchers became curious in understanding personality traits of individuals that influence them to impulse buying.

Rook (1987) drew attention to the several behavioural aspects of individuals that lead to impulse buying. The researcher describes the phenomenon of impulse buying as an unintentional, non-reflective reaction triggered when a customer is exposed to specific external, internal or situational stimuli. Later researchers, in accordance with that, identified and investigated various stimulus factors that act as influencers of impulse buying among individuals (Ünsalan, 2016).

Although extensive research is done to understand impulsive buying behaviour among consumers in the light of various personality traits, stimulus factors, etc., studies on the social and economic factors responsible for impulse buying are rare.

### *Social Factors that Influence Consumers' Buying Behaviour*

#### *Reference Groups*

Richins and Fournier (1991) argued that the reference groups impact a person's behaviour, which is not uncommon regarding buying behaviour. The researchers referred to all the groups that have direct or indirect power to influence an individual's attitude or behaviour in one way or another. According to consumer researchers, reference groups can include families, friends, classmates, neighbours or co-shoppers (Xiurong & Chenglei, 2010). Family members such as spouses, kids and parents significantly influence an individual. Further, scholars have also identified that pressure from peers or peer groups heavily influences a consumer's purchase decisions. Luo (2005) opined consumers strongly tend to

impulse buy when shopping with peers or reference groups. However, Rook and Fisher (1995) argue that shopping in anonymity increases the chances of impulsive buying.

The researchers in this study propose a strong positive relationship between the influence of reference groups and consumers' impulsive buying. Hence, the following—

**Proposition 1:** *There is a strong positive association between peer group's influence and consumers' impulse buying.*

### *Cultural Practices*

The buying behaviour of consumers is influenced by the cultural norms of society by and large. Researchers have described culture as a collective memory of the society (Solomon et al., 2006), which is operationalised as a set of shared meanings, rituals, norms and traditions among the members of a society or an organisation. Consumer behaviour theorists opined that an individual's consumption habits, including food, clothing, personal care and gifts, are influenced by the individual's cultural practices. Culture significantly impacts how people communicate, manage their organisations and approach problems (Hofstede, 2001). Eventually, cultural practices influence a consumer's shopping and buying behaviour (Nayeem, 2012; Spiers et al., 2014; Yakup et al., 2011). Broadly, cultural practices are compartmentalised into individualism and collectivism (Hofstede, 2001). The prior study suggests that impulsive buying is more common in countries with individualistic cultural practices (Lee & Kacen, 2008). Researchers described individualists as individuals who consider themselves autonomous and independent (Kacen & Lee, 2002). These individuals' carefree attitude makes them more hedonic and therefore indulge in impulsive purchases (Sen & Nayak, 2021).

The researchers in this study propose a strong positive relationship between cultural practices and consumers' impulsive buying. Researchers here propose that consumers who exhibit individualistic cultural practices—as a cultural or individual norm—are more likely to display impulse buying. Hence, the following—

**Proposition 2:** *There is a strong positive association between individualism and consumers' impulse buying.*

### *Store Experience*

A store shop's physical appeal is another factor influencing a customer's buying decisions. Scholars have identified certain factors that could influence an individual's buying behaviour in retail settings (Bellizzi & Hite, 1992; Hashmi et al., 2020; Milliman, 1986; Yalch & Spangenberg, 1990). These factors include the music played within the store, the colour of the store inlay and the merchandising approach, some of which can lead to impulsive buying. Researchers posit these factors as external factors that influence impulse buying. Further scholars have operationalised the external factors as store atmospherics or store environments (Applebaum, 1951; Atulkar & Kesari, 2018a; Stern, 1962), product characteristics

(Duarte et al., 2013; Harmancioglu et al., 2009; Lucas & Koff, 2014) and promotional activities (Duarte et al., 2013; Hultén & Vanyushyn, 2011). Therefore, it can be deduced that an enhanced in-store experience of a consumer is capable of driving the individual into impulse buying.

The researchers in this study propose a strong positive relationship between store appeal and consumers' impulsive buying. Researchers suggest that if the store's atmosphere attracts consumers, then the customers are more likely to buy impulsively. Hence, the following—

**Proposition 3:** *There is a strong positive association between store experience and consumers' impulse buying.*

### *Economic Factors that Influence Consumers' Buying Behaviour*

#### *Buying Power or Income*

The economic conditions of the market or a country largely influence consumer preferences and decisions. The market's money supply and consumers' purchasing power increase proportionally to how prosperous and stable a country's economy is. Personal income, family income, income expectations, savings, consumer credit, etc. influence a consumer's purchasing power and, thus, impulse buying tendency (Analytics Steps). Consumers' ability to make impulsive purchases is also strongly influenced by their financial situation. According to Rana and Tirthani (2012), respondents' gender has no bearing on their propensity for impulsive purchases; what matters are their monthly income and education levels, which significantly impact their impulse buying behaviour. Further studies support the argument that high-income customers behave more impulsively while purchasing.

Modern researchers have commented that an individual's or family income has no impact on moderating a materialistic individual's propensity to impulse buying (Sen & Nayak, 2019). But this finding is not sufficiently evident to disregard the positive influence of income on an individual's impulsive buying behaviour.

Therefore, the researchers in this study propose a strong positive relationship between a consumer's income or family income and a consumer's impulsive buying. Researchers here propose that if consumers exhibit increasing impulsive buying tendencies with the increase in their disposable income levels. Hence, the following—

**Proposition 4:** *There is a strong positive association between a consumers' disposable income levels and impulse buying.*

#### *Price Sensitivity*

Sales promotion acts as an effective tool to influence consumers' buying tendencies, especially for price-sensitive customers. Marketers frequently use sales promotion to compete, maintain their competitive advantage and ultimately increase sales by motivating consumers to make more purchases over and above

their shopping list. Sales promotions in the form of rebates and discount offers are an essential and effective tool for influencing the impulse buying behaviour of customers on apparel (Nagadeepa et al., 2015). According to Banks and Moorthy (1999), sales promotion led to a sudden increase in sales experienced by retailers by attracting the price-consciousness of consumers.

The researchers in this study propose a strong positive relationship between sales promotions offered to consumers and impulsive buying. Researchers here propose that if the consumers are exposed to an attractive sales promotional offer, they are more likely to indulge in impulsive buying. Hence, the following—

**Proposition 5:** *There is a strong positive association between sales promotions offered to a consumer and the consumers' impulse buying.*

A chronological advancement report of the research works reviewed in this research is documented in Table 1.

**Table 1.** Chronological Advancements in the Research Continuum.

Year	Researcher	Evolution of the Study
1962	Stern	Describes impulse mix, suggesting the different forms and types of impulse buying
2009	Dawson and Kim	A significant positive correlation was found between a person's normative evaluation and actual online impulse buying behaviour.
2003	Crawford and Melewar	Airports are unique retail environments due to the environmental and psychological issues linked with the travel process, enhancing impulse buying.
2010	Xiurong and Chenglei	The findings test and verify that normative evaluation has a moderating effect between impulse buying intention and behaviour.
2012	Hadjali et al.	Research suggests that gender, appropriate environment and targeted promotional tools significantly affect impulse buying behaviour.
2015	Nagadeepa et al.	This study showed that the two important sales promotional schemes, namely rebates and discount offer and the retailers' loyalty programs, are more effective in the impulse buying behaviour of customers on apparel.
2015	Luo	Found that the presence of peers increases the urge to purchase and that the presence of family members decreases it.
2008	Mattila and Wirtz	Found that employee friendliness in stores positively affects impulse buying behaviour.
2020	Hashmi et al.	The results state a positive influence of store environment on consumer's enjoyment, pleasure and arousal, directly influencing consumer's spontaneous purchase.

(Table 1 continued)

(Table 1 continued)

Year	Researcher	Evolution of the Study
2021	Billore and Anisimova	Defined panic buying among consumers and proposed that tactics must be directed towards increasing sales through online promotions because of the pandemic-induced transition from offline to online.
2021	Zafar and Qui	Found the impact of celebrities' posts, mood polarity, observational learning and impulse purchasing propensity on the desire to purchase spontaneously in Pakistan.

### *Cues from the Past Research*

As mentioned before, the research continuum on impulse buying has broadly experienced the consideration of the external, internal and situational stimulus factors that influence impulse buying (Belk, 1985; Moore & Berger, 2015; Sen & Nayak, 2021). Further, impulse buying is approached and studied in light of several internal and behavioural factors. Atulkar and Kesari (2018a) have incorporated various internal and behavioural elements, such as materialism and impulse buying tendencies, to describe impulse buying. The researchers have also considered emotional factors such as emotional attachments and shopping enjoyment as antecedents to impulse buying. However, the main attraction of the present study is that Atulkar and Kesari (2018a) have also considered the role of interpersonal influence on customers' impulse buying. In this study, the researchers went on to identify peer influence, which is a result of interpersonal influence, as a social factor influencing impulse buying.

Further, Kollat and Willett (1969) and West (1951) propose that the presence of peers can increase a person's inclination to buy, while the company of family members can have the opposite effect. This finding indicates that diverse promotion and advertising strategies are necessary for different shopping groups. For instance, promotions like coupons and price discounts aimed at customers who shop in a cohesive peer group can augment store sales. Still, such tactics may not be as effective for customers who prioritise family values.

In addition, Sen and Nayak (2019) have established a strong positive relationship between materialism among Indian millennials and impulse buying but have found no impact of income as a moderator to the relationship. The question now arises: income, as an economic factor, is commonly agreed to impact impulse buying positively. But will this proposition hold under varied economic conditions? For example, an individual with a higher income will indulge in impulse buying or look forward to increasing savings during a recession. Although this study proposes a strong positive relationship between income and impulse buying, this requires further tests for generalizability.

Apart from the above-mentioned factors, there are several factors that modern researchers are exploring that would describe the phenomenon of impulse buying. The factors include an individual's situation, product attributes, motivational

activities, variety-seeking behaviour, cultural practices, etc. (Atulkar & Kesari, 2018b; Luo, 2005; Sen & Nayak, 2021).

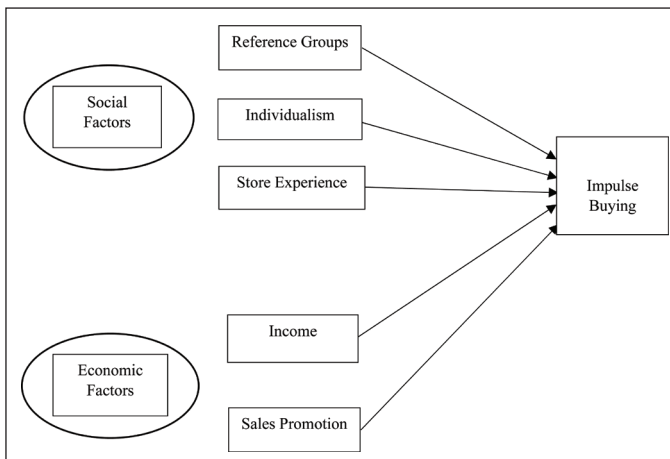
The present research is based on the cues of previous research on impulse buying, intending to identify gaps and developing a research framework. The detailed chronological advancement in *t* research on impulsive buying is postulated in Table 1.

## The Research Framework

The present study has identified several social and economic factors that potentially influence individuals' impulse buying behaviour. The social factors include reference or peer groups, individualism and the store experience of the consumer. These factors are conceptualised as potential antecedents of the construct of impulse buying. These factors are expected to impart a strong and positive influence on customers' impulsive buying behaviour. As mentioned in the previous section, the propositions running from proposition 1 to proposition 3 capture this core ideation.

Further, this study also identifies several economic factors, including a consumer's disposable income level and the sales promotions offered to customers during the buying process. These economic factors, which are potential antecedents of the construct of impulse buying, are expected to have a strong and positive influence in governing the customers' impulsive buying behaviour. As mentioned in the previous section, the propositions running through proposition 4 and proposition 5 capture this core ideation.

Based on these above propositions, the researchers in this study have developed the proposed research framework depicting the relationship between the various social and economic factors as antecedents of the impulse buying behaviour of consumers (Figure 1).



**Figure 1.** The Research Framework.

## **Practical Implications of the Study:**

In today's market, impulsive or unplanned purchases are a common occurrence. Impulsive purchases account for a sizable portion of sales across product categories. This study provides sufficient evidence to support various social and economic factors influencing consumers' spontaneous or unplanned purchases. An increase in consumers' impulse purchases can be attributed to the upward potential of the effectiveness of the marketing strategies of marketers and practitioners. Future marketing strategists can take a cue from the propositions of this study to devise effective marketing strategies. Practitioners operating in a business-to-consumer market can align their marketing activities and communications with the social and economic factors identified in this to ensure formative gains out of their businesses. Researchers have strongly opined that it is possible to condition consumers to increase or decrease their impulsive buying behaviour. Therefore, this study's unique findings are deemed crucial for future marketers.

This study has found various social factors that influence consumers to buy products that are not pre-decided or bought impulsively. It is found that co-shoppers influence consumer purchasing. The consumer's reference group is a social factor that influences impulse buying. Among these reference groups, a significant factor influencing a consumer's purchase decisions is peer influence Luo (2005). Prior studies have also identified the celebrity endorsements as an alternative to or similar to peer influence that directly influences impulse purchases. Further studies drew attention to the importance of an authentic and trustworthy review on an online site. Researchers posit that such trustworthy reviews for a product can positively induce a consumer to buy it immediately. This study identifies all these factors as elements of peer influence that lead a customer to buy impulsively. In addition, the study also points out the influence of cultural practices on impulse buying. It is stated that individualists showcase more impulsive purchases (Lee & Kacen, 2008). Therefore, it is crucial for marketers to identify this segment and devise communication strategies that are significantly attractive to them. Attracting more and more individualists to a business can potentially ensure increased cash inflow or revenue generation for the businesses. Furthermore, the physical appeal of a store can boost a consumer's in-store experience, thereby leading to impulsive buying.

This study also identifies various economic factors like consumer income (consumers with savings or disposable income) and sales promotion as significant and positive antecedents for impulse buying. Income and education levels significantly impact these consumers' buying behaviour (Rana & Tirthani, 2012), likely leading to impulsive purchase. Marketers can churn out high sales volumes by targeting the high-income group and attracting them to make impulsive purchases above and over their pre-determined shopping list. Marketers can also look to bring more price-sensitive customers into their business and influence them to buy impulsively by reducing the perceived purchase risk through sales promotions. Although it is commonly agreed that decreased perceived risk leads to increased impulsive purchases, the reverse is often true under exceptional circumstances, such as panic buying situations (Sen, 2022). Researchers have pointed out that consumers tend to buy

impulsively when there is a fear or panic of missing out (Billore & Anisimova, 2021). Researchers have posited that time-bound promotions such as limited period offers, one-day free delivery options, happy hours, etc. increase consumers' urge to buy instantly. Rebate and discount offers significantly impact customers' impulsive purchases (Nagadeepa et al., 2015). Therefore, it would likely lead the business to attain better economies of scale and ensure a better position to sustain it.

However, the researchers here would like to raise a word of caution for marketers who would be willing to adopt both strategies simultaneously. The reason is that attracting price-sensitive customers to a business will likely discourage the high disposable income segment from associating themselves with it, or they will also look for similar benefits as the price-sensitives. Thus, on the one hand, there is a risk of losing revenues, and on the other, there is a likelihood of losing brand value.

## **Discussions and Future Directions**

The findings in this study suggest that reference groups must be targeted to increase impulse buying among consumers. For products that are targeted to specific age groups, the advertisements must be designed in a manner that can influence the reference groups of the targeted consumers as well. This will ensure that these group members directly or indirectly affect consumers' purchase decisions. Another strategy to induce impulse buying is to design an attractive store environment that pushes the consumer to stay longer. Retailers can use visual merchandising, in-store music and clean and spacious pathways to attract buyers.

Assuming most consumers in emerging economies are price-sensitive, sales promotion is an essential tool marketer can use periodically. A retailer can also introduce a loyalty program to ensure consumers' repeat purchases. Another strategy to generate impulse purchases is to design retail outlets based on target groups. Since high-income consumers can be potentially high-impulse buyers, retailers can separately target higher- and lower-end markets.

This research article proposes several practical implications and directions for marketers and practitioners. It identifies various factors that can help them develop strategies to increase profit and sales by inducing impulse purchases. The practical implications of this study provide a roadmap for marketers and retailers to encourage such purchases. However, this aspect is not captured in many pieces of research, indicating a research gap that requires attention. Another research gap identified is the lack of mention of scarcity promotions, which create urgency and immediacy of purchase by using timers for promotions like limited-period offers. Such sales promotions can significantly aid in inducing impulse purchases. Social media influencers have also become increasingly important, yet most reviewed articles do not mention their influence on consumer purchase decisions. Marketers and retailers can use the cues from this study to increase consumer purchases through impulsive buying.

For future researchers, the research framework developed in this study can act as a pathway for future tests. Researchers can develop operationalisable constructs and create or adopt measurement scales using this research model. The findings would have further implications for the practical business world.

## Limitations of the Study

Similar to every research work, this study too entails certain limitations. The first issue is that this research lacks empirical evidence and is based on an extensive literature review. This research article is an amalgamation of papers that meet specific pre-defined criteria. Because of this, the findings of the study cannot be generalised to the entire study of impulse buying, as many other relevant articles are not included in the study. Second, since this research is a blend of various studies, it does not define the specific markets where the findings can be implemented. This research focuses on identifying the gaps in the research continuum; it does not include the particular needs or marketplaces within its scope. However, this research framework can be adopted in different markets or geographies for empirical investigations. Third, this research focuses on social and economic factors and thus does not consider psychographic factors or demographic factors like age and gender, thereby having a limited scope. Fourth, although the study has posited various constructs in the form of social and economic factors that influence consumers' impulse buying, it did not attempt to assert operationalisable constructs. Further, the findings of this study lack the quality of generalisability due to the lack of empirical investigation associated with them. However, it paves a scope for future consumer researchers to adopt the proposed research framework and empirically test it with operationalised constructs across various markets and geographies. Finally, another limitation of the research is its language. The research work is an amalgamation of papers published in English and therefore has not included relevant articles published in other languages.

## Conclusion

The objective of this study was to perform an extensive review of the literature on impulse buying and identify gaps, potential research avenues and directions for future inquiry in this domain. The study's primary aim was to consolidate the existing literature on impulse buying and investigate its development over time. Therefore, we synthesised the available literature on impulse buying, analysing the theories, contexts, constructs and methodologies employed in this field.

Impulse buying drives a considerable chunk of sales in retail outlets. This research has found that reference groups (even co-shoppers), cultural practices and store experience are social factors that highly influence consumers' impulse purchases. Social factors directly affect consumers. The economic factors identified were the consumer's income level and price sensitivity. These economic factors have a significant influence on unplanned purchases. The higher the consumer's income, the higher the chance of impulse buying and vice versa. The more the consumer is price-sensitive, the more promotional tools are likely to influence impulse purchases.

This research article recommends strategies for retailers and marketers to leverage these factors and increase the likelihood of impulsive buying among customers, ultimately leading to increased revenue and sales volume. The article also provides future directions and a pragmatic view for marketers to take cues from to increase growth potential in the future.

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The corresponding author's affiliation is with IMT Hyderabad as an Assistant Professor in Marketing area. The first author was a PGDM student at IMT Hyderabad when the article was written. She has passed out successfully of IMT Hyderabad as of now.

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The authors of this study declare that the article neither has been published nor is/will be under consideration for publication elsewhere until the editorial decision from BIMTECH Business Perspectives has been communicated.

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# Democratising Healthcare in India: Opportunities and Challenges

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## Abstract

India is in a state of distinctive paradox. On one side, it is ranked the fifth largest economy in the world with the aim to be among the top three by 2030, while on the other hand, the country's equally important health sector lags and is ranked 145 among 195 countries on the Healthcare Access and Quality Index (HAQ; GBD 2016 Healthcare Access and Quality Collaborators, 2018). Despite significant thrust on healthcare and reforms over the last decade that have positively impacted life expectancy, helped lower infant mortality rate and provided better health coverage due to government initiatives like Ayushman Bharat and the National Health Mission, healthcare in India still faces critical challenges and is crippled with many deficiencies around health quality, accessibility, affordability and safety. This perspective article explores the opportunities and challenges in healthcare delivery in India and why it is imperative to implement a framework for connecting all the stakeholders in the healthcare ecosystem to facilitate equitable access to quality and affordable healthcare. The article also reflects on models of collaboration, connected health and cooperation to strengthen and streamline the healthcare sector for improved outcomes.

## Keywords

Healthcare, start-up, India, connected health, digitisation, cooperation

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## Introduction

Health is fundamental to a quality life. However, India's healthcare economy faces significant challenges, including a fragile system with numerous barriers such as skewed doctor-patient ratio, urban-rural divide, lack of disease awareness, inadequate infrastructural facilities, trained workforce and lack of timely intervention to name a few. We have seen our health infrastructure crumble during the second wave of the COVID-19 pandemic as we lost numerous lives due to a lack of beds, oxygen, medicines and medical support, and our hospitals were painfully overflowing. The strong gaps and cracks in our healthcare systems stared at us, throwing up many questions as we agonisingly struggled through the crisis. The health crises over the two years, from 2020 to 2022, brought us to an inflection point. Despite having executed stringently towards subverting it and initiating comprehensive reforms to enhance healthcare, it is now imperative that we take an end-to-end look at our healthcare systems and resources to bring in a much-needed complete overhaul. Neglecting the sector could throttle the long-run growth of the country.

Healthcare is one of the largest sectors in the Indian economy in terms of both revenue and the number of people employed. It was expected to have an annual compounded growth rate of around 22% since 2016 (Sarwal et al., 2021). The e-health market, which has already gained substantial momentum, is also expected to reach US\$10.6 billion by 2025 (Ibef.org, 2021). India is also among the fastest digital adopters in the world, with half a billion internet users, 350 million smartphone users, an overwhelming rise in tech start-ups and India-trained CEOs (Ranganathan, 2020).

The healthcare start-up ecosystem has also taken huge strides over the last two decades and is on the verge of reaching a new level of maturity. Though the first generation of start-ups in healthcare were mainly focused on providing EMR systems copied from the West, health-tech start-ups in India are now offering an array of solutions in the health space, spanning clinic management software for doctors, online consultations, follow-ups and medicine delivery. More so, wearable data is being used to analyse, design and recommend personalised services for proactive health, artificial intelligence is being used for effective diagnosis and deep learning is being used to better comprehend X-rays and imaging scans. Telehealth start-ups are facilitating the remote treatment of patients using consultations. Many start-ups are also providing healthcare at home for the elderly and patients with mobility constraints (Inc42.com, 2020).

The pharma sector is also being reshaped with the latest regulations to bring costs under control. Local pharmacies are being given competition by e-pharmacies, which offer convenience and affordability to patients. Large diagnostics players are also expanding their footprint by adopting a 'hub and spoke' business model with large centralised facilities for diagnostics and local collection centres. A few start-ups aggregating small players and home collections are being offered for convenience and an interesting competition is on.

The above transformations were catalysed by the healthcare reforms that were introduced in India around 2005. The reforms had a multi-pronged focus across

strengthening rural health services National Rural Health Mission (NHRM), Universal Health Coverage (UHC) for standardising and benchmarking health-care (NABH, IPHS, CEA) and establishing institutions like AIIMS and Medical Colleges across the country under the Pradhan Mantri Swasthya Suraksha Yojna. The Pradhan Mantri Jan Arogya Yojana (PMJAY), popularly known as the Ayushman Bharat Yojana Scheme, is a flagship scheme that aims to provide health insurance and financial protection to the underprivileged. The Government has also introduced few reforms with respect to digitization of healthcare under the Digital India campaign (Ranganathan, 2020).

Despite all these efforts and initiatives, India needs to achieve much more to be a healthy nation. Countries like Maldives, Bhutan and Nepal are faring better in curbing tuberculosis and premature deaths because of non-communicable diseases in comparison to India, despite a decade of ambitious National Health Mission implementation (Gopal, 2019). Thailand and Vietnam have also achieved superior health outcomes as compared to India by consistently investing in their health systems. They have also implemented multisector initiatives aimed at improving availability of clean drinking water, sanitation amenities, education and improved nutrition. Their health insurance schemes cover close to 75% and 87% of the population, respectively, while in India, the penetration of health insurance stood at just around 35% in the financial year 2018 (India: Health insurance penetration, 2018, 2019). India also lags in the number of hospital beds per thousand population (0.5) in comparison to a few of the lesser developed countries like Bangladesh (0.87), Kenya (1.4) and Chile (2.1) (Worldbank.org). What is even more concerning is that, India spent just 4% of its budget on health as it moved into the pandemic, which is the fourth lowest in the world (Martin et al., 2020). India was also reported among the top five least-performing countries in handling the coronavirus crisis (Howell, 2021).

The above makes it apparent that there is something considerable beyond just healthcare reforms, digitisation efforts and investments that need to be addressed to move the health needle significantly. This article explores the need to identify and address the underlying issues in healthcare that are inhibiting the overall improvement of healthcare in a meaningful way. It is the precise time to have collaborative ownership and effort from all stakeholders, including government agencies, healthcare providers, community organisations and individuals, to identify and address issues to improve healthcare outcomes and ensure everyone can access high-quality healthcare services across primary, secondary and tertiary care settings.

The rest of the article is organised as follows. We provide background and discuss the major challenges of healthcare in India in the section 'Background and Major Challenges'. An integrative approach for healthcare is presented in section 'Rethinking Healthcare: An Integrated Approach'. Section 'Conclusion, Limitations and Way Forward' concludes.

## **Background and Major Challenges**

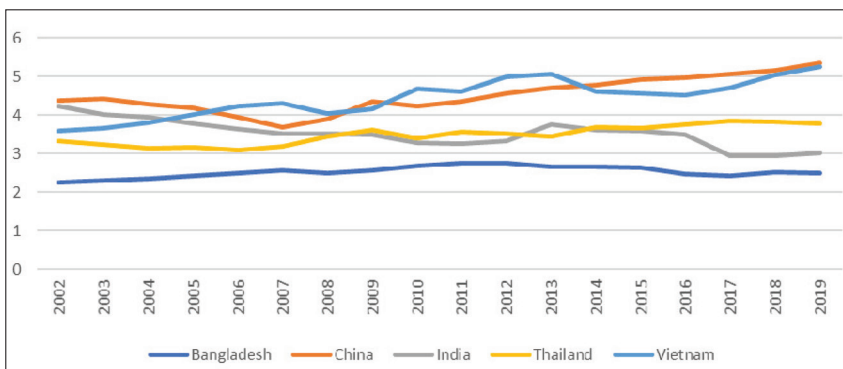
In India, healthcare services are provided by the government as well as the private sector. Government services are hugely subsidised, while the private sector

in health functions more like a free market despite being largely regulated (Rajagopalan & Choutagunta, 2020). Rural healthcare is a three-tier system consisting of Sub-Centres, Primary Health Centres (PHC) and Community Health Centres (CHC). Every tier is faced with shortages in health facilities to the tune of 18% at the Sub-Centre level, 22% at the PHC level and 30% at the CHC level (Rekha, 2020).

As of 2021, approximately 65% of India's population lives in rural areas, according to the World Bank. According to the National Health Profile 2020 published by the Ministry of Health and Family Welfare, Government of India, the doctor-patient ratio in rural India was approximately 1:10,926. The number of primary health centres was 31,494, indicating that the rural population has very limited access to hospitals, clinics and doctors, and a lot more still needs to be done around primary healthcare which is most fundamental to health.

Irrespective of the fact that healthcare is a fundamental right under Article 21 of the constitution, the government spends just 1.5% of its GDP on healthcare (Sarwal & Kumar, 2021), while the world average is 6%, making the sector under-served and leaving it for the private sector to take over major services. Figure 1 clearly indicates India's low thrust on healthcare.

Figure 1 indicates that India's health expenditure is not only lower than other countries but has also declined over the years. Even among the BRIC countries, India's healthcare spending has been the lowest for the year 2019 (OECD, 2019). A study analysing historical trends in healthcare spending by BRIC countries predicts the following trends for 2030: Brazil, 8.4% (95% PI 7.5, 9.4); Russia, 5.2% (95% PI 4.5, 5.9); India, 3.5% (95% PI 2.9%, 4.1%); China, 5.9% (95% PI 4.9, 7.0); South Africa, 10.4% (95% PI 5.5, 15.3) (Jakovljevic et al., 2022). The out-of-pocket expenditure on health in India continues to be significant. Though the figures have reduced from 69.4% in 2004–2005 to 48.31% in 2018–2019, it is still high, as per the National Health Accounts. According to the statistical reports for India and China, 37 and 32 million people, respectively, are under the poverty line due to OOP payment, and this results in the risk of pushing people into financial disaster and poverty.



**Figure 1.** Health Expenditure as a Share of GDP Across Countries.

**Note:** For interpretation of the references to colour in this figure, please refer to the web version of the article.

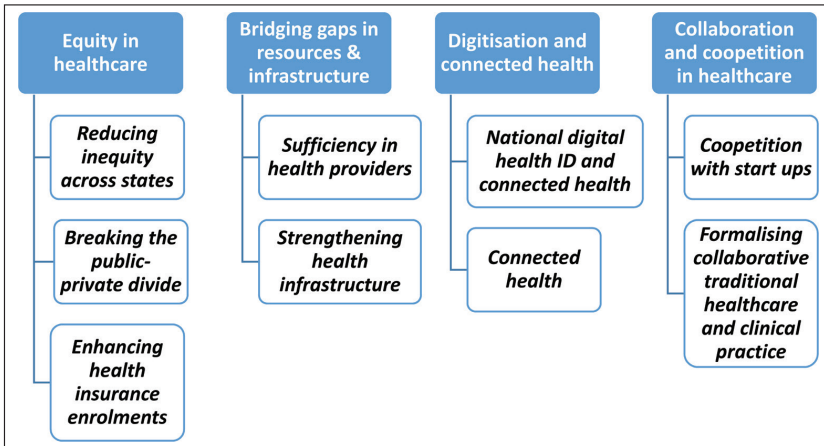
Over the last two decades, health-tech start-ups have also attempted to crack the archaic healthcare system. Start-ups bring in novel ideas and methods to improve the accessibility and affordability of healthcare. However, one of the major challenges that they face in this space is that they are generally capital-demanding and have comparatively slower returns, particularly in minor locations. Under such circumstances, very few start-ups can survive despite the lower competition levels. Another challenge for the health start-ups is the lack of health data, which is fragmented as of the date, and the fact that the healthcare industry has not been that agile in adopting new technologies for accessibility to health data. Likewise, because health start-ups have prolonged gestation periods, venture capitalists invest in companies that are able to make money in five to seven years, with most avoiding healthcare funding due to this reason.

Another hurdle in India's healthcare system is compliance and regulatory factors. While there have been efforts to simplify and streamline the regulatory framework, there are still challenges in implementing and enforcing policies effectively, possibly due to presence of multiple regulators, enforcement challenges and standardisation challenges. In addition, some of the laws governing this space are so aged and need to be changed under existing circumstances. The Drug and Cosmetics Act 1940, Drugs and Cosmetic Rules 1945, Pharmacy Act 1948 and Indian Medical Act 1956 were crafted way before the age of e-commerce. The Information Technology Act 2000 still lies in the grey area when it comes to healthcare technology. The policies are mostly unclear vis-à-vis the current scenario, leading to ambiguity and the reluctance of healthcare practitioners and players partnering with start-ups. As far as healthcare devices go, it is ironic that despite the hyped 'Make in India' campaign, foreign players dominate the market.

Despite an overall increase in technology adoption, there are barriers to technology innovation in healthcare. Indian markets are not uniform, and behaviour of consumers changes after a radius of 30–50 km, creating obstructions to building business or market strategies for new products and services. Healthcare innovators often find it hard to scale due to a fractured market and gradually fall out (Dr. Hempel Digital Health Network, 2018). While consumers who are exponentially adopting technology for e-commerce, social media, education and the like are awry of doing the same when it comes to their health. More so, the working and operating styles of healthcare professionals and healthcare centres are also uneven with most having their own unique practices, making things more difficult to standardise.

## **Rethinking Healthcare: An Integrated Approach**

A country's ailing health system has a negative impact on its productivity and economic output. India cannot accomplish its growth potential without a robust healthcare system, for which an integrated healthcare approach needs to be adopted. There is good evidence to show that health systems which are end-to-end consolidated and connect people's patterns of health through their life cycles have



**Figure 2.** An Integrative Framework.

far better health consequences (Levine et al., 2019; Starfield et al., 2005) for the same level of expenditure than those that leave people to handle their own health until they are truly sick, post which they follow the hospital-based approach (Mor, 2019). Countries that have highly effective health systems, like the United Kingdom (Cylus et al., 2015) in the developed world, Thailand (Tangcharoensathien, 2015) and Costa Rica (Pesec et al., 2017) in the developing world, have been able to have fruitful impacts to offer.

It is, therefore, clear that fragmented or patchwork efforts will not help; rather, we have to consciously invest in our health systems to not only make them stronger and safer but also interconnected. What we need is an integrated approach to strengthening our infrastructure and resources and linking and empowering all stakeholders in the healthcare ecosystem for overall enhancement in healthcare, uniformly, transparently and equally. Keeping this in mind, we present and explain in Figure 2 an integrated approach to tackle challenges in healthcare by strengthening the bond between the healthcare provider, receiver and environment, thus moving from a reactive to a proactive approach in healthcare.

## *Equity in Healthcare*

### *Reducing Inequity Across States*

Equity in health is as important as social and economic equity. In India, presently, health is primarily a state subject, due to which there are huge variations and inequality in healthcare facilities, accessibility and infrastructure across the country as states have skewed priorities. The fragmented health infrastructure is largely due to the way in which roles and responsibilities have been framed between the centre and the states. To take an example, the centre spends less on public health and sanitation as they are on the state list. To bring parity across

states in terms of healthcare facilities, policies and infrastructure, the centre has to redefine responsibilities and ownership by either taking health directly into their focus or putting in place a central monitoring mechanism that constantly views and reviews every state's healthcare systems. With the rise of e-healthcare, it is imperative to have a central regulatory framework rather than multiple frameworks, along with clear privacy guidelines and enforcement, to provide affordable, accessible and quality healthcare across India.

#### *Breaking the Public–Private Divide*

In addition to addressing the existing inequities across states, it is crucial for the centre to also tackle the public-private divide in healthcare. The lack of health data integration between the public and private sectors, and the scarcity and inadequate quality of public infrastructure force individuals to seek medical care at private hospitals, even if they cannot afford the expenses. This places an enormous burden on people's already limited financial resources. According to the National Family Health Survey-3, 70% of households in urban areas and 63% of households in rural areas depend on the private medical sector as their primary source of health. The huge burden of out-of-pocket expenditure to the tune of approximately 65% to 70% also increases the possibility of vulnerable groups slipping into poverty. Accessibility and quality of public health facilities are, therefore, imperative to counter this situation. An increase in the proportion of GDP spent on healthcare can definitely help enhance the Public Health Infrastructure and also decrease the OOPE, thus reducing the financial strain on the endangered groups.

#### *Enhancing Health Insurance Enrolments*

India is a country with one of the lowest health insurance penetration rates. Around 65% of India's population is not covered under any health insurance plan (Statista, 2022). The government needs to play a strong role in the adoption of health insurance plans by a larger section of society. Private health insurance plans target people in the higher income category, and therefore the government needs to devise a significantly low-cost health insurance product covering outpatient-care that will help rope in people with lesser incomes who have the capacity to pay nominal insurance.

Though the Pradhan Mantri Suraksha Bima Yojana is a step towards offering accidental death and disability benefits to policyholders, and though health insurance coverage has also shown an upward trend over the last five years, according to the latest National Family Health Survey (NFHS-5), it still remains well below half the population in most of the states. Of the 22 states gauged, 15 states demonstrated increased in health coverage, but other than Andhra Pradesh, Telangana, Assam and Kerala, all major states indicated less than 50% of households with one member covered by a health scheme. Healthcare financing is core to progressing towards universal health coverage, and the government of India could weigh the World Health Organization (WHO) approach of considering the four key financing strategies to achieve UHC—increasing taxation efficiency, increasing government budgets for health, innovation in financing for health and increasing development assistance for health.

## *Bridging Gaps in Resources and Infrastructure*

### *Sufficiency in Health Providers*

First and foremost, we cannot achieve good health systems and standards if we do not have adequate and trained medical professionals. It is estimated that by 2030, India will need 2.07 million more doctors to achieve the doctor-to-population ratio of 1:1000 as set by WHO (Tiwari et al., 2018). The states with higher deficit of doctors, like Uttar Pradesh, Chhattisgarh, Odisha and Madhya Pradesh, are home to a big chunk of India's rural population of more than 0.8 billion (Parvathi & Loni, 2022). It is also important for India to ensure that the shortage of medical staff is addressed in rural areas, as primary healthcare is the foundation of public health services in a country. The importance of primary care can be seen from the evidence congregated by the World Bank that 90% of healthcare needs can be managed by primary care, while only 10% require services supplemented by hospitals (Rao & Pilot, 2014).

It may be pertinent to point out that we need to look at novel and unique ways of enhancing the availability of skilled hands in the healthcare sector. In addition to the regular route of attracting and retaining talent in healthcare, the other options worth considering will be scrutinising how the existing medical workforce is deployed and how it can be reallocated for better productivity. Interstate licence compacts for multi-state practice or having medical colleges attached to all major government hospitals will also increase the availability of a medically trained workforce under emergency circumstances. Efforts around creating a pool of contingency staff for deployment on a need-based basis with constant evaluation and monitoring with a 'do not return' tag for those who are found misfits or not suitable may also be another way of resourcing medical staff.

### *Strengthening Health Infrastructure*

The pandemic has clearly shown India's lack of infrastructure to cater to its 1.38 billion population. There are no two opinions on the fact that healthcare infrastructure needs deep-rooted and massive reforms to make it strong enough to face crises of unprecedented magnitude. Breaking the vicious cycle of poverty and poor health is indispensable for economic development and growth. Achieving better health for a nation requires the transformation in not only the health sector but beyond it too. Within the health sector, the focus should encompass basics like education, sanitation, health awareness and targeted measures to support vulnerable groups. Additionally, efforts should extend to more advanced aspects like building research capacities, enhancing medical staff and resources, upgrading supply and distribution chain, mobilising additional resources from public-private partnerships, domestic and philanthropic initiatives.

Rural India severely lacks adequate health infrastructure, and what does exist does not meet adequate quality requirements, is underfinanced, has poor equipment, a low supply of medicines and lacks qualified and dedicated human resources. Additionally, the underdeveloped state of roads and railways as well as the issue of erratic power supply make it even more difficult to set up rural health facilities. It is essential that these issues be prioritized and addressed urgently to ensure the provision of adequate healthcare services in rural areas.

## Digitisation and Connected Health

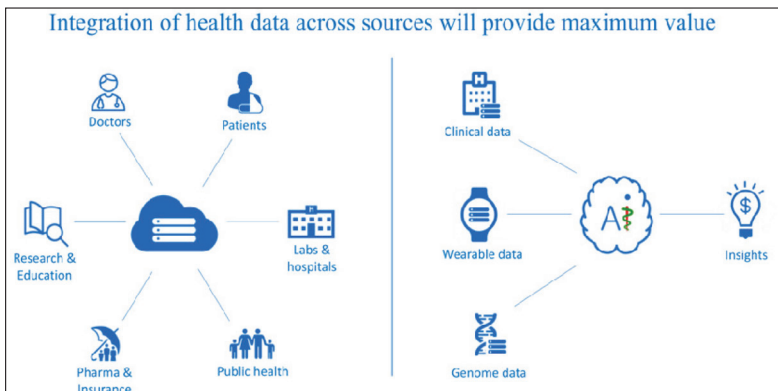
### National Digital Health ID and Connected Health

With the advances in information and communication technologies, India must work towards ‘connected health’ and open digital health ecosystem empowering information transparency, interoperability and innovation across stakeholders. For delivering quality health outcomes, data from multiple sources will aid better diagnosis, treatment and bring about a paradigm shift in the way healthcare is facilitated.

Presently, the healthcare stakeholders in India operate in silos, and the availability of health data is fragmented and broken. Patient life cycle health data will not only help health data flow seamlessly across healthcare receivers and providers but also reduce costs on account of repeated diagnostic tests, support disease diagnosis and treatment advised to patients, enhanced awareness, preventive and predictive health and remote patient treatment and monitoring, to name a few. With the advent of wearables, AI, ML and IoT, health data can immensely aid in changing the outlook from symptomatic treatment to preventive and predictive healthcare. Figure 3 indicates how health data from multiple sources can be collated and collectively studied for better diagnosis, prescription and treatment.

What we need here is a two-pronged approach. First, every citizen of India needs to have a health identity. The government may decide to use the Adhaar number as an identity or generate an Adhaar-based health ID for every citizen. Gradually, those not having Adhaar should also be brought into this fold. There is a dire need for immediate implementation of the Unique Health Identifier Rules, 2021, which were notified on 1 January 2021, and which are meant to help facilitate the ‘integration of health data across various applications and create longitudinal Electronic Health Records for citizens’.

Second, all healthcare stakeholders like the patient and health providers like doctors, registered clinics, polyclinics, hospitals, government health centres, diagnostic services and pharmacies should be brought on a connected platform so that health data is easily accessed across the life-cycle of every citizen. Additionally,



**Figure 3.** Future of Health Data: Connected Health.

block chain can be used to ensure the safety, security and privacy of the data, with heavy punishment for misuse.

The implementation of a digital health ID and a connected platform would greatly facilitate the collation and tracking of patient data throughout their lifetimes. Such a system would enable seamless sharing of information with healthcare providers, hospitals, and insurance companies with just a click significantly enhancing the efficiency and accessibility of healthcare services. Numerous hospitals have adopted IT/EHR systems, but primarily for patient registration and not so much for clinical use. Prior to the pandemic, adoption of digital technology in healthcare was rather slow; however, post-pandemic demands for contactless consultation and medication have given a new thrust, and it looks like digital technology is now here to stay and evolve for the betterment of mankind.

## *Collaboration and Coopetition in Healthcare*

### *Coopetition with Start-ups*

Disruptive growth requires new business models. Entrepreneurs have the ability to identify complex problems and develop innovative, simple and efficient solutions for them. The pandemic has led to a structural shift towards digital healthcare in many countries, including India. Start-ups are a very effective way of promoting innovation, and the COVID-19 pandemic has forever changed how start-ups will do business in the future. We have seen start-ups as catalysts for innovation, be it in the areas of low-cost ventilators, chatbots to address queries, thermal cameras with an alerting system, contact tracing technologies, transportation for frontline workers, community-based platforms enabling lifestyle discovery and the like. Start-ups can also help tap the opportunities, bring in a viable business model and support the government in strengthening loopholes in the healthcare system.

Start-ups like Tattvan E Clinics, myUpchar, Portea Medicals, Practo, mFine, Lybrate, DocsApp and MedCords are a few among many others working towards not only strengthening the present infrastructure but also creating an ecosystem that will be seamless and accessible for all its stakeholders (Naik, 2020). Swasth Alliance is another example in which over 100 players in the health ecosystem, such as hospitals, health-tech start-ups, pharmacies, technology and other organisations, have collaborated to overcome some of the healthcare challenges. Collaboration and coopetition can therefore play a very critical role in building national capacities by rebooting healthcare and closing gaps in the traditional healthcare ecosystem.

### *Formalising Collaborative Traditional Healthcare and Clinical Practice*

India has a very rich heritage of traditional forms of medicine like Ayurveda, Siddha, Unani and homeopathy, which largely use plant-based medications for promoting health and curing illness and have been used for centuries. India is among the largest producers of medicinal plants, and there are over 7.7 lakh registered 'AYUSH doctors practicing in India (Ayurveda-428884 [55.4%], Unani-49566[6.4%], Siddha-8505[1.1%], Naturopathy-2242[0.3%] and Homoeopathy-284471 [36.8%]; Shailaja & Kishor, 2018). Modern research has acknowledged the

importance of traditional medicinal systems and their effectiveness. Japan's Osaka Medical School has formed a society of Ayurveda way back in 1969 and has been passionately spreading Ayurveda forms of treatment. Ayurveda is also prevalent in Thailand and Myanmar, and education and practice of Ayurveda are thriving in many states of the USA (Sen & Chakraborty, 2017).

Research-backed and scientific integration or collaboration of Ayurvedic and other forms of Indian traditional medicine in clinical practice may help cure diseases in a more wholesome way with fewer side effects. Moreover, a large section of people who cannot afford expensive treatment can benefit from more reasonable forms of traditional medications if they are available in primary health centres. Treatment based on a combination of modern and traditional medicines can also be formalised as more and more people adopt traditional wellness and lifestyle methods.

Many foreign countries have shown interest in India's ancient forms of health and wellness and are keen on collaborations for research and development. The World Health Organization (WHO) and the Government of India have also agreed to establish the WHO Global Centre for Traditional Medicine to harness the potential of traditional medicine to better the health of people as well as the planet. India, being the origin of non-drug therapies and preventive and life management techniques, must utilise this precious resource for the well-being of its citizens.

## **Conclusion, Limitations and Way Forward**

Going by the trends, there is a vast undercurrent in healthcare, and in the next few years, healthcare will be very different from how we see it today. India has a very fragile healthcare infrastructure that needs to be forcefully and vigorously strengthened. If India does not bring systemic changes in the healthcare system, the impact of the country's economic growth might be negated. Beleaguered by a shortage of medical professionals, inadequate infrastructure, a lack of digitisation, poor technology adoption, a shortage of funds and high out-of-pocket expenditures, the situation is visibly a huge challenge for the country. Over the years, healthcare costs have skyrocketed, the quality of care is inconsistent and patient experience needs drastic improvements.

A thorough analysis of the gaping loopholes and the lessons learned, along with charting out a multipronged approach to fix the current system, is a dire need of the hour. Integrating and streamlining disparate systems and processes, strategic reforms by the government on existing inequities in healthcare, technology convergence and new healthcare delivery models will help bridge the existing gaps and play a vital role in improving accessibility, affordability, transparency and greater awareness for better quality systems in healthcare.

Since this article is from the perspective of the author, there are some limitations that need to be acknowledged. The author's own understanding, analysis or interpretation may influence the arguments presented in the article. Although the perspective may be short of comprehensive, it is well known that, going forward, digital changes will empower all sectors, including healthcare. Integrating healthcare

delivery with exponentially increasing data from genomics, the microbiome, imaging, digital health, environmental information and more will be a game changer. AI and digital platforms will churn around diagnostics and reduce misdiagnosis while pharmacy will evolve from a mere dispenser of medications to being a vital healthcare team member with a more clinical role in patient care. Pharmacists are likely to take on greater responsibilities in areas such as medication management, patient counselling and chronic disease management as the healthcare system in India evolves.

In every crisis lies an ocean of opportunities, and this is a good time to revisit old models, redefine them or create new ones. Having gone through the COVID crisis, each of us will surely agree to the age-old saying that ‘health is wealth’. The time cannot be more appropriate to take a deep dive into our healthcare system and bring in groundbreaking changes to democratise healthcare so that not only the nation but every citizen be able to take charge of their health for both self and national prosperity.

### Declaration of Conflicting Interests

The author of this study declare that the article neither has been published nor is/will be under consideration for publication elsewhere until the editorial decision from BIMTECH Business Perspectives has been communicated.

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rural villages, small towns, and urban centers. These kids are unstoppable! These young wonders were inspired by their passions and the common issues they saw around them, and they were successful in having an impact on society (Source: Amazon).

## **Interview of Ms. Rupangi Sharma, Author and Edupreneur**

**Professor Sinha:** Dear Rupangi, the editorial team of *BIMTECH Business Perspectives* is very grateful to you for this interview. We would be happy to know about your journey of becoming an edupreneur.

**Ms. Rupangi:** I think for me, the journey of becoming an edupreneur started with this deep wish to change the face of education and contribute in whatever possible way so that learning becomes more exciting and fun for students. There was definitely a gap that needed to be bridged in the current education system. A big change in the teaching-learning ecosystem was deemed necessary from “the Sage on the stage” model, which was one-way, teacher-centric, and dull. I felt excited by the prospect of being able to be a part of that change. That is how the edupreneur in me was born. It was interesting for me because I do not think I began with the idea of becoming an entrepreneur. While I was exploring different ideas and perspectives, it brought out my curiosity as well. I wanted to explore this one big question. How do we make learning more exciting, more fun for students, and more engaging so that the classroom comes alive, whether that is for a six-year-old, or three-year-old, or even a 60-year-old learner?

**Professor Sinha:** Having been exposed to global education, what, according to you, will transform the education system of India?

**Ms. Rupangi:** While I was in college, I was in the habit of reading a lot, especially, during my postgraduation and social communications media class. We were reading about an American thinker who was a proponent of democratizing education. I started deep diving into this further. India, early 21st century, had started seeing social media and digital channels impact education. I started thinking about how technology can be used to democratize learning. I thought this was something that I felt excited about as an educator. This is something that I would like to contribute to, you know, changing the way we look at education. And, if there is a way for us to reimagine education and make it more exciting, as I said, then learner-centric paradigms, inclusivity, democratization, and digitalization of education are the future. The other thing that I like about learning is that it is about human development. We talk about learning in a very restrictive sense, that it is about school or college. You know, learning is a pursuit. This is going to be lifelong. So now we have started talking about lifelong learning and how we are always learning, right? Hence, educationists have to make conscious efforts through curriculum, content, and pedagogical innovations to ensure that learning becomes more fun.

**Professor Sinha:** Share your vision for nurturing changemakers and innovators in our society. What are certain roadblocks, according to you?

**Ms. Rupangi:** I think the first is that we do not talk about these kinds of avenues or opportunities with young people in the first place. So a lot of people do not understand these terms. What does it mean to be an entrepreneur? What does it mean to be an innovator or a changemaker? The more we talk about what exactly this entails and share the journeys of entrepreneurs, changemakers, and innovators, the more I think it becomes a viable opportunity that others can pursue because it requires a certain kind of skill set. As you know, you need to be high on creativity, have the ability to solve problems, and demonstrate a lot of empathy when you are trying to create a solution for a problem that exists for millions of people across the world. So nurturing and honing these skills is the first roadblock, I feel. So, we need to first give those examples of entrepreneurial journeys and what all of these things mean. Then, finally, we can understand what skills are required of those people. Then try to teach those skills as well.

The second roadblock is that, I think, India especially has been affected by a mindset where kids are encouraged to be just one of these three: doctors, engineers, and lawyers. So I think that generation still nurtures their children to feel that they have to pursue these three or four things. But there is an explosion of professions that have come up, you know, because of the digital age. You can now see content creators and many other avenues. Such is the future of work. That is not a roadblock but an opportunity!

**Professor Sinha:** How do you see storytelling genres being useful in the classrooms?

**Ms. Rupangi:** That is a very interesting question because, for me, even when I was doing my master's or doctoral study, I have always felt that storytelling is something that needs to be introduced to every field, be it learning, teaching, or leadership. You know, the more we talk about youngsters who are achieving all of these different kinds of milestones through their entrepreneurial ventures or social activism, the more we will prepare the generations for the future. The mindset change that we want will happen by bringing these stories to life again. That is another example of how, you know, storytelling can be so powerful. So, I think that storytelling is a very fundamental core skill and should be taken much more seriously. The Western world, where they focus on research, brings storytelling into case studies or research methods. Today country is dealing with a huge gap which can be bridged potentially if our educational practices are based on research. So I think that is a big challenge as well. In scientific journals, the endeavor is to have research that tells stories. Even with numbers nowadays, you can tell stories. We are like storytelling animals. The brain is conditioned to think in the form of narrative.

One of the reasons I became an educator was to understand how we can bring storytelling into education in a bigger way. That is something I am still working on. How can storytelling genres or storytelling in general, whether it is a case

study or nonfiction, be useful in classrooms? How else do you inspire and educate children? So the people who can educate or inspire the most are always the ones who tell stories. So again, I think that there is massive use in the classroom or outside of the classroom, in general, for learning and teaching. I think storytelling is massive in terms of the level of engagement that it can engender.

**Professor Saloni:** How do you see this book adding value to educators and researchers?

**Ms. Rupangi:** I think the book addresses a lot of different myths that we have about age. So age is not something you should consider when deciding whether you are too old to do something. It is not just about being young enough to do something; it is also about, you know, being too old to do something. So I think age should not be a factor. And that is something that the book also talks about. All of the featured young Indian innovators are between the ages of seven and 21. They are so inspiring that their stories definitely should be heard. And I think that is how the book adds value to educators and researchers as well, because these 65 stories have not been heard before. They need to be shared in every type of classroom to open minds toward research and discussions.

**Professor Sinha:** How do you see your book contributing to changing the mindset toward child innovators?

**Ms. Rupangi:** I remember my publisher asking me, “Are you sure that there are youngsters between seven and 21 who are innovators, teams, makers, and entrepreneurs, you know, who have successfully done all of this?” Well, India has such talents, and we just need to nurture them and talk about their journey. Learn resilience, self-belief, and perseverance from these heroes and heroes. Look at the persistence, curiosity, and endurance of this one child who, at the age of eight or 11, fighting between those times when he was in and out of hospitals, thought that I would cure sickle cell one day. I will find a cure for it. And he did! This is a young Indian innovator, right? Look beyond their age! I think these are very honest stories about these youngsters but sadly, and typically so, in the media, I would see that their stories were just sort of portrayed as, you know, these young geniuses. And they would just highlight their age, but they would not highlight their journey because I think there is an underlying assumption that they are never going to succeed. This must change, and my book may make that happen, I feel.

**Professor Sinha:** What prompted you to develop this book? How and why did you choose the theme of entrepreneurship and innovation?

**Ms. Rupangi:** I wrote this book because, in my experience as someone who is an entrepreneur, I was taught subjects such as innovation, creative learning, and design thinking. Whenever I ask students about any innovator, the obvious answers are Steve Jobs and Einstein. But you know, you would never hear any of them say that I can be an innovator too. I would then engage with them in a dialogue and

say, “OK, do you know what the attributes of an innovator are?” And they would come up with age as one of the factors.

And so that is where I wanted to challenge their assumptions that an innovator is someone who is from the Western world with proven success. I mean, the point is that today you can be an innovator, you can make change, you can make an impact, and you do not necessarily have to believe that everything has been solved in the world because it has not. So I think that was another big reason for me to choose to change the understanding and break the biases around innovators.

Their answers were, of course, not wrong, but they are sort of simply symptomatic of the underlying issues in our education system. We do not teach our kids that they have to solve problems when they go out into the world. We teach them through textbooks that everything is already solved. And then they do go out into the world, and you suddenly realize that everything hinges on your ability to solve problems. But that is something you have not been taught, right? Generally, what we are telling children, whether it is within the walls of the school or outside of school, is that everything is already solved.

So I think that is another thing that I felt as an entrepreneur and an authorpreneur. So if there is a book that I am trying to find but cannot, the first reaction to that is to write it right. So as an educator, I was looking for books that showed young people role models of their age, especially young Indian innovators, entrepreneurs, and changemakers. And when I could not find it, I knew what I had to do.

I have always loved writing and expressing myself through words, and I think when you are writing, it is the best way to travel because you are traveling across time, across space, and across different ideas. So I think it is fascinating, just the act of writing. It is also linked to, you know, my passion to be an entrepreneur because this way you can inspire and educate. For an *Aatmanirbhar Bharat*, these stories must be told.

**Professor Sinha:** More and more people are reading nonfiction, which inspires them to become an author too. What is your key mantra for budding authors?

**Ms. Rupangi:** I think my first and last mantra is “be disciplined.” Focus on instilling the habit of writing every day. So I think that is about it. It starts and finishes at that because even doing that is hard. And then the second part is to be able to handle your inner critic and not lose faith. Keep encouraging yourself to learn more and more about how you can be a better writer.

## Appendix<sup>2</sup>

### *Starting Early: Changing Paradigms in Entrepreneurship Education*

Innovators are young people who dare to walk the road less traveled and are highly curious, creative, and critical thinkers. They use their imagination, sensitivity, and problem-solving abilities to develop original concepts or answers to contemporary issues. They are minds that want to change the world around them because they

want to take the reins and become drivers of development and change. This age-diverse community of innovators might come from any background or area of interest, but they all have the desire to make a difference and demonstrate a natural curiosity. They might have a special interest in the fields of science, technology, engineering, the arts, or mathematics (STEAM), and they might use their knowledge and abilities to create novel innovations, goods, or services. Some young inventors have received widespread acclaim for their work, such as Gitanjali Rao, who was selected as Time Magazine's first-ever "Kid of the Year" at the age of 15.

The National Institution for Transforming India (NITI) Aayog is a policy think tank of the Government of India that works towards fostering innovation, entrepreneurship, and sustainable development. One of NITI Aayog's key initiatives is the Atal Innovation Mission (AIM), which aims to promote innovation and entrepreneurship across India. Under AIM, NITI Aayog has launched several programs to encourage and support child innovators. One of these programs is the Atal Tinkering Lab (ATL) initiative, which provides a platform for students to develop their innovation and creativity skills. ATLs are set up in schools across India and are equipped with state-of-the-art technologies such as 3D printers, robotics, and electronics kits.

In addition to ATLs, NITI Aayog has also launched the Atal Incubation Centres (AIC) at HEIs to foster curiosity, changemaker mindsets, and researcher mindsets. Through the Atal Innovation Challenge, a national-level innovation competition for students, NITI Aayog invites innovative ideas from students across India and provides them with mentoring, funding, and support to turn their ideas into reality. The challenge also provides a platform for students to showcase their ideas to potential investors and industry experts. NITI Aayog has also launched the Atal Community Innovation Centre (ACIC) initiative, which aims to promote innovation at the community level. ACICs provide a platform for community members to come together and collaborate on innovative projects that can benefit their community.

Overall, NITI Aayog is playing a significant role in fostering a culture of innovation and creativity among child innovators in India. Through its various initiatives, NITI Aayog is providing young students with the skills, tools, and opportunities they need to succeed in the 21st century. A project of the Indian government's AIM is the ATL. ATL wants to encourage entrepreneurship and creativity among young Indian students by providing them a platform to hone innovative mindsets and abilities, including design thinking, problem-solving, and creativity. (Source: NITI Aayog website, <https://niti.gov.in/>)

## Notes

1. The book was featured in the "Entrepreneurship and Innovation Panel Talk" during BIMTECH Business Literature Festival 2023 on February 10, 2023 (<https://businessliteraturefestival.bimtech.ac.in>).
2. The appendix is compiled by Ms. Charu Goyal, PGDM 2022–24 and Executive Member-Majlis-Theatre and Debating Society, BIMTECH, Greater Noida.

### **Manuscript submission**

- The preferred format for your manuscript is MS Word.
- The journal does not consider a paper that has been published elsewhere or that is under submission to another publisher. Authors must attest to this at the time of submission. It is also author's responsibility to disclose any potential conflict of interests regarding their submitted papers.
- Authors will be provided with a copyright form once the contribution is accepted for publication. The submission will be considered as final only after the filled-in and signed copyright form is received.

### **Basic formatting of the manuscripts**

The journal publishes the following article types:

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- Review essay – 6000–8000 words
- Perspective/viewpoint – 3000–5000 words
- Interview – 2000–3000 words
- Book review – 2000–3000 words

Please refer to the Submission Guidelines on the journal website for details on formatting.

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- Consistent use of either British or American spelling is advised, but not both at the same time.
- Spell out numbers from one to nine, 10 and above to remain in figures. However, for exact measurements use only figures (e.g. 3 km, 9%). Please use 'thirteenth' instead of '13th century'; use '1960s' instead of 'nineteen sixties'.

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- Notes should be numbered serially and presented at the end of the article. Notes must contain more than a mere reference.
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