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THE BUSINESS REVIEW

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Message From the Editor-in-Chief

In an era of rapid transformation, where knowledge creation and dissemination drive the trajectory of economic and social development, it is imperative to explore the evolving dynamics of human capital, organizational behavior, and sustainable business practices. Volume 28, No 1 (2024) of our esteemed journal delves into these critical dimensions by bringing together a diverse set of studies that investigate the intricate interplay between workplace behavior, human resource management, and sustainability, along with emerging trends in the energy sector.

The discourse on employee well-being and innovation, as explored in the studies on Happiness at Work and Innovative Work Behaviour and Knowledge Sharing and its Impact on Innovation, highlights the role of organizational culture in fostering creativity and performance. These studies reinforce the growing body of research that positions psychological well-being and collaborative learning as essential factors for sustainable professional environments.

Similarly, as we navigate the evolving landscape of organizational commitment, the research on Psychological Contract Breach and Organizational Commitment in Higher Education offers valuable insights into trust, expectations, and retention in academic institutions. Complementing this, the examination of Green Human Resource Management (GHRM) in Indian Banking underscores the increasing emphasis on environmentally conscious corporate strategies, a theme that resonates with global efforts toward sustainability.

Corporate Social Responsibility (CSR) remains a cornerstone of ethical business practice, and the study on CSR and Organizational Citizenship Behavior in Nepal's Business Schools presents a compelling narrative on how corporate responsibility extends beyond compliance, shaping employee engagement and institutional identity. This issue also broadens the spectrum of knowledge by integrating research on quantification of financial risk of bankruptcy. These studies underscore the need for resilient policies that balance economic growth with environmental imperatives.

This issue reflects the journal's commitment to fostering interdisciplinary knowledge that not only enriches academic discourse but also provides actionable insights for policymakers, corporate leaders, and practitioners. We hope that the findings presented in this volume will inspire further inquiry into the synergies between workplace well-being, responsible business practices, and sustainable economic frameworks.

We extend our deepest appreciation to the contributors, reviewers, and the entire editorial team for their dedication to advancing scientific knowledge.

With regards

Prof. Mushtaq Ahmad Darzi
Editor-in-Chief

The Business Review

In an era defined by rapid economic shifts, technological advancements, and evolving consumer expectations, the need for rigorous academic inquiry into business and management has never been more crucial. *Business Review* stands as a platform for fostering meaningful discourse, bringing together scholars, industry practitioners, and policymakers to engage with contemporary challenges and opportunities in the world of business.

With each issue, we strive to present research that not only advances theoretical understanding but also offers practical insights with real-world implications. Whether it's examining the dynamics of workplace innovation, exploring the evolving landscape of corporate responsibility, or analyzing the forces shaping financial and economic stability, our journal is committed to pushing the boundaries of knowledge.

As we continue this journey of intellectual exploration, we invite our readers to engage with these ideas, challenge existing paradigms, and contribute to shaping the future of business and management. Your curiosity, critical thinking, and commitment to knowledge are what make this publication a meaningful endeavour.

We extend our sincere gratitude to our authors, reviewers, and editorial team for their invaluable contributions. It is through collective efforts that *The Business Review* remains a trusted source of scholarly excellence.

Warm regards,

Prof. Mushtaq Ahmad Darzi

Editor-in-Chief

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Determinants of Green Human Resource Management Practices in the Indian Banking Sector

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Abstract

The banking sector in India has started using eco-friendly practices as a way to reduce paper usage, transition to sustainable practices, and use energy-saving strategies. The main aim of conducting this study is to determine the most important factors that affect the adoption of Green Human Resource Management (GHRM). A hybrid style of research design has been used, exploratory and descriptive; based on a mix method deploying both qualitative and quantitative approaches. By using a carefully designed instrument, a total of 109 responses were collected from bank employees in a few select banks, SBI, UCO, HDFC, and ICICI. An exploratory factor analysis was used to assess the gathered data and investigate the factors. The findings show that banks have mostly adopted Green HRM practices to perform daily tasks. Furthermore, five essential components were determined to have the biggest effects on the adoption of Green HRM. Online training and awareness in addition to organisations wide sensitization to use energy-saving tools have been found to be strong enablers of adoption of Green HRM. The findings have implications for academicians and banking professionals in understanding the factors influencing Green HRM in Indian banking.

Keywords: *Green HRM, Banking Sector, Factor Analysis and Sustainability.*

1. Introduction

Researchers began examining GHRM more methodically over time as environmental concerns grew (Jabbour, 2016). One of the main reasons why policymakers have been interested in environmental concerns is climate change. It has an impact on an organization's internal operations as well as the future management style (Sharma, 2018). It is crucial to the process of constructing our collective digital future to promote human growth (UNEP FI, 2024). Degradation of natural resources happens globally as a result of an increase in enterprises, industries, and service sectors (Rendtorff, 2020). There has been a rise in academic research on eco-friendly activities and the majority of studies are on manufacturing sector, while the service sector is also receiving attention as well (Aslam & Jawaid, 2022). Risk management can benefit from the application of the "green banking" idea (Park and Kim, 2020). The word "sustainable" is complicated, it conjures up ideas of people coexisting peacefully with the environment for the benefit of both people and the world. The existing population size and the resources consumed are not sustainable over the long term with any objective or combination of goals due to the excessive use of natural resources. Green practices are being implemented by the banking industry in the present day to enhance their corporate ethics (Henderson et al., 2023). Green HRM is becoming more and more well-known every day, and most individuals are aware of the advantages of Green HRM in the banking sector. A successful application of

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Green HRM enhances employees perception of the organisation, lowers costs, and boosts employee loyalty (Singh & Keshri, 2024). The future frontiers of Green HRM are sustainable development, environmental performance, and corporate social responsibility (Shah and Misra, 2024).

The first section of this paper covers an introduction to Green Human Resource Management, while the second part reviews the indicative extant literature to formulate the problem statement. The problem overview and research objectives are discussed in the third and fourth sections. The fifth section deals with data analysis and interpretation. The sixth section frames a conclusion following the interpretation and literature gap.

2. Literature Review

Green HRM has a favourable relationship with strategic positioners (Yong & Mohd-Yusoff, 2016). Change advocates also suggest green job descriptions, green incentives, and green analysis. An organisation may see an increase in environmentally friendly conduct as a result of Green HRM. Employees' adoption of environmentally friendly behaviours might be aided by departmental learning and top management assistance. The secret to greening organisation is green employee empowerment and HR's duties (Mishra et al., 2017). It has been widely held that talent management and green efforts can both benefit from the application of green HRM. The performance outcome of green HRM has drawn attention from researchers, both at the organisational and individual levels. To make Green HRM function effectively for the benefit of people and the environment, top management must take a comprehensive approach (Chaudhary et al., 2019).

The current study has found that green values have a moderating effect on green culture and that green culture is strongly correlated with green organisation citizenship behaviour. An organisation can be made more sustainable by implementing appropriate green policies that are complemented by green ideals and culture (Raut & Mangla, 2020). Green knowledge sharing is possible through Green HRM. It has a mediating effect between green HRM and green service behaviour. Poor green HRM practices are associated with environmental incompetence. Research indicates that an organization's capacity to compete in the green market can be greatly increased through employee involvement, leadership, performance management, incentives, compensation, and training and development. When green HRM is implemented, employees become more environmentally conscious and incorporate it into their daily routines. A green innovative culture must mediate a fully implemented green HRM programme in order to maximise a company's green competitive advantages (Hooi et al., 2021). According to Srividya, (2022), there is a high correlation between education and the qualification of employees towards green banking practices. Green HRM has the potential to create environmental awareness, commitment level, and willingness to contribute towards greening the organisation. Measures such as green innovation, human capital, and political risk are the supportive elements for energy efficiency which leads to a reduction in carbon footprint. The adoption of several human resources functions properly makes the implementation of green HRM successful (Khan et al., 2024).

Recent studies indicate that organisational, and educational factors significantly influence green human resource management methods. Organisations implemented green initiatives as a mandatory practice to attain sustainability (Amrutha & Geetha, 2020). To promote green ethics in the workplace, green sustainable performance is crucial (Jabeen et al., 2022). Corporate sustainability is found to be significantly impacted by the adoption of green strategies and a green corporate culture (Yong et al., 2022). From the review of literature it has been identified that organisational learning culture and green separation are two most critical components of the circular economy, and they have the potential to affect all other green HRM elements. The

academic interest in GHRM is rising as seen by the sharp rise in publication volume that began in 2018 and is continuing to expand. Mostly quantitative methodologies are used to conduct studies on the Green HRM. Most of the studies are done in Asian countries, as well as in the manufacturing and service sectors. Practices like telecommunicating and virtual meetings are said to have significant positive effects on the environment as well as a cost-effective strategy adopted by the HR professionals. From the literature, the researchers have identified that employee environmental commitment has a positive impact on employee turnover intentions also. In the banking sector, ENVP (environment performance) can be predicted by green HRM practices. The organization's financial success is also impacted by Green HRM practices in addition to its environmental performance (Jora et al.,2023).

3. Statement of the problem

As indicated in the brief review of literature, organisations are realising the significance of environmental issues these days. The buzzword of the twenty-first century that has permeated our daily lives and workplaces is "environmental issues." We now must address environmental issues before they worsen because our lifestyle, both personally and professionally, has begun to negatively impact the environment. Green human behaviour is essential for organisations to improve performance and reduce environmental challenges which are possible by implementing Green HRM successfully. To develop a green workforce it is important to know the most important factors responsible for creating green ethnology within the organisation.

Objectives of the study

- To gain an understanding of green human resource management from a literature perspective.
- To identify the factors that influence the adoption of Green HRM in the banking industry.

4. Research Methodology

The study employed a mixed technique of research design to conduct the investigation. Study 1 is about the quantitative aspects and, the study 2 is about the qualitative aspects. Both exploratory and descriptive research have been used for this study.

5. Results

5.1 The Qualitative Study (Study 1)

The brief literature review has provided an insight to determine factors influencing adoption of GHRM in the banking sector. To have better understanding of the elements influencing Green HRM, in-person interviews were conducted. Twenty two officers working in banking sector in Assam, India were interviewed with a schedule.

To have insight and first-hand information on the practices of Green HRM initially the researchers conducted 22 personal interviews in the selects banks viz. SBI, UCO, ICICI and HDFC. From the discussions, with the branch managers and officers it was found that mostly all the bank branches started Green practices in their regular working operations.

- a. SBI has taken the initiatives of Green rupee term deposit, Green Pin generation etc. The bank has invested heavily in the areas of digital application (YONO), employee engagement, organisational sustainability, carbon footprint reduction, and waste management.
- b. Major initiatives taken by UCO bank are to make employees aware of Green practices, reduce paperless work, and convert from a conventional setup to a modern eco-friendly structure.

- c. Green initiatives taken by HDFC bank are as follows: Digital Banking, GHG Sequestration, Energy Reduction, and Renewable Energy Generation. Apart from these, HDFC banks also promote Green HRM by using green recruitment, conducting online training, designing ESG policy framework (Environmental, Social & Governance Policy), Performance Appraisal based on the environmental and social criteria achieved by the employees, reducing paper waste emissions, tree plantation, energy efficient space cooling measures, efficient data centers, green buildings.
- d. Green initiatives undertaken by ICICI bank are as follows: environment conservation to reduce carbon footprint through the 3 R (Reduce, Reuse, Recycle) approach, integrated ecological and environmental strategies, enhancing renewable energy usage.

1. Understanding of GHRM.
2. Green HRM Practices within the bank.
3. Use of E-copies for day-to-day operations.
4. Green Initiatives by the employees.
5. Green recruitment, selection, training and development.
6. E-recruitment.
7. Green recruitment as a challenge.
8. Practice of E-copies, E-mail.
9. Paperless work in routine job.
10. Save Electricity.
11. Practice of Double-sided photocopies
12. Eco-friendly practices.
13. Green teams.
14. E-HRM (in day to dayoperation).
15. Green training & development.
16. Green training is the priority.
17. Awareness of green training & development.
18. Availability of online training material.
19. Conducting Workshop.
20. Green performance appraisal techniques.
21. Green Achievement.
22. Green Initiatives.
23. Green Reward System.
24. Online payroll system.
25. Recruit candidates with sustainability experience.
26. Top management support.
27. Complexity & Difficulty in nature.
28. Casual Approach of GHRM.
29. Costly
30. Expensive process.
31. Encourage Green Initiatives.

Factors Affecting Adoption of Green Human Resource Management (identified through literature review and findings from interviews with service providers).

Figure 1: Theoretical Model of the Study

Factors Affecting Adoption of Green HRM

Source: Drawn by researchers

The practices of the select banks are more or less in tune with the findings from literature review. In view of the adoption of eco-friendly measures by the select banks and sharing of

practical insights by functionaries in the interviews, the researchers have outlined a theoretical model which is presented in Figure 1.

5.2 The Quantitative Study (Study 2)

The questionnaire for the study was developed with inputs found from the interviews and literature review. The questionnaire was validated and modified with inputs received from 11 officers who had previously participated in in-person interviews. There are 31 variables in the final questionnaire as indicated in the Theoretical Model developed for this study (Figure No 1). Purposive sampling was used to gather data from employees at four distinct banks- SBI, UCO, HDFC, and ICICI Bank. A total of 109 responses were collected which have been considered suitable pertaining all the data needed for this investigation. Responses were captured by using a 5-point Likert scale. Online and offline methods were used to get responses from the aforementioned banks. IBM SPSS statistics 20 has been used to analyze the data. After conducting the reliability test and finding acceptable results, several statistical tests, including Principal Component Analysis, KMO, and Bartlett's test have been used to identify the factors affecting the adoption of Green human resource management in the banking sector. To minimize the number of factors based on high loadings on each factor Eigenvalue criterion, the Scree test is used.

5.2.1 Data Analysis and Interpretation

5.2.1.1 Reliability

Cronbach's alpha is a measure of internal consistency. It is also considered to be a measure of scale reliability. Cronbach's alpha ranges between 0 and 1. In general, Cronbach's alpha value of more than 0.7 is considered as acceptable. A high level of alpha shows the items in the test are highly correlated. Reliability results are summarised in Table 1. A construct is reliable if the Alpha (α) value is greater than 0.70 (Hair et al., 2013). The Green Practices scale with seven items ($\alpha=.881$) and the Factors affecting the adoption of Green HRM scale with thirty-one items ($\alpha=.950$) were found reliable.

Table 1: Reliability Statistics

Constructs	No. of Items	Alpha (α)
GP (Green Practices)	07	.881
GF (Green Factors)	31	.950

Source: Computed from Primary Data

Table 2: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.873
Bartlett's Test of Sphericity	Approx. Chi-Square	3731.873
	df	465
	Sig.	.000

Source: Computed from Primary Data

5.2.1.2 KMO & Bartlett's Test

KMO test is a measure that has been intended to measure the suitability of data for factor analysis. In other words, it tests the adequacy of the sample size. Table 2 data shows that the KMO value is 0.873, which is above the cutoff of 0.5 and is regarded as a good outcome. That

guarantees that a factor analysis can be performed in the present inquiry. Yet Bartlett's test results indicate.000, which is less than 0.005, indicating that the variables' forming factors are sufficient. The results show that there isn't much of a connection or coefficient between the items.

Table 3 : Communalities

Communalities		
	Initial	Extraction
Understanding of GHRM	1.000	.753
Green HRM Practices within the bank	1.000	.760
Use of E-Copies for day-to-day operations	1.000	.766
Green Initiatives by the employees	1.000	.832
Green recruitment, selection, training and development	1.000	.757
E-recruitment	1.000	.646
Green recruitment as a challenge	1.000	.703
Practice of E-copies, Email	1.000	.808
Paperless Work in routine job	1.000	.821
Save Electricity	1.000	.809
Practice of Double sided photocopies	1.000	.843
Eco-friendly practices	1.000	.870
Green Teams	1.000	.851
E-HRM(in day to day operation)	1.000	.759
Green training & development	1.000	.764
Green training is the priority	1.000	.864
Awareness of green training & development	1.000	.857
Availability online training material	1.000	.735
Conducting Workshop	1.000	.769
Green performance appraisal techniques	1.000	.789
Green Achievement	1.000	.825
Green initiatives	1.000	.820
Green Reward System	1.000	.767
Online payroll system	1.000	.815
Recruit candidates with sustainability experience	1.000	.784
Top management support	1.000	.762
Complexity & Difficulty in nature	1.000	.663
Casual Approach of GHRM	1.000	.771
Costly	1.000	.743
Expensive Process	1.000	.767
Excourage Green Initiatives	1.000	.780

Extraction Method: Principal Component Analysis.

Source: *Computed from Primary Data*

5.2.1.3 Communalities

Table 3 represents communalities which indicates the amount of variance in each variable that is accounted for by the components. Here, we have the value of Initial and Extraction communalities. Initial commonality explains the estimates of the variance in each variable that is accounted for by all the components of Principal Component Analysis. Here the initial communality value is equal to 1. The extraction communalities are the estimates of the variance in each variable accounted for by the components. The extraction communalities values are:

For variable 1 (Understanding of GHRM) is 0.753, and for variable 2 (Green HRM Practices within the bank) is 0.766 which is more than 0.05. The High value of extraction communalities indicates the components represent the variable well. In table 3 we can see the value of all the variables is more than 0.5 which is favourable for our study.

Table 4 : Total Variance Explained**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1. Understanding of GHRM	14.237	45.925	45.925	14.237	45.925	45.925	9.881	31.874	31.874
2. GreenHRM Practices within the bank	5.452	17.587	63.512	5.452	17.587	63.512	5.444	17.561	49.435
3. Use of E-COPIES for day to day operation	1.970	6.353	69.865	1.970	6.353	69.865	5.292	17.070	66.504
4. Greeninitiatives by the employees	1.571	5.067	74.932	1.571	5.067	74.932	1.893	6.107	72.612
5. Green recruitment, Selection & Training & Development	1.022	3.297	78.229	1.022	3.297	78.229	1.742	5.618	78.229
6. E-recruitment	.840	2.708	80.938						
7. Green recruitment as a challenge	.697	2.249	83.186						
8. Practice of e-copies, E-mail	.576	1.860	85.046						
9. Paper less work in routine job	.487	1.572	86.618						
10. Save Electricity	.468	1.509	88.127						
11. Practice of Double Sided Photocopies	.430	1.387	89.515						
12. Eco-friendly Practices	.381	1.230	90.745						

13. Green teams	.350	1.129	91.874						
14. E-HRM(inday to day operation)	.318	1.025	92.898						
15. Green Training & Development	.270	.870	93.768						
16. Green training is the priority	.255	.823	94.591						
17. Awareness of green training & development	.214	.691	95.282						
18. Availability of online training materials	.192	.621	95.903						
19. Conducting Workshop	.185	.597	96.500						
20. Green Performance Appraisal techniques	.167	.539	97.039						
21. Green Achievement	.155	.502	97.540						
22. Green Initiatives	.119	.385	97.925						
23. Green Reward System	.111	.358	98.283						
24. Online Payroll system	.104	.336	98.618						
25. Recruit Candidates with sustainability experience	.096	.308	98.926						
26. Top management support	.079	.255	99.182						
27. Complexity & Difficulty in nature	.074	.237	99.419						
28. Casual approach of GHRM	.061	.197	99.616						
29. Costly	.055	.179	99.795						
30. Expensive Process	.033	.108	99.903						
31. Encourage Green Initiatives	.030	.097	100.000						

Extraction Method: Principal Component Analysis.

Source: *Computed from Primary Data*

5.2.1.4: Total Variance Explained

Table 4 demonstrates the eigenvalues and total variance explained. The extraction method of factor analysis used in this study is principal component analysis. The data set for the eigenvalue > 1 consists of five distinct linear components after extraction and rotation. A total of 78.229% of the variance has been accounted for by the five components that are recuperated. It is advised that the retained components account for a minimum of 50% of the overall variation. The outcome demonstrates that five factors can account for 78.229% of the common variance shared by thirty-one variables. It indicates that by reducing up to 5 variables out of 31 variables still, retained upto 78% of the information (5 factors are contributing more towards green hr). From the initial solution, we can understand that the final solution will extract not more than five factors. The first component has explained 31.874 % of the total variance with eigenvalue 14.237. The second component has explained 17.561 % with eigen value 5.452. The third component has explained 17.070 % with eigen value 1.970. The fourth component has explained 6.107 % with eigen value 1.571 and The fifth component has explained 5.618 % with eigen value 1.022.

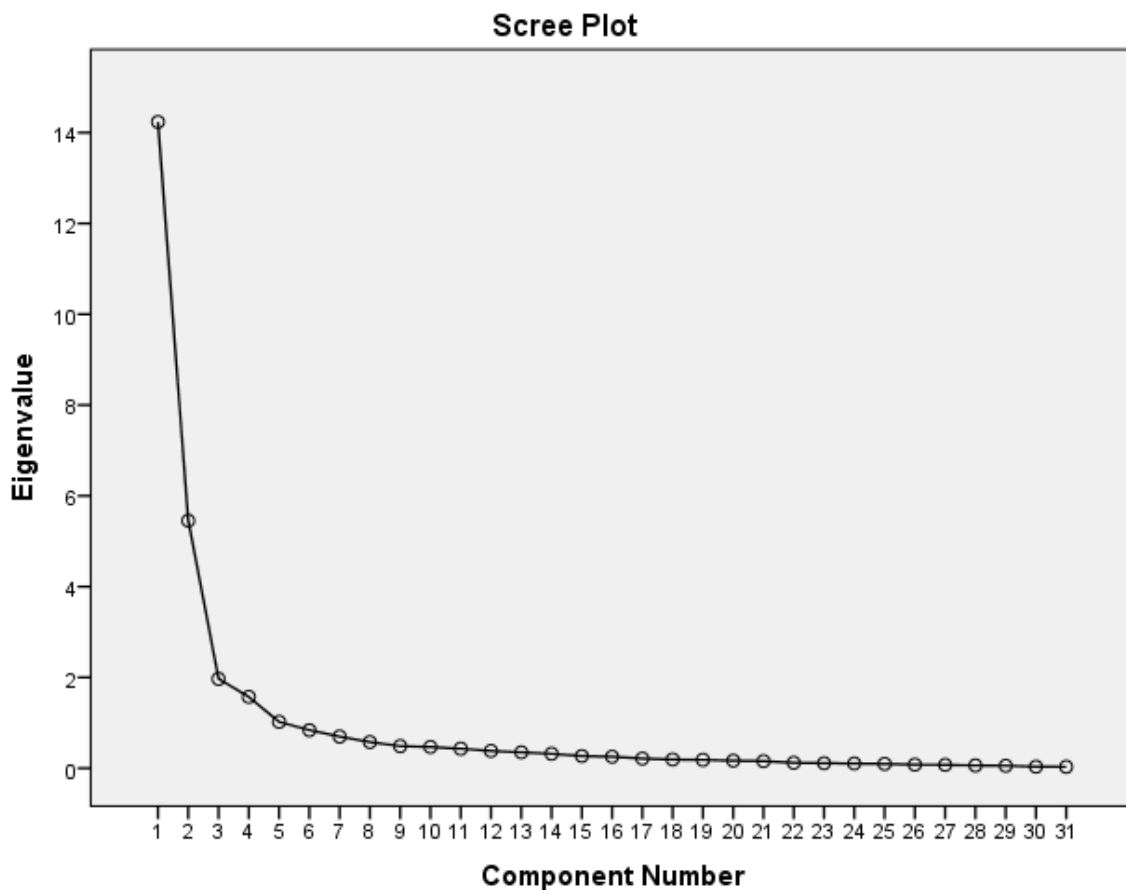


Figure 2 : Scree Plot

From the above figure it is quite evident that on x-axis, we have the component number and on the y-axis we have Eigenvalue. From scree plot we can see that after the fifth factor, the line becomes practically flat, implying that each subsequent factor accounts for a smaller and decreasing proportion of the total variance.

Table 5 : Rotated Component Matrix
Rotated Component Matrix^a

	Component				
	1	2	3	4	5
Paperless work in routine job	.847	.101	.240	-.094	.165
Green performance appraisal techniques	.845		.243	.066	-.088
Green Achievement	.814	-.155	.333	.064	-.152
Recruit candidates with sustainability experience	.811		.352		
Green Reward System	.789	-.065	.184		-.324
Green recruitment as a challenge	.785		.149	.203	.148
Green initiatives	.779		.438	.113	.087
Green training & development	.767		.340	.241	
Practice of E-copies, Email	.739	.127	.304		.392
Conducting Workshop	.729	-.113	.306	.360	
Online payroll system	.721	.144	.326	-.082	.402
E-recruitment	.654	.124		.450	
Awareness of green training & development	.637		.377	.545	.098
E-HRM(in day to day operation)	.635	.084	.290	.334	.391
Availability of online training material	.632	.160	.156	.246	.475
Green training is the priority	.622		.308	.606	.111
Green recruitment, selection, training and development	.502	.155	.476	.480	.157
Green HRM Practices within the bank		.862			.113
Green Initiatives by the employees	-.089	.855	.101		-.172
Top management support		.850	-.137		.137
Casual Approach of GHRM		.848			.215
Understanding of GHRM	.115	.809	.102	.064	.267
Complexity & Difficulty in nature		.801		.123	-.077
Costly		.747		-.109	-.413
Expensive Process	.065	.671		-.248	-.500
Practice of Double sided photocopies	.315		.848	.060	.143

Save Electricity	.270	-.079	.843	-.125	-.061
Encourage Green Initiatives	.407		.779	.225	-.077
Eco-friendly practices	.411	-.083	.771	.312	
Green Teams	.445	-.063	.747	.301	
Practice of E-Copies, E-mail	.298	.171	.690		.412

Extraction Method: Principal Component Analysis.

Source: Computed from Primary Data

5.2.1.5 Principal Component Analysis

Table 5 represents, approach to factor rotation. It is also known as Factor Loading. Varimax rotation method has been used to get the optimum component matrix which is Five. The variables with large loading values > 0.40 indicate that they are representative of the factor.

- a) The first component represents paperless work in routine job and green performance appraisal techniques.
- b) The second component represents a green HRM Practices within the Bank.
- c) The Third component represents practice of double sided photocopies.
- d) The fourth component represents awareness of green training and development; and,
- e) The Fifth component represents availability of online training material.

6. Findings of the study

6.1 Objective 1:- To gain an understanding of GHRM from a literature perspective.

Research conducted in both developed and developing nations has contributed to our understanding of green HRM. Green HRM practices enhance life quality in addition to aiding in the achievement of the sustainability goal. According to the literature review, managers need to put into effect a system of incentives, green orientation, and green targets for employees to promote environmentally friendly behavior. Since HR professionals are highly conscious of environmental challenges in today's world, they began integrating green HRM as a strategically appropriate way to green the workplace. The green revolution, which was embraced by practically every industry between 2000 and 2010, is what gave rise to the need for green human resources. Green HRM can be interpreted from a variety of perspectives, including operational, financial, and sustainable. In addition to being a recruiting tool, it also affects the organization as a whole.

The literature review consolidates the understanding of GHRM in terms of the following.

- i. An essential component of emerging HR Policy
- ii. A set of eco-friendly tools to perform HR tasks
- iii. An enabler to promote organization wide ethical behaviour
- iv. An enabler to ensure organisational sustainability

6.2 Objective 2:-Factors that influence the adoption of Green HRM

To achieve this goal, findings from both the qualitative and quantitative studies have been used. The qualitative study based on literature review and interviews with the industry functionaries helped in developing the theoretical framework with 31 variables that could have an impact on Green HRM in the banking industry. Green HRM is positively impacted by every component. Based on each component's high loading, statistical tests were used to minimize

the number of components. The researchers found that five out of the thirty-one criteria have the greatest impact on the adoption of Green HRM.

- i. Paperless work in routine job and green performance appraisal techniques.
- ii. Green HRM practices within the Bank.
- iii. Practice of double sided photocopies.
- iv. Awareness of green training and development and,
- v. Availability of online training material.

7. Conclusion

The present study gives an in-depth comprehension of Green HRM from both a qualitative and quantitative aspect as well. A mixed method is useful in developing a holistic perspective. Insights received from a brief review of indicative extant literature on GHRM helped in understanding the influencers of GHRM. However, the findings from the interviews with banking service providers yielded better insights to develop the theoretical framework with 31 variables. After the conduct of a series of tests, five factors have been finally identified. However, the set of findings will have implications for future research in terms selection of sample banks, sample respondents, their job positions, and places of work. Nevertheless, it is very important to know that awareness of green training and development coupled with the availability of online materials is a strong enabler for GHRM. In addition to that tools like promoting double sided photocopying and paperless work can have far reaching impact on developing favourable dispositions among banking sector employees on GHRM.

References:

- Amrutha, V. N., & Geetha, S. N. (2020). *A systematic review on green human resource management: Implications for social sustainability. Journal of Cleaner production, 247, 119131.*
- Appelbaum, E.; Bailey, T.; Berg, P.; Kalleberg, A.L. *Manufacturing Advantage: Why High-Performance Work Systems Pay off* ; Cornell University Press: Ithaca, NY, USA, 2000; pp. 25–63.
- Aslam, W., & Jawaid, S. T. (2023). *Green banking adoption practices: improving environmental, financial, and operational performance. International Journal of Ethics and Systems, 39(4), 820-840.*
- Aslam, W., & Jawaid, S. T. (2023). *Let's go green: achieving consumer-related performance outcomes in banks. International Journal of Ethics and Systems.*
- Bahuguna, P. C., Srivastava, R., & Tiwari, S. (2023). *Two-decade journey of green human resource management research: a bibliometric analysis. Benchmarking: An International Journal, 30(2), 585-602.*
- Chaudhary, R. (2019). *Green human resource management in Indian automobile industry. Journal of Global Responsibility, 10(2), 161-175.*
- Edwards, J.R.; Shipp, A.J. *The relationship between person-environment fit and outcomes: An integrative theoretical framework. In Perspectives on Organizational Fit; Psychology Press: San Francisco, CA, USA, 2007; pp. 209–258.*
- Henderson, K., & Loreau, M. (2023). *A model of Sustainable Development Goals: Challenges and opportunities in promoting human well-being and environmental sustainability. Ecological modelling, 475, 110164.*
- Hooi, L. W., Liu, M. S., & Lin, J. J. (2021, September 22). *Green human resource management and green organizational citizenship behavior: do green culture and green values*

- matter? *International Journal of Manpower*, 43(3), 763–785. <https://doi.org/10.1108/ijm-05-2020-0247>
- Islam, T., Khan, M. M., Ahmed, I., & Mahmood, K. (2021). Promoting in-role and extra-role green behavior through ethical leadership: mediating role of green HRM and moderating role of individual green values. *International Journal of Manpower*, 42(6), 1102-1123.
- Jora, R. B., Mittal, P., Kaushal, S., & Raghuvaran, S. (2023, March). Tech-Enabled Sustainable HR Strategies: Fostering Green Practices. In 2023 9th International Conference on Advanced Computing and Communication Systems (ICACCS) (Vol. 1, pp. 2496-2501). IEEE.
- Khan, M. H., & Muktar, S. N. (2020). A bibliometric analysis of green human resource management based on scopus platform. *Cogent Business & Management*, 7(1), 1831165.
- Mehrajunnisa, M., Jabeen, F., Faisal, M. N., & Mehmood, K. (2022). Prioritizing green HRM practices from policymaker's perspective. *International Journal of Organizational Analysis*, 30(3), 652-678.
- Mishra, P. (2017, November 6). Green human resource management. *International Journal of Organizational Analysis*, 25(5), 762–788. <https://doi.org/10.1108/ijoa-11-2016-1079>
- Muisyo, P. K., Qin, S., Ho, T. H., & Julius, M. M. (2021, July 8). The effect of green HRM practices on green competitive advantage of manufacturing firms. *Journal of Manufacturing Technology Management*, 33(1), 22–40. <https://doi.org/10.1108/jmtm-10-2020-0388>
- Ojo, A. O., Tan, C. N. L., & Alias, M. (2022). Linking green HRM practices to environmental performance through pro-environment behaviour in the information technology sector. *Social Responsibility Journal*, 18(1), 1-18.
- Park, H., & Kim, J. D. (2020). Transition towards green banking: role of financial regulators and financial institutions. *Asian Journal of Sustainability and Social Responsibility*, 5(1), 1-25.
- Paulet, R., Holland, P., & Morgan, D. (2021). A meta-review of 10 years of green human resource management: is Green HRM headed towards a roadblock or a revitalisation?. *Asia Pacific Journal of Human Resources*, 59(2), 159-183.
- Pham, N. T., Hoang, H. T., & Phan, Q. P. T. (2020). Green human resource management: a comprehensive review and future research agenda. *International Journal of Manpower*, 41(7), 845-878.
- Rana, G., & Arya, V. (2023, July 14). Green human resource management and environmental performance: mediating role of green innovation – a study from an emerging country. *Foresight*, 26(1), 35–58. <https://doi.org/10.1108/fs-04-2021-0094>
- Raut, R. D., Gardas, B., Luthra, S., Narkhede, B., & Kumar Mangla, S. (2020). Analysing green human resource management indicators of automotive service sector. *International Journal of Manpower*, 41(7), 925-944.
- Shah, N., & Soomro, B. A. (2022, October 5). Effects of green human resource management practices on green innovation and behavior. *Management Decision*, 61(1), 290–312. <https://doi.org/10.1108/md-07-2021-0869>

- Shah, P., Singh Dubey, R., Rai, S., Renwick, D. W., & Misra, S. (2024). Green human resource management: A comprehensive investigation using bibliometric analysis. *Corporate Social Responsibility and Environmental Management*, 31(1), 31-53.
- Sharma, M. (2018). Development of a 'Green building sustainability model' for Green buildings in India. *Journal of cleaner production*, 190, 538-551.
- Singh, M. P., Mishra, A. K., & Keshri, K. (2024). Association of Green Hrm Practices with Organizational Effectiveness in Banking Sector: A Case Study of Sbi.
- Subramanian, N., & Suresh, M. (2022). The contribution of organizational learning and green human resource management practices to the circular economy: A relational analysis—evidence from manufacturing SMEs (part II). *The Learning Organization*, 29(5), 443-462.
- Suleman, A. R., Amponsah-Tawiah, K., & Ametorwo, A. M. (2023). The role of employee environmental commitment in the green HRM practices, turnover intentions and environmental sustainability nexus. *Benchmarking: An International Journal*.
- Susanto, E., Rofaida, R., & Senen, S. H. (2022). Green human resources management in hospitality industries: a systematic literature review. *European Journal of Human Resource Management Studies*, 5(4).
- Thompson, B., *Exploratory and confirmatory factor analysis: Understanding concepts and application*, American Psychological Association, Washington D.C., 2004.
- UNDP. 2024. Sustainable Development Goals. New York: United Nations Development Programme, <https://hdr.undp.org>
- Wen, J., Hussain, H., Waheed, J., Ali, W., & Jamil, I. (2021, September 21). Pathway toward environmental sustainability: mediating role of corporate social responsibility in green human resource management practices in small and medium enterprises. *International Journal of Manpower*, 43(3), 701–718. <https://doi.org/10.1108/ijm-01-2020-0013>
- Yong, J. Y., & Mohd-Yusoff, Y. (2016, October 3). Studying the influence of strategic human resource competencies on the adoption of green human resource management practices. *Industrial and Commercial Training*, 48(8), 416–422. <https://doi.org/10.1108/ict-03-2016-0017>
- Yong, J. Y., Yusliza, M. Y., & Fawehinmi, O. O. (2019, June 13). Green human resource management. *Benchmarking: An International Journal*, 27(7), 2005–2027. <https://doi.org/10.1108/bij-12-2018-0438>
- Yong, J. Y., Yusliza, M. Y., Ramayah, T., Farooq, K., & Tanveer, M. I. (2022, July 19). Accentuating the interconnection between green intellectual capital, green human resource management and sustainability. *Benchmarking: An International Journal*, 30(8), 2783–2808. <https://doi.org/10.1108/bij-11-2021-0641>
- Yusliza, M. Y., Othman, N. Z., & Jabbour, C. J. C. (2017, November 13). Deciphering the implementation of green human resource management in an emerging economy. *Journal of Management Development*, 36(10), 1230–1246. <https://doi.org/10.1108/jmd-01-2017-0027>

Happiness at Work and Its Impact on Innovative - Work Behaviour Among Academics: An Empirical Investigation

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Abstract

In the dynamic contemporary environment, organisations grapple with various challenges such as technological advancements and globalisation that can significantly impact their competitiveness and overall well-being. Existing literature inter alia highlights the efficacy of fostering innovative work behaviour (IWB) as a strategic response to these challenges, recognizing that employees play a pivotal role in driving innovation within an organisation. In tandem with this, studies also indicate that positive work attitudes among employees serve as critical precursors to IWB. However, there is a noticeable gap in research exploring employee attitudes as predictors of IWB, and literature contends that broader attitudinal constructs like Happiness at work (HAW) have been overlooked in previous studies that can effectively forecast IWB. Against this backdrop, the present study seeks to examine the relationship between HAW, a comprehensive attitudinal construct, and IWB. Data for the study were collected from faculty members of higher educational institutions. A response rate of 62.5 per cent was achieved with the collection of 250 questionnaires. Using the PLS-SEM, results revealed that HAW has a positive and significant impact on IWB. These findings suggest that a positive and happy workforce is linked to a notable increase in IWB, emphasizing the importance of fostering workplace happiness for promoting innovative behaviours among employees.

Keywords: *Innovative work behaviour, Happiness at work, Engagement, Job satisfaction, Affective organisational commitment*

1. Introduction

Innovation plays a pivotal role in the long-term success of the organisations (Amabile, 1988; West & Farr, 1989; Kontoghiorghes et al., 2005) with a potential to provide organisations with a competitive edge and enhance their performances (Storey et al., 2015). Literature amply endorses that employees serve as the main catalysts for innovation in organisations, and their collective innovative efforts, commonly referred to as Innovative Work Behavior (IWB) (Dixit & Upadhyay, 2021), play a substantial role in the overall success of the organisation (Abstein & Spieth, 2014). The innovative efforts led by employees have the potential to enable an organisation to stand out from its competitors and gain a competitive edge (Alfy & Naithani, 2021). All in all, IWB involves the initiatives undertaken by individuals and teams in organisations to bring forth new ideas, services, products, or work-related tasks, ultimately

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contributing to the organisation's overall innovativeness and resulting in positive outcomes (Farrukh et al., 2022) with a focus on translating new ideas into practical implementation and generating innovative results (De Jong and Den Hartog, 2010), in a bid to thrive and endure in the contemporary competitive business environment.

In the current global health scenario shaped by the pandemic, innovation is increasingly acknowledged as a valuable asset (Sharma et al., 2021). The incorporation of electronic applications and information technology in the education sector has amplified the necessity for fostering IWB (Khan et al., 2020). The establishment of new knowledge and the cultivation of a competitive culture within higher educational institutions rely on teachers' IWB (Blaskova, Blasko, Figurska&Sokol, 2015). Thurlings et al. (2014) put forth three primary justifications underscoring the significance of teachers' IWB. Firstly, it assists educators in staying abreast of dynamic changes in society. Secondly, it facilitates the adoption of new learning approaches and technologies. Thirdly, teachers' IWB is deemed crucial for fostering a competitive society, serving as the foundation for developing citizens as creative and innovative thinkers. Consequently, beyond global economic competition, developing nations must ensure that their higher education systems contribute to building a skilled workforce capable of meeting the evolving demands of the knowledge-based economy (Ibusa et al., 2020). Despite this imperative, there is a scarcity of studies exploring the factors contributing to IWB in higher education institutions (Dixit &Upadhyay, 2021).

Notwithstanding the above, research argues that various individual and organisational factors contribute to IWB. Notably, researchers have identified supervisory behavior (Scott & Bruce, 1994), job autonomy (Axtell et al., 2000), problem ownership (Dorenbosch et al., 2005), professionalism (Messmann, 2012), work knowledge and skill (Miller & Miller, 2020), training, selective staffing and rewards (Farrukh et al., 2021), and knowledge sharing (Aldabbas et al., 2021) as crucial predictors of IWB. Research also revealed that employees' positive attitudes act as the antecedents to their IWB (Pukkeeree et al., 2020; Mustafa et al., 2021; Yuan and Ma, 2022). However, limited efforts have been made to explore the role of employees' attitudes as predictors of IWB (Coetzer et al., 2018).

In addition to this, while scholarly discussions advocated for investigating broader attitudinal constructs as more effective predictors of behavioral constructs (Harrison et al., 2006), no research can be found examining the relationship between broader attitudinal constructs and IWB. This gap has also been highlighted in a recent research study conducted by Farooq et al. (2024). Therefore, the current study seeks to address this gap by examining the influence of a comprehensive attitudinal concept, happiness at work (HAW), as conceptualized by Fisher (2010), on IWB within the academic context of higher educational institutions in Jammu and Kashmir. HAW offers a holistic viewpoint of the work environment, encapsulating three vital facets: engagement, job satisfaction, and affective organizational commitment, as delineated by Salas-Vallina and Alegre in 2021. This comprehensive approach is instrumental in surmounting the compatibility principle, which posits that broader attitudinal constructs possess greater predictive efficacy for behavioral constructs, as asserted by Harrison et al. in 2006. The stability, certainty, accessibility, and direct derivation from personal experience render HAW dimensions capable of anticipating behavior, as suggested by Fisher in 2010. To our understanding, this study represents the first to examine the role of Fisher's conceptualisation of HAW on IWB. The theoretical framework for the study is based on social exchange theory (Blau, 1964), and this framework is detailed in the Literature Review section. The paper is structured as follows: initially, the authors presented the theoretical background and the development of hypotheses. Following that, the authors detailed their research methodology and presented the results. Finally, the study's implications are then discussed, followed by the limitations and suggestions for future research.

2. Literature Review

2.1 Innovative Work Behaviour (IWB)

Farr and Ford (1990) characterized IWB as a voluntary and proactive conduct displayed by individuals within an organisation. This behavior encompasses the creation, development, and implementation of fresh and valuable ideas, processes, products, or services. In contrast, Spreitzer's (1995) definition of IWB underscores its creative nature, emphasizing the generation of novel and original ideas or solutions distinct from previous approaches. Meanwhile, Scott and Bruce (1994) defined IWB as the production of practical and goal-oriented products, processes, or services resulting from problem identification and idea generation. This definition underscores the significance of innovation in enhancing organisational effectiveness and competitiveness, emphasizing a practical orientation.

This study adopts Janssen's (2000) definition of IWB, emphasizing its purposeful and intentional nature, along with a focus on shared benefits. According to this definition, individuals demonstrating IWB are motivated by a desire to introduce and implement new ideas that can yield advantages for themselves, their group, or the entire organisation. The definition is broken down into three phases: 1) Idea generation, involving brainstorming and problem-solving; 2) Idea promotion, primarily encompassing the sharing of ideas on formal platforms; 3) Idea realization, which involves the application of ideas and their transformation into reality.

2.2 Happiness at Work (HAW)

The fields of management and psychology have witnessed the emergence of various constructs that share considerable overlap with the overarching concept of happiness, as outlined by Fisher (2010). Notably, the construct such as job satisfaction, a well-established variable in organisational research, have been extensively studied as both an independent and dependent variable, holding significant importance and frequent usage (Brief, 1998; Cranny et al., 1992). Other constructs include subjective well-being, which encompasses an overall evaluation of life and experiences, considering both positive and negative emotions (Diener, 1984), and psychological well-being, defined as a sense of fulfillment or flourishing in life, encompassing aspects like purpose, autonomy, personal growth, positive relationships, and self-acceptance (Ryff, 1989). The array of constructs related to HAW may seem confusing due to this diversity. In addition to this, Warr (2011) noted that some positive attitude measures predominantly focus on positive affect and job satisfaction, neglecting crucial factors like meaningfulness at work. Harrison et al. (2006) introduced a higher-level concept that originates from job satisfaction and organisational commitment. They recommended that future studies delve into aspects such as job involvement or job identification within this overarching construct.

To address this complexity, Fisher (2010) introduced a higher-order construct of positive attitudes, namely, HAW, which encompasses engagement, job satisfaction, and affective organisational commitment. HAW is characterized as experiencing positive emotions related to the work tasks, the job along with its contextual elements, and a positive attitude towards the organisations as a whole. Fisher's definition also underscores the significance of the HAW compatibility principle, suggesting that a broad range of positive attitudes predict behavior more effectively when they align with each other (Harrison et al., 2006). In essence, employees exhibiting positive attitudes toward their work, job, and the organisation as a whole are more likely to be engaged, motivated, satisfied with their jobs, and inclined to display positive behaviors.

i. Engagement

Kahn (1990) described engagement as the psychological condition wherein organisational members fully commit themselves to their job roles, involving and expressing their physical,

cognitive, and emotional aspects during their performance of assigned tasks. Essentially, engagement, according to Kahn, is a process wherein employees bring their entire selves to their work, extending beyond mere physical presence. Engaged employees invest emotionally in their work, utilizing cognitive and emotional resources to perform their job to the best of their abilities. Similarly, Maslach et al. (2001) defined engagement in a manner akin to Kahn's description, portraying it as a psychological and emotional state involving a persistently motivating sense of fulfillment.

This study adheres to Schaufeli et al.'s (2002) definition of engagement, akin to Zigarmi et al.'s (2009) conceptualisation, understanding it as "employee work passion." In this context, engagement goes beyond mere job satisfaction or commitment; it entails a profound emotional connection and a robust sense of motivation and energy directed toward work. This perspective aligns with Warr's assertion that work should provide employees with a sense of purpose and fulfillment, emphasizing that meaningful work plays a crucial role in fostering engagement and passion.

ii. Job Satisfaction

In accordance with Locke's (1976) definition, job satisfaction is articulated as a state of enjoyment or positive emotional well-being arising from the assessment of one's job or job-related experiences." Spector (1997) offers a similar definition, characterizing job satisfaction as "the extent to which people like or dislike their jobs." Although Spector's definition echoes Locke's emphasis on the subjective evaluation of the job, it does not explicitly reference the emotional aspect or the appraisal process.

Contrastingly, Schriesheim and Tsui (1980) provide a definition of job satisfaction that emphasizes an emotional reaction tied to the appraisal of one's job or job experiences. This definition underscores the role of the appraisal process in shaping job satisfaction, asserting that it is not solely determined by the objective characteristics of the job but is also influenced by an individual's subjective evaluation and interpretation of their job experiences.

iii. Affective Organisational Commitment

Affective organisational commitment, as defined by Meyer and Allen (1991), is characterized as the emotional connection, sense of identification, and active engagement that an employee has with the organisation. Meyer et al. (2002) further characterize affective organisational commitment as "a psychological state that binds an individual to the organisation and its goals." They differentiate affective commitment from other forms of commitment, such as continuance and normative commitment. Continuance commitment is linked to the employee's assessment of the expenses involved in leaving the organisation, whereas normative commitment is based on the employee's feeling of duty or obligation to remain with the organisation. On the other hand, affective commitment is rooted in the employee's emotional connection to and identification with the organisation.

The current research adopts Allen and Meyer's conceptualization, considering affective organisational commitment as sentiments directed toward the entire organisation. Consequently, it emphasizes a distinct dimension from job satisfaction and engagement, focusing on the unique aspect of emotional attachment and identification with the organisation.

2.3 HAW as a Driver of IWB

Our research is grounded in the argument that HAW encompassing engagement, job satisfaction, and affective organisational commitment, leads to IWB. This relationship, as per the tenets of social exchange theory (Blau, 1964), suggests that employees, motivated by financial and socio-psychological recognition, demonstrate commitment and superior performance when they feel

valued by their organisation. Consequently, empirical evidence from various studies (Niu, 2014; Olanrewaju, Musa, 2019; Contreras, 2022; Yuan & Ma, 2022) supports the idea that employees who are satisfied with their job and organisation are more likely to exhibit IWB.

Employee engagement, recognized as a potent driver of favorable behavior, is expected to enhance productivity and performance compared to disengaged counterparts (Tims et al., 2012; Kim et al., 2013). The blend of cognitive, emotional, and physical energy characterizing employee engagement fosters a conducive environment for innovation and supports the development of novel ideas and practices (Hakanen et al., 2008). Scholars emphasize the multitude of benefits associated with innovative work behavior and work engagement for organisational success, warranting further investigation (Monica & Krishnaveni, 2019). Recent studies affirm a significant positive impact of work engagement on employees' IWB (Nazir & Islam, 2020; Pukkeeree et al., 2020; Contreras et al., 2022).

Job satisfaction, a key work-related attitude, combines affective and cognitive evaluations of job experiences (Brief, 1998). Scholars recognize job satisfaction as intrinsic motivation for employees' creativity (Amabile et al., 1996; Schleicher, 2004; Shipton et al., 2006). In alignment with social exchange theory, highly satisfied employees are expected to reciprocate through engagement in IWB (Cropanzano R, Mitchell, 2005; Mustafa et al., 2021). Positive relationships between job satisfaction and IWB have been observed in various studies (Niu, 2014; Mustafa et al., 2021).

Furthermore, employees committed to their organisation are more likely to display innovative behaviors (Xerri & Brunetto, 2011; Xerri & Brunetto, 2013). Affective organisational commitment (AOC) fosters positive emotions and attachment, akin to identifying with the organisation (Mustafa et al., 2021). Workers exhibiting strong Affective Organisational Commitment (AOC) are inclined towards intrinsic motivation, directing their efforts toward behaviors that contribute to the organisation, including knowledge sharing, thereby fostering Innovative Work Behavior (IWB) (Auger & Woodman, 2016). Past studies indicate that positive emotional experiences associated with AOC play a role in inspiring creative ideas (Baas et al., 2008). AOC also prompts employees to challenge existing norms and explore novel working methods and strategies (Park et al., 2018; Ribeiro et al., 2020). Yuan and Ma's (2022) study indicates that employees with affective commitment tend to be more innovative.

While numerous studies have explored various forms of positive attitudes as determinants of IWB, the broad attitudinal construct of positive attitudes as a determinant of IWB remains unexplored. Therefore, considering HAW as a higher-order construct encompassing engagement, satisfaction, and commitment to the organisation, it is proposed that this construct may be more relevant to study as an antecedent to IWB, given that higher-order constructs predict behavioral constructs more effectively (Harrison et al., 2006). In line with the above arguments, the following hypotheses are proposed:

H1. HAW is positively related to IWB.

H1 (a) Engagement is positively related to IWB.

H1 (b) Job satisfaction is positively related to IWB.

H1 (c) Affective organisational commitment is positively related to IWB.

3. Methodology

3.1 Sample and Target Population

The primary focus of this study was on faculty members of higher educational institutions in J&K. Both colleges and universities were considered as the sampling frame from which the

sample was drawn. In J&K, there are a total of 362 higher educational institutions, comprising 209 private colleges, 141 government colleges, and 12 universities. For the present study, 25 educational institutions were selected for data collection purpose, including 14 private colleges, 10 government colleges, and one university. The selection was proportionate to their representation in the overall population. These colleges and the university were chosen using Systematic Random Sampling for colleges and simple random sampling for the university. Once the sampling frame was established, the next step involved was determining the sample size. Cochran's (1963) formula, suitable for large populations, was used for sample size determination in this study. Following this formula, the sample size was determined to be 385. Survey questionnaires were distributed to 400 faculty members, and 250 responses were received, resulting in a response rate of approximately 62.5 percent. Data were collected using the Systematic Random Sampling technique, involving the selection of elements from a target population by choosing a random starting point and then selecting other elements at fixed intervals from each college and a university under study.

3.2 Measurement

In the current research, the measurement of IWB was facilitated through the implementation of the IWB scale developed by Janssen in 2000. This scale, comprised of nine items, was selected for its demonstrated high reliability and validity in assessing the phenomenon of interest. Moreover, the widespread usage of this instrument across diverse cultures and contexts as evidenced by studies conducted by Dincer and Orhan (2012), Al-Omari (2017), and Akram et al. (2018), further validated its appropriateness for the present investigation. The decision to adopt the Janssen IWB scale was informed by its established efficacy, both in terms of psychometric properties and alignment with the operationalization of the study's objectives, reinforcing its suitability as a robust tool for measuring IWB in the specific context under examination.

In the assessment of Happiness at Work (HAW), the Shortened Version of HAW (SHAW) scale, comprising nine items and developed by Salas-Vallina and Alegre in 2021, was employed for its suitability in operationalizing the study. The SHAW scale encompasses three key dimensions: Engagement, job satisfaction, and affective organizational commitment. Utilizing a five-point Likert scale, respondents rated their agreement levels on a spectrum from 1, "strongly disagree," to 5, "strongly agree." The decision to employ the SHAW scale was based on its alignment with the study's operational goals and its demonstrated reliability and validity across diverse international studies and contexts, as evidenced by various studies (Andre de Waal , 2018; Palihakkara N. and Weerakkody W.A.S., 2019, and Andres Salas-Vallina, 2020).

4. Results

The data underwent analysis through Partial Least Squares Structural Equation Modeling (PLS-SEM), which consists of two models: the measurement model and the structural model. However, literature suggests two different ways to measure unobserved latent constructs as reflective measurement model and formative measurement model. In this study, the authors have used disjoint two-stage approach for testing reflective-formative model.

4.1. Validating the Reflective Measurement Model

The association between constructs and their respective indicators was evaluated using a measurement model, as depicted in Figure 1. The measurement model requires the scale to demonstrate robust reliability and validity. In validating reflective constructs, four crucial aspects must be considered: the reliability of individual indicators, the internal consistency of latent variables, the convergent validity of the constructs, and the discriminant validity of the latent variables (Hair et al., 2021a).

Figure 1: Reflective Measurement Model

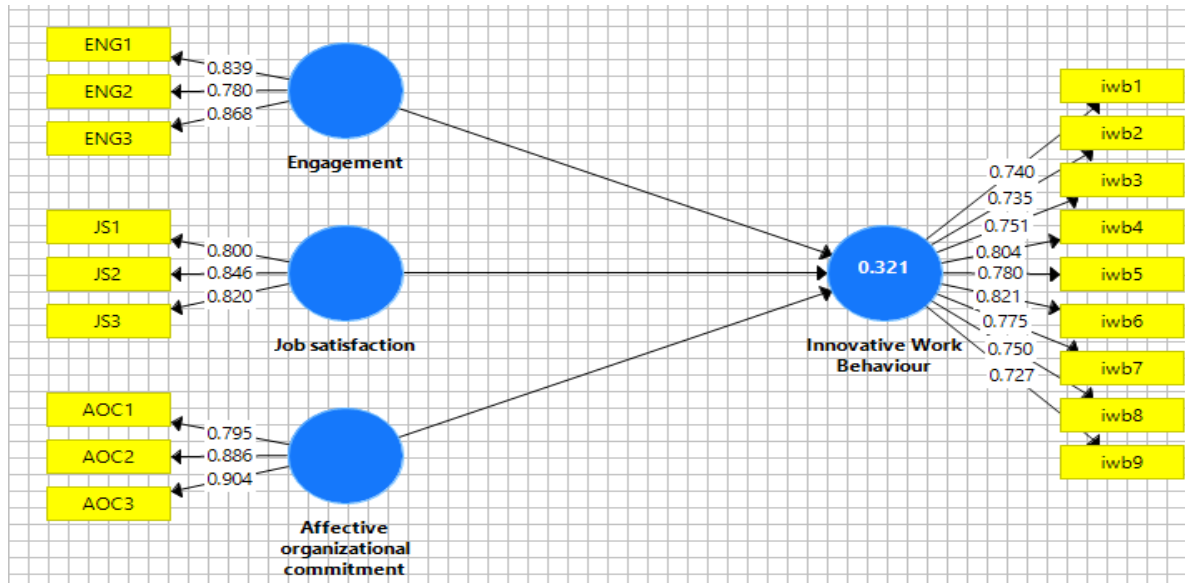


Table 1: Factor Loadings, VIF values, AVE, CR, and Alpha

Items	Loadings	VIF	AVE	CR	Cronbach's α
Innovative Work Behaviour					
IWB1	0.740	2.670	0.586	0.927	0.911
IWB2	0.735	3.201			
IWB3	0.751	3.216			
IWB4	0.804	2.595			
IWB5	0.780	2.615			
IWB6	0.821	3.190			
IWB7	0.775	3.017			
IWB8	0.750	3.088			
IWB9	0.727	2.944			
Happiness at Work					
ENG1	0.839	1.672	0.689	0.869	0.774
ENG2	0.886	1.461			
ENG3	0.904	1.728			
JS1	0.800	1.478	0.676	0.862	0.760
JS2	0.846	1.604			
JS3	0.820	1.546			
AOC1	0.795	1.688	0.745	0.897	0.830
AOC2	0.886	2.034			
AOC3	0.904	2.217			

The reliability of the scales employed in this study meets the established minimum requirement by Nunnall (1978): all constructs in the model surpass the criteria with composite reliability exceeding 0.7 and Cronbach's alpha surpassing 0.60 (Table 1). Convergent validity was also assessed using average variance extracted (AVE), and the AVE values for all variables exceeded the recommended threshold of 0.50 (Table 1). Additionally, all items demonstrated robust factor loadings, surpassing the designated threshold of 0.50 (Hair et al., 2010).

Table 2: Discriminant Validity Assessment by Fornell Larcker Criteria AVE > r

	AOC	ENG	IWB	JS
AOC	0.863			
ENG	0.421	0.830		
IWB	0.488	0.398	0.765	
JS	0.642	0.507	0.509	0.822

Note: Diagonals represent the square root of the AVE while the other entries represent the squared correlation

Table 3: 7 Discriminant Validity: Heterotrait-Monotrait Ratio of correlations
HTMT Ratio < 0.90

	AOC	ENG	IWB	JS
AOC				
ENG	0.521			
IWB	0.547	0.470		
JS	0.811	0.660	0.609	

Discriminant validity was assessed using Fornell-Larcker criteria (1981) and HTMT ratio. Through Fornell-Larcker criteria, the present study established discriminant validity as the Square-roots of AVE values (highlighted in bold in table 2) for constructs were greater than the correlations between the constructs. The HTMT (Heterotrait-Monotrait) ratio revealed that the correlation among all constructs was under 0.90, thus confirming discriminant validity (See Table 2).

4.2. Validating the Formative Measurement Model

In the present study, HAW is formulated as higher-order formative construct consisting of three dimensions viz. Engagement, job satisfaction and affective organisational commitment, as depicted in Figure 2. The Relevant criteria for the assessment of formative measurement model include the assessment of indicator collinearity, statistical significance and relevance of the indicator weights.

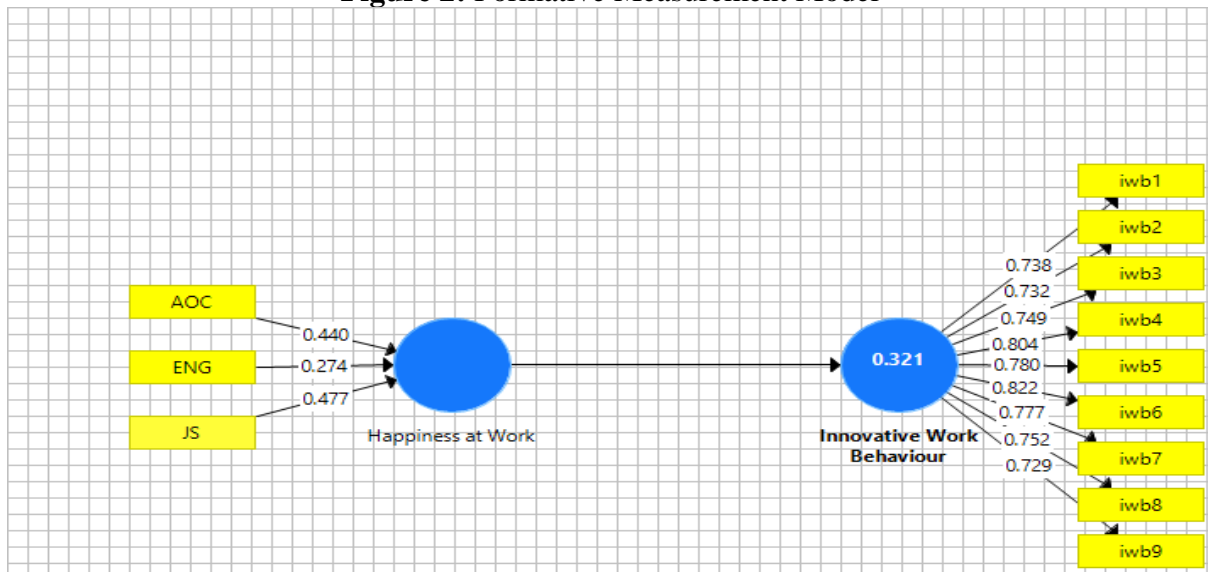
Table 4: Indicator Weights of Higher-Order Formative Construct

HOC	LOC's	Outer weights	T statistic	P Values	Outer Loadings	VIF
HAW	Engagement	0.274	1.930	0.054	0.701	1.374
	Job satisfaction	0.477	3.287	0.001	0.898	1.923
	Affective Organisational Commitment	0.440	2.845	0.004	0.862	1.738

***HOC, Higher order construct, LOC's, Lower order constructs

The first step in validating the formative measurement model is the assessment of the collinearity issues. In PLS-SEM, the level of collinearity is assessed through variance inflation factor (VIF). VIF values less or equal to 5 indicate no collinearity issue (Hair et al., 2021b). Since, all the VIF values were below 5 (Table 4), therefore there is no collinearity issue. Subsequently, the statistical significance and importance of outer weights were examined, following the methodology outlined by Sarstedt et al. (2019). All outer weights were deemed significant except for engagement. Moreover, the outer loadings for each indicator comprising HAW were statistically significant according to Sarstedt et al. (2019). Consequently, the higher-order construct was validated, affirming the reliability and validity of the reflective and formative measurement model.

Figure 2: Formative Measurement Model



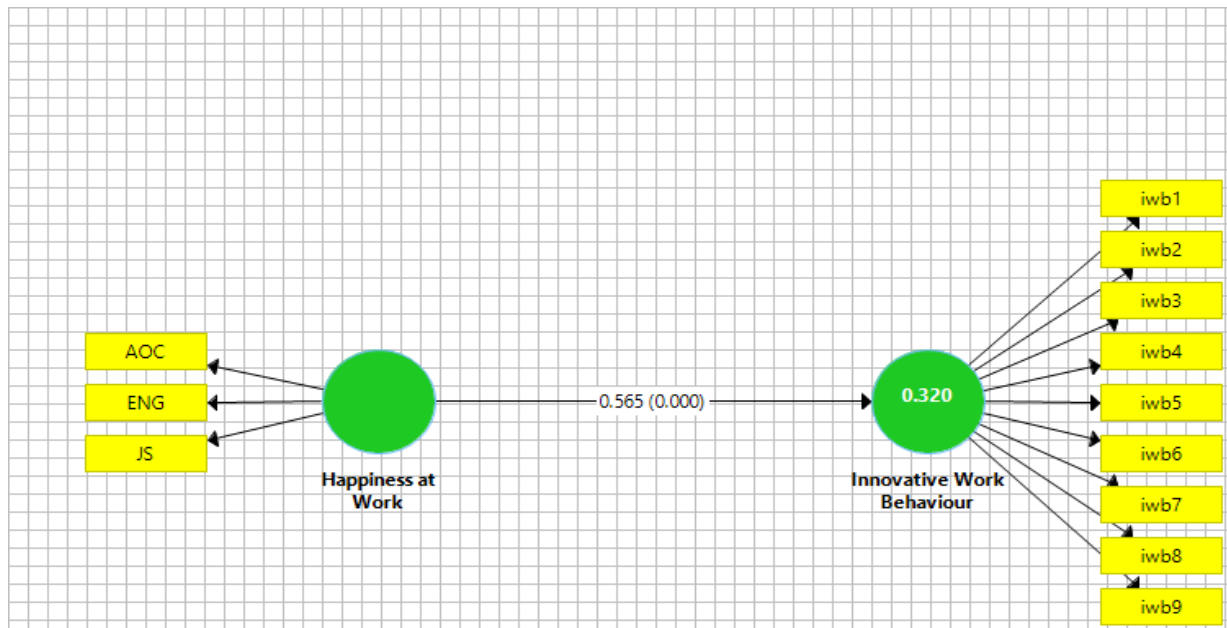
4.3 Structural Model Assessment

The first step in structural model assessment involves examining multicollinearity using VIF. The VIF values were below the threshold value of 5 (Hair et al., 2021b), signifying the absence of multicollinearity concerns. Following this, the study evaluates the hypotheses to determine the significance level using 5000 bootstrap samples at a 95% confidence interval. The results are highlighted in Figures 3 & 4, and Table 5. Table 5 indicates that all the hypotheses were accepted. The main hypothesis H1 was related to the association of HAW and IWB. This hypothesis was divided into three sub-hypotheses to investigate the association of three dimensions of HAW with the IWB.

Table 5: Path Coefficients

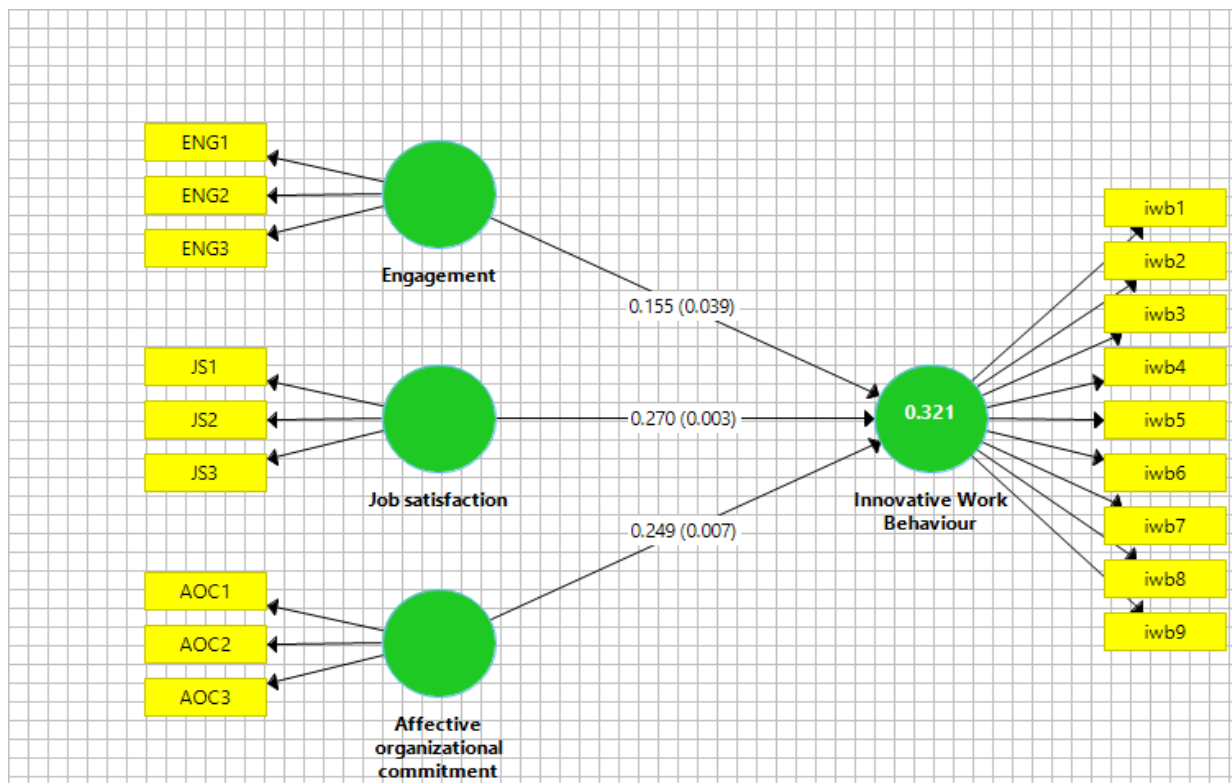
Hypotheses	Original Sample (β)	STDEV	T statistics	P values	Decision
HAW -> IWB	0.566	0.053	10.074	0.000	Supported
ENG -> IWB	0.155	0.077	2.022	0.043	Supported
JS -> IWB	0.270	0.090	3.004	0.003	Supported
AOC -> IWB	0.249	0.093	2.692	0.007	Supported

Figure 3: Structural Model (Higher-Order Construct)



For hypothesis H1, bootstrapping results revealed that there is a positive and significant impact of HAW on IWB ($\beta = 0.565$, $p < 0.001$) as shown in Table 5 and Fig 3. Next, explanatory power of the model was assessed. R-sq value for IWB was found as 0.320 which is over 0.1 (Falk & Miller, 1992). The assessment of predictive relevance was conducted through the Q-sq value, with the endogenous construct yielding a Q-sq value of 0.180. These Q-sq values, characterized as moderate according to Hair et al. (2021a), provide insights into the predictive capability of the model.

Figure 4: Structural Model (Lower-Order Constructs)



For hypotheses H1 (a), H1 (b) and H1 (c), the findings revealed significant impact of engagement ($\beta = 0.155$, $p = 0.039$), job satisfaction ($\beta = 0.270$, $p \leq 0.003$) and affective organisational commitment ($\beta = 0.249$, $p = 0.007$) on IWB (Table 5 and Fig 4). R-sq value of IWB was found as 0.321 which is above 0.1 (Falk & Miller, 1992). Stone-Geisser's Q-sq value for IWB was 0.180 which reveals moderate predictive relevance of exogenous variables for endogenous variables (Hair et al., 2021a).

5. Findings and Discussion

The primary objective of the present study was to investigate the influence of HAW on IWB among academics of higher educational institutions. The findings of this study indicated a positive and significant impact of HAW on IWB. It's noteworthy that this study contributes novelty to the existing literature, as there were no prior studies identified that specifically examined the association between HAW and IWB. HAW is conceptually defined by a combination of factors, including engagement, job satisfaction, and affective organisational commitment, as articulated by Fisher (2010). According to this definition, HAW encompasses a comprehensive set of positive attitudes that collectively contribute to shaping behavior. The interplay of these factors suggests that a harmonious alignment of positive attitudes is more effective in predicting behavior, a concept supported by Harrison et al. (2006). This theoretical perspective aligns with the study's findings, which reveal a positive influence of HAW on Innovative Work Behavior (IWB). The interconnectedness of engagement, job satisfaction, and affective organisational commitment within the construct of HAW contributes to fostering an environment conducive to innovative behaviors among academics. The study's results, therefore, not only validate the conceptualisation of HAW but also underscore the significance of a holistic approach to positive attitudes in predicting and promoting IWB.

Within the examination of HAW, the initial focus was on the dimension of engagement, revealing a noteworthy impact on IWB. This finding aligns with prior research by Pukkeeree et al. (2020), and Contreras et al. (2022). For example, Pukkeeree et al. (2020) conducted a study on human resource officers and found that employee engagement influenced IWB. In another study, Contreras et al. (2022) found that a positive relationship exists between employee work engagement and innovative work behaviour of Latin American female employees of B Corps.

The second dimension, job satisfaction, was also found as having a positive and significant impact on IWB, aligning with the research by Niu (2014) and Mustafa et al. (2021). For instance, Niu (2014) conducted a study within the service industry in Taiwan, revealing a positive influence of job satisfaction on individual innovative behavior. Additionally, Mustafa et al. (2021) investigated the relationship between job satisfaction and IWB among employees in small-sized enterprises, finding a positive correlation between job satisfaction and innovative work behavior.

Thirdly, the study revealed a positive and significant association between affective organisational commitment and IWB. This outcome resonates with the findings of Yuan and Ma (2022) and Torlak et al. (2023). For example, Yuan and Ma (2022) conducted a study among employees in small and medium-sized ICT (Information and Communication Technology) companies and their research results supported the notion that affective organisational commitment positively contributes to Innovative Work Behavior. In another study, Torlak et al. (2023) found that employees' affective commitment to their companies significantly positively affects their IWB.

These results collectively underscore the importance of multifaceted positive attitudes, encapsulated within the dimensions of engagement, job satisfaction, and affective organisational

commitment, in influencing IWB. The findings not only reinforce the significance of these individual components but also highlight the interconnected nature of positive attitudes in fostering a conducive environment for innovative work behaviors.

5.1 Theoretical Contribution

The study outcomes contribute to the HAW and IWB literature. First, the study's findings reveal that positive attitudes, including engagement, job satisfaction, and affective organisational commitment, exert a direct and significant positive impact on IWB. This aligns with previous research (Niu, 2014; Pukkeeree et al., 2020; Mustafa et al., 2021; Contreras et al., 2022; Yuan & Ma, 2022). In addition, the investigation also delves into the relationship between a broad attitudinal construct, namely, HAW and IWB among academic professionals in higher educational institutions. The results indicate a positive and significant association between HAW and IWB. Therefore, the current study suggests that employees experiencing HAW are more likely to exhibit engagement, satisfaction, and commitment in their roles, ultimately fostering IWB. The study underscores the importance for organisations to enhance HAW through strategies such as offering professional development opportunities, recognizing and rewarding employees, promoting work-life balance, and cultivating a positive and supportive workplace culture to encourage IWB. Notably, this study is the first to explore the higher-attitudinal construct of HAW as a predictor of IWB. Second, this study examines the higher education context, where a scarcity of research exists on the role of employees' attitudes as predictors of Innovative Work Behavior (IWB). Third, a notable contribution of the current study is the provision of new empirical evidence for the HAW and IWB scales within the context of higher education in India.

5.2 Managerial Implications

The recent COVID-19 pandemic and the inclusion of e-applications and information technology in education has heightened the demand for IWB, especially in the higher education sector, which has been significantly impacted. The findings of the present research found that the happiness of the faculty members at work has the significant impact on IWB. Therefore, it is emphasized that higher education managers should actively promote and maintain Happiness at Work (HAW) among academics to enhance their levels of IWB in the workplace.

To achieve elevated levels of HAW, measures to enhance it should be implemented. First, academic staff should be encouraged and supported through training, development, and motivational activities to boost employee engagement. Second, higher education managers need to be mindful of how Human Resource Management (HRM) policies and practices impact employee job satisfaction as their organisations evolve.

A third approach involves the implementation of High-Commitment Work Systems (HCWSs). HCWSs seek to create an enduring reciprocal relationship between organisations and employees, strengthening the organisational identity and psychological commitment of academics to a sustained affiliation with their institution. Such practices may foster stronger connections between academics and their organisation, leading to increased commitment. Finally, there should be a focus on exploring effective ways to enhance work-life balance for both women and men. Creating a supportive work environment allows academics to make the most of their leisure time, engage in personal relationships, or pursue hobbies, ultimately recharging their personal energy and fostering positive emotions. This approach is expected to enable higher education managers to attain elevated levels of HAW, consequently contributing to higher levels of IWB among academics.

6. Limitations and Future Research Directions

The study encounters three limitations. Firstly, self-reported questionnaires were employed to measure the two constructs, potentially introducing response distortion. Future research should explore alternative methodologies, such as multi-level approaches. Secondly, the primary objective of this study was to identify factors influencing IWB. However, IWB could be influenced by additional variables that were not taken into consideration. Hence, there is an imperative for continuous exploration into the determinants of IWB. Finally, while findings of the present study provide important insights into the relationship between HAW and IWB in the higher education context, it is important to replicate the study in other sectors to determine the generalizability of the results.

References:

- Abstein, A., & Spieth, P. (2014). *Exploring HRM meta-features that foster employees' innovative work behaviour in times of increasing work-life conflict. Creativity and innovation management*, 23(2), 211-225.
- Amabile, T. M. (1988). *A model of creativity and innovation in organisations. Research in organisational behavior*, 10(1), 123-167.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). *Assessing the work environment for creativity. Academy of management journal*, 39(5), 1154-1184.
- Auger, P., & Woodman, R. W. (2016). *Creativity and intrinsic motivation: Exploring a complex relationship. The journal of applied behavioral science*, 52(3), 342-366.
- Baas, M., De Dreu, C. K., & Nijstad, B. A. (2008). *A meta-analysis of 25 years of mood-creativity research: Hedonic tone, activation, or regulatory focus?. Psychological bulletin*, 134(6), 779.
- Battistelli, A., Odoardi, C., Vandenberghe, C., Di Napoli, G., & Piccione, L. J. H. R. D. Q. (2019). *Information sharing and innovative work behavior: The role of work-based learning, challenging tasks, and organisational commitment. Human Resource Development Quarterly*, 30(3), 361-381.
- Battistelli, A., Portoghese, I., Galletta, M., & Pohl, S. (2013). *Beyond the tradition: test of an integrative conceptual model on nurse turnover. International Nursing Review*, 60(1), 103-111.
- Blaskova, M., Blasko, R., Figurska, I., & Sokol, A. (2015). *Motivation and development of the university teachers' motivational competence. Procedia-Social and Behavioral Sciences*, 182, 116-126.
- Brief, A. P. (1998). *Attitudes in and around organisations (Vol. 9)*. Sage.
- Coetzer, A., Inma, C., Poisat, P., Redmond, J., & Standing, C. (2018). *Job embeddedness and employee enactment of innovation-related work behaviours. International Journal of Manpower*, 39(2), 222-239.
- Contreras, F., Soria-Barreto, K., & Zuniga-Jara, S. (2022). *Managerial support and innovative work behaviour in B corps: Examining the effect of female employee work engagement and corporate reputation. Journal of Sustainable Finance & Investment*, 12(3), 809-831.
- Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). *Job satisfaction: Advances in research and applications*. Lexington, MA: Lexington Books.
- Cropanzano, R., & Mitchell, M. S. (2005). *Social exchange theory: An interdisciplinary review. Journal of management*, 31(6), 874-900.
- De Jong, J., & Den Hartog, D. (2010). *Measuring innovative work behaviour. Creativity and innovation management*, 19(1), 23-36.
- Diener, E. (1984). *Subjective well-being. Psychological bulletin*, 95(3), 542.

- Dixit, A., & Upadhyay, Y. (2021). Role of JD-R model in upticking innovative work behaviour among higher education faculty. *RAUSP Management Journal*, 56, 156-169.
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.
- Farooq, F., Mohammad, S. S., Nazir, N. A., & Shah, P. A. (2024). Happiness at work: a systematic literature review. *International Journal of Organizational Analysis*.
- Farr, J. L., & Ford, C. M. (1990). *Individual innovation*.
- Farrukh, M., Ansari, N. Y., Raza, A., Meng, F., & Wang, H. (2022). High-performance work practices do much, but HERO does more: an empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management*, 25(3), 791-812.
- Fisher, C. D. (2010). Happiness at work. *International journal of management reviews*, 12(4), 384-412.
- Fornell, C., & Larcker, D. F. (1981). *Structural equation models with unobservable variables and measurement error: Algebra and statistics*.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021b). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook* (p. 197). Springer Nature.
- Hair Jr, J., Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021a). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. New Jersey: Prentice Hall.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & stress*, 22(3), 224-241.
- Harrison, D. A., Newman, D. A., & Roth, P. L. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management journal*, 49(2), 305-325.
- Ibusa, S., Wahabb, E., Ismail, F., & Ouard, R. (2020). Stimulating Innovative Work Behavior among Academics in Private Higher Educational Institutions. *International Journal of Innovation, Creativity and Change*, 11(4), 245-261.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organisational psychology*, 73(3), 287-302.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of management journal*, 33(4), 692-724.
- Khan, M. A., Ismail, F. B., Hussain, A., & Alghazali, B. (2020). The interplay of leadership styles, innovative work behavior, organisational culture, and organisational citizenship behavior. *Sage Open*, 10(1), 2158244019898264.
- Kim, W., Kolb, J. A., & Kim, T. (2013). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review*, 12(3), 248-276.
- Kontoghiorghes, C., Awbre, S. M., & Feurig, P. L. (2005). Examining the relationship between learning organisation characteristics and change adaptation, innovation, and organisational performance. *Human resource development quarterly*, 16(2), 185-212.
- Locke, E. A. (1976). The nature and causes of job satisfaction. *Handbook of industrial and organisational psychology*.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52(1), 397-422.

- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualisation of organisational commitment. *Human resource management review*, 1(1), 61-89.
- Meyer, J. P., Becker, T. E., & Vandenberghe, C. (2004). Employee commitment and motivation: a conceptual analysis and integrative model. *Journal of applied psychology*, 89(6), 991.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnysky, L. (2002). Affective, continuance, and normative commitment to the organisation: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, 61(1), 20-52.
- Monica, R., & Krishnaveni, R. (2019). Enhancing innovative work behaviour through work engagement: examining the role of psychological empowerment and social support. *International Journal of Business Innovation and Research*, 20(4), 527-553.
- Mustafa, M., Coetzer, A., Ramos, H. M., & Fuhrer, J. (2021). Exploring the effects of small- and medium-sized enterprise employees' job satisfaction on their innovative work behaviours: the moderating effects of personality. *Journal of Organisational Effectiveness: People and Performance*, 8(2), 228-250.
- Nazir, O., & Islam, J. U. (2020). Influence of CSR-specific activities on work engagement and employees' innovative work behaviour: An empirical investigation. *Current Issues in Tourism*, 23(24), 3054-3072.
- Niu, H. J. (2014). Is innovation behavior congenital? Enhancing job satisfaction as a moderator. *Personnel Review*, 43(2), 288-302.
- Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis of mental disorders: A handbook*, 97-146.
- Olanrewaju, M. K., & Musa, S. Analysis of scamper creative technique and workplace happiness on innovative behaviour of Secondary School teachers in Oyo State, Nigeria.
- Park, H. H., Zhou, Y., & Choi, M. (2018). When are individuals innovative?. *Journal of Personnel Psychology*.
- Pukkeeree, P., Na-Nan, K., & Wongsuwan, N. (2020). Effect of attainment value and positive thinking as moderators of employee engagement and innovative work behaviour. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 69.
- Ribeiro, N., Duarte, A. P., Filipe, R., & Torres de Oliveira, R. (2020). How authentic leadership promotes individual creativity: The mediating role of affective commitment. *Journal of Leadership & Organisational Studies*, 27(2), 189-202.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, 57(6), 1069.
- Salas-Vallina, A., & Alegre, J. (2021). Happiness at work: Developing a shorter measure. *Journal of Management & Organisation*, 27(3), 460-480.
- Sarstedt, M., Hair Jr, J. F., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian marketing journal*, 27(3), 197-211.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*, 3, 71-92.
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. (2004). Reexamining the job satisfaction-performance relationship: the complexity of attitudes. *Journal of applied psychology*, 89(1), 165.

- Schriesheim, C., & Tsui, A. S. (1980). Development and validation of a short satisfaction instrument for use in survey feedback interventions. In *Western Academy of Management Meeting* (Vol. 1980, pp. 115-17).
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*, 37(3), 580-607.
- Shahab, H., & Imran, R. (2018). Cultivating University Teachers' innovative work behavior: The case of Pakistan. *Business and Economic Review*, 10(1), 159-177.
- Sharma, M. K., & Sharma, R. C. (2021). Innovation framework for excellence in higher education institutions. *Global Journal of Flexible Systems Management*, 22, 141-155.
- Shipton, H. J., West, M. A., Parkes, C. L., Dawson, J. F., & Patterson, M. G. (2006). When promoting positive feelings pays: Aggregate job satisfaction, work design features, and innovation in manufacturing organisations. *European journal of work and organisational psychology*, 15(4), 404-430.
- Spector, P. E. (1997). *Job satisfaction: Application, assessment, causes, and consequences* (Vol. 3). Sage.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of management Journal*, 38(5), 1442-1465.
- Storey, C., Cankurtaran, P., Papastathopoulou, P., & Hultink, E. J. (2016). Success factors for service innovation: A meta-analysis. *Journal of Product Innovation Management*, 33(5), 527-548.
- Thurlings, M., Evers, A. T., & Vermeulen, M. (2015). Toward a model of explaining teachers' innovative behavior: A literature review. *Review of educational research*, 85(3), 430-471.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of vocational behavior*, 80(1), 173-186.
- Torlak, N. G., Budur, T., & Khan, N. U. S. (2023). Links connecting organizational socialization, affective commitment and innovative work behavior. *The Learning Organization*.
- Warr, P. (2011). *Work, happiness, and unhappiness*. Psychology Press.
- West, M. A., & Farr, J. L. (1989). *Innovation at work: Psychological perspectives*. Social behaviour.
- Xerri, M. J., & Brunetto, Y. (2011). The impact of the perceived usefulness of workplace social networks upon the innovative behaviour of SME employees: A social capital perspective. *International Journal of Innovation Management*, 15(05), 959-987.
- Xerri, M. J., & Brunetto, Y. (2013). Fostering innovative behaviour: The importance of employee commitment and organisational citizenship behaviour. *The International Journal of Human Resource Management*, 24(16), 3163-3177.
- Yuan, H., & Ma, D. (2022). Gender differences in the relationship between interpersonal trust and innovative behavior: the mediating effects of affective organisational commitment and knowledge-sharing. *Behavioral Sciences*, 12(5), 145.
- Zigarmi, D., Nimon, K., Houson, D., Witt, D., & Diehl, J. (2009). Beyond engagement: Toward a framework and operational definition for employee work passion. *Human Resource Development Review*, 8(3), 300-326.

Quantification of Financial Risk of Bankruptcy using Altman's Z-Score model: An Empirical Analysis of Select Hydropower Companies in India

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Abstract

This research endeavors at measuring the financial risk of bankruptcy of select hydropower companies using Altman's Z-Score model. The aim of this study is to quantify the financial risk of bankruptcy in the sample hydropower companies as well as identify the zone in which they fall in terms of the Z-Score model. For the purpose, two hydropower companies have been investigated for the decade from 2010-11 to 2020-21. Secondary data sourced from annual reports/financial statements and other reports of the corresponding sample companies was used to work out the five financial ratios required in the model, and then the discriminant function of the model was applied on these ratios to arrive at the Z-Score of the sample companies. Results indicate the financial risk of bankruptcy of both the sample companies for all the financial years forming reference period for the study coming out to be <1.81. Moreover, empirical evidence from the present study has led to the classification of both the sample companies as in the "Distress" zone.

Keywords: Hydropower, Financial Risk, Bankruptcy, Z-Score.

Introduction

Electricity is a basic facility for all facets of life, recognized as a basic human need. It is a crucial infrastructure on which the socio-economic development of the country depends [1]. Electricity constitutes one of the vital infrastructural inputs in the socio-economic development of a country [2]. Economic growth of a country and the living standard of its citizens depends, among other things, upon the availability of adequate, reliable and affordable power [3].

In the context of India, electric power is a critical infrastructure for the growth of Indian economy [4]. India holds the fifth largest and one of the most diverse power systems in the world including hydropower generation systems. Hydropower is one of the main energy resources in India with projects above 2MW contributing 15% of the total installed capacity [5].

Infrastructure project development incurs financial risks including the risk of cost overruns, inflation, exchange rate risks etc [6]. A member of the infrastructure projects family, hydropower projects are capital intensive and have long gestation periods which result in their exposure to various uncertainties and risks including financial risks [7]. Poor risk management of hydropower projects leads to time and cost overruns; ultimately resulting in the failure of these projects.

The development of hydropower projects inter-alia involves financial risks and one major financial risk is the risk of bankruptcy [8]. Also known as default or insolvency risk, the bankruptcy risk measures the risk that a firm will be unable to meet its debt obligations [9]. Bankruptcy risk exists at all stages of a firm's life cycle [10].

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The normative capital structure is measured in terms of a normative ratio of debt and equity; project developers are liable to service the debt in line with the corresponding terms and conditions in course of the development of the project and hence, the risk that a firm will be unable to meet its debt obligations arises. From lenders' perspective, hydropower projects requiring huge investments besides having long gestation periods need long-tenure loans, resulting in considerable business and credit/bankruptcy risks; risk avoidance by the owner further reinforces this perception of riskiness leading to the financiers' tendency to avoid the project [11]. Normally lenders while appraising a lending proposal consider the cumulative impact of risks influencing the project timeline [12].

The consequences of bankruptcy risk impact both on the firm's whole activity of business and all other contracted firms it is associated with [13]. Hence, prediction of the risk of bankruptcy assumes more importance in case of hydropower project development; the sector being highly capital intensive and complex in nature [11].

Objective(s) of the Study

The present research endeavors at measuring the financial risk of bankruptcy of select hydropower companies in India. The aim of this study is to quantify the financial risk of bankruptcy in the sample hydropower companies as well as identify the intensity of financial risk of bankruptcy in the same hydropower companies with the purpose to classify them.

Review of Literature

Infrastructure project development incurs financial risks including the risk of cost overruns, inflation, exchange rate risks etc. [6]. The development of hydropower projects inter-alia involves financial risks [8]. From lenders' perspective, hydropower projects have long gestation periods and are capital intensive, and thus need long-tenure loans, resulting in considerable business and credit/bankruptcy risks; risk avoidance by the owner further reinforces this perception of riskiness leading to the financiers' tendency to avoid the project [11].

A study on water supply projects executed under public-private-partnership mode in Iran to identify and categorize its risk factors for measuring the overall risk level found that financial risk was the highest in ranking followed by experimental, technological and legal risk respectively [14]. With an emphasis on the comparative cost of financing of public and private financing in traditional procurement and public-private-partnership mode of procurement in the context of infrastructure projects, an investigation into the cost associated with transferring risk from public to private sector by the implementation of projects in public-private-partnership mode concluded that the risk transfer through public-private-partnership arrangement leads to inefficient risk premium which goes above the direct cost of financing [15].

To ensure sustainable availability of finances considering various funding models, one study presented a systematic framework for appraisal and assessment of the risk of infrastructure projects executed in public-private-partnership mode in Libya. The results of the study indicated that the proposed framework was a successful analytical tool to assess the effectiveness of public-private-partnership project over the life cycle in terms of its viability to achieve the targeted internal rate of return and the predicted results for IRR were accurate to the extent of 83%, close to those executed with regard to the risk management process [16]. Another study focused on large-scale infrastructure project risk assessment in the field of road and motorway construction in order to facilitate decision-making on project financing, only to emphasise the need to pay attention to the economic efficiency indicators which form the basis for acceptance or rejection of a project for financing [17]. The role of the financial sector in

renewable energy development in non-OECD countries was investigated in a research study and it was confirmed that the influence of financial sector development on the use of renewable energy; financial intermediation particularly in the form of commercial banking having a significant positive impact on the amount of renewable energy produced - impact being larger in case of non-hydropower renewable energy [18].

Key risk factors associated with infrastructure projects in Siberia funded under project financing method was studied and it found significant deviations from plans during project execution and lack of use of project risk management techniques included some major risk factors. The results of the study indicated flaws in project-technical documentation with the highest risk emergence (83%) followed by legal risks in the project host country (74%), and political risk being the least emergent (58%) [19]. Another study identified twenty-two critical risk factors in power and transport sector projects, giving an insight as to how risks and their significance vary across sectors. Above all, this study inter-alia found the delay in financial closure as the most critical risk in the power sector [20].

Review of the extant literature on risk management of hydropower projects within the purview of sustainable development was conducted in one study, highlighting the need for incorporation of risk analysis in the cost estimation process as well as the provision of sufficient financial margin on the ex-ante base cost to cover uncertainties, besides recommending sensitivity analysis as a primary method for evaluation of the significant risk factors in hydropower projects [7]. In another study on hydropower risks the focus of which was to determine the relative importance of four risks –sector-specific risks, project financing risks, political risks and legal risks associated with hydropower projects, concluded that hydrological risks assumed the highest indicating high threats to project sustainability [8].

Researching on the financiers' perspective of risk in hydropower projects with the aim to maximizing the probability of obtaining sustainable finance for a project, a study found that social and environmental risks as the greatest risks that can cause reputational damage to the stakeholders, leading the financiers to best avoid them [21]. Similarly, an investigation on the subject matter of risk endeavoured to explore relationship between the perceptions of risk influence and financing of hydropower projects. Based on the data collected focus groups participants comprising of lawyers, insurers, lenders, equity investors, development banks and lenders' engineers, the researchers found that the two most important financial risks are foreign exchange risk and electricity market risk, and climate finance for hydropower projects might reduce the financial risk of a project by diversifying the range of sources of its financing [11].

Bankruptcy risk exists at all stages of a firm's life cycle concluded a study [10]. Prediction of the risk of bankruptcy assumes more importance in case of hydropower project development; the sector being highly capital intensive and complex in nature [21]. The consequences of bankruptcy risk impact both on the firm's whole activity of business and all other contracted firms it is associated with found another research study [13].

Bankruptcy prediction models are important from investors as well as lenders and even the firms themselves [22]. The first financial metric to quantify the probability of a firm entering bankruptcy was developed by Edward Altman [23]. Known as the Altman's Z-Score, the technique consolidates several financial ratios into a single indicator of the financial health of a firm. With the help of Z-Score model, Altman himself was able predict a firms' bankruptcy up to 2-3 years in advance [24]. A study conducted to analyse the performance of Z-Score model on various firms from 31 European and 3 non-European countries found that Z-Score model works reasonably well for most countries with the prediction accuracy of 0.75 approximately [25]. Another study found out high predictive power for Z-Score model [26].

Research Methodology

In light of the objectives of the study in conjunction with the review of the extant literature, Altman's Z-Score model has been applied to measure the financial risk of bankruptcy of two sample companies viz. NHPC and JKPDC. This technique consolidates several financial ratios into a single indicator of the financial health of a firm. Altman's Z-Score is considered to be a reliable method for predication of the risk of bankruptcy.

The underlying principle of Altman's Z-Score model is to establish a criterion of categorizing companies into either financial stable or financially distressed group with minimal estimation errors, by employing a set of accounting ratios appropriately weighted and condensed into a statistical index known as the Score, which is arrived at through the formulation of a function called as the discriminant function [27]. The discriminant function synchronizes independent variables comprising various balance sheet indicators with each indicator assigned a specific coefficient as weight.

The general discriminant function is represented as follows:

$$S_j = v_1x_{1j} + v_2x_{2j} + \dots + v_nx_{nj}$$

Where:

S_j = score of the j th company

v_i = coefficient of the variable x_i

x_{ij} = descriptive variable of the i th characteristic for the j th company, each of the measured parameters must be considered several times over a period of time [27].

The final discriminant function for Altman's Z-Score is outlined below [25]; [28]:

$$Z = \{(1.2 * x_1) + (1.4 * x_2) + (3.3 * x_3) + (0.6 * x_4) + 1.0 * x_5\}$$

Where,

x_1 = Working Capital / Total Assets

x_2 = Retained Earnings / Total Assets

x_3 = EBIT / Total Assets

x_4 = Market Value of Equity / Total Liabilities

x_5 = Sales / Total Assets

Variable x_1 comprising the "ratio of working capital and total assets" is an effective indicator of a firm's ability to manage short-term financial obligations given a firm encountering operational losses, the proportion of current assets to total assets tends to decrease [28]. x_2 representing the "ratio of retained earnings to total assets" reflects a firm's financial health over a long period; as to what extent the firm has utilized its retained earnings to consolidate its asset base [28]. Higher the value of this ratio signifies reduced dependence of the firm on external debt. The ratio of "EBIT (earnings before interest and taxes) to total assets" - x_3 , maps a firm's profitability to its asset base, capturing its ability to generate operating income with the underlying asset base [28]. The ratio of "market value of equity to book value of total liabilities" is labelled x_4 , illustrates the extent to which a firm's assets may undergo a decrease in value - calculated by the market value of equity and debt - before its liabilities surpass its assets to turn insolvent, hence providing insight into potential financial distress. Finally, x_5 the ratio of "sales to book value of total assets" measures a firm's capacity to generate sales with the available assets [29].

For the purpose of this study, sample companies have been investigated for the decade from 2010-11 to 2020-21. Secondary in nature, the time series data sourced from annual reports/financial statements and other reports was used to arrive at the ratios (x_1 , x_2 , x_3 , x_4 and x_5) required for computation of Altman's Z-Score.

Data Analysis and Results

Following compilation of ratios forming the basic parameters for applying the Altman's Z-Score model, results of the analysis are presented in table 1.1 and 1.2.

Table 1.1: Altman's Z-Score for NHPC Time Series

Variable	Financial Years										
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
x_1	0.068	0.097	0.107	0.091	0.072	0.081	0.007	-0.013	-0.004	0.025	0.023
x_2	0.091	0.113	0.131	0.138	0.031	0.057	0.049	0.065	0.082	0.092	0.118
x_3	0.068	0.073	0.066	0.061	0.072	0.077	0.087	0.083	0.078	0.068	0.078
x_4	0.097	0.098	0.091	0.734	0.798	0.757	1.076	1.110	0.841	0.619	0.540
x_5	0.089	0.107	0.097	0.138	0.123	0.135	0.139	0.130	0.137	0.135	0.146
Z-Score	0.581	0.683	0.681	1.082	0.970	1.021	1.149	1.146	1.007	0.890	0.918

Source: Authors' Exploration on the Basis of Time Series Data.

The results depicted in the Table 1.1 indicate that the Z-Score for all the reference financial years is < 1.81 which indicates that the firm falls in the distress zone. Thus, the NHPC is likely to experience financial challenges in the near future for the projects under study [28]; [30]; [31].

Similarly, Altman's Z-Score for JKPDC time series was calculated, results of which are presented in the Table 1.2.

Table: 1.2- Altman's Z-Score for JKPDC Time Series

Variable	Financial Years										
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
x_1	0.144	0.021	0.054	0.035	0.021	0.226	0.015	-0.039	0.022	0.070	0.127
x_2	0.022	0.046	0.019	0.016	0.020	0.001	0.009	0.020	0.026	0.062	0.052
x_3	0.035	0.050	0.052	0.042	0.041	0.039	0.046	0.051	0.049	0.087	0.078
x_4	0.480	1.351	0.554	0.434	0.506	0.024	0.219	0.523	0.710	1.347	1.271
x_5	0.142	0.127	0.117	0.097	0.093	0.093	0.105	0.111	0.115	0.157	0.132
Z-Score	0.747	1.191	0.710	0.561	0.585	0.508	0.418	0.574	0.766	1.424	1.376

Source: Authors' Exploration on the Basis of Time Series Data.

In case of JKPDC time series also, the results depicted in the Table 1.2 indicate that the Z-Score for all the reference financial years is < 1.81 which signifies that the firm falls in the distress zone and thus, is likely to experience financial challenges in the near future [28]; [30]; [31].

Discussion

The Altman's Z-Score is considered as one of the best models to predict the bankruptcy risk of the firms. As per Altman the score of above 2.6 is considered "Safe", score between 1.1 and 2.6 is considered "Grey" and while as score below 1.1 is considered "Distress". However, in 2019 a lecture delivered by Altman himself titled "50 years of the A Z-Score" has conveyed that a score between 0-1.80 is the figure at which investors need to worry about the financial well-being of the company. It has been seen that the median Altman's Z-Score of the companies during 2007 crisis was 1.81. The credit rating of these companies was equivalent to 'B' and this indicated that fifty percent of the firms were having lower ratings, were highly distressed and had a high possibility of becoming bankrupt. Thus, the companies whose Altman's Z-Score is nearer to threshold ratio of 1.81 are facing high probability of solvency risk. So, the results of the present study indicate that both the sample firms have Altman's Z-Score of less than 1.1 - far less than threshold ratio of 1.81, and as such, there are clear signs of distress faced by the sample companies.

Conclusion

The present study has been able to measure the financial risk of bankruptcy of both the sample companies for all the financial years of reference coming out < 1.81 . Moreover, empirical evidence from the present study has led to the classification of both the sample companies as in "Distress" zone.

Owing to the evidence of distress in both the sample companies in the present study, it is implied that the hydropower projects exhibit a high degree of financial risk of bankruptcy. As a consequence, the risk of bankruptcy has an impact on the borrowing cost from the investor's point of view, which in turn would impact the cost of generation, thus stretching the pricing competitiveness of the energy generated from the hydropower projects. From lenders perspective, the financial risk of bankruptcy would entail higher pricing by virtue of added risk premium and collateral to secure the risk.

References:

- National Electricity Policy (2017). Ministry of Power, Government of India. Issued under No. 23/40/2004-R&R (Vol.II).*
- Yoo, S. H., & Lee, J. S. (2010). Electricity consumption and economic growth: A cross-country analysis. Energy Policy, 38(1), 622-625.*
- Singh, R. (2001). Power Infrastructure in India: The Issues and the Strategies. Indian Journal of Public Administration, 47(3), 327-340.*
- Subasini, S., & Malarvizhi, V. (2011). Power Sector: A Crucial Facet for Infrastructure Development in India. Asian Journal of Research in Business Economics and Management, 1(3), 381-387.*
- Agarwal, S. S., & Kansal, M. L. (2018). Importance of hydropower for energy sustenance in India. Water And Energy International, 61(2), 61-73.*
- Goldsmith, K. (1993). Economic and Financial Analysis of Hydropower Projects. Hydropower Development, Volume no. 6, Norwegian Institute of Technology.*

- Shaktawat, A., & Vadhera, S. (2021). Risk management of hydropower projects for sustainable development: a review. In *Environment, Development and Sustainability* (Vol. 23, Issue 1, pp. 45–76). Springer Science and Business Media B.V. <https://doi.org/10.1007/s10668-020-00607-2>
- Nepal, A., Khanal, V., & Maelah, R. (2021). *Relative Importance of Risks in Hydropower Projects and Project Finance in Nepal*. www.phdcentre.edu.np
- Horváthová, J., & Mokrišová, M. (2018). Risk of bankruptcy, its determinants and models. *Risks*, 6(4). <https://doi.org/10.3390/risks6040117>.
- Tatsiana, N. R. (2006). *Analysis and Estimate of the Enterprises Bankruptcy Risk*. Republic of Belarus: State Economic university.
- Judith Plummer, Braeckman. (2021). *Perceptions of risk in relation to large hydropower projects: a finance perspective*. FutureDAMS.
- Wang, Y., & Campbell, M. (2010). Business failure prediction for publicly listed companies in China. *Journal of Business and Management*, 16(1), 75-88.
- Bordeianu, G. D., Radu, F., Paraschivescu, M. D., & Păvăloaia, W. (2011). Analysis models of the bankruptcy risk. *Economy Transdisciplinarity Cognition*, 14(1), 248-259.
- Rezaeenour, J., Mousavi-Saleh, M., & Kolahkaj, A. R. (2018). Analyzing the risk factors of private–public partnerships for water supply projects using fuzzy synthetic evaluation: a case study of Iranian water supply projects. *Water Supply*, 18(3), 1005–1019. <https://doi.org/10.2166/ws.2017.174>
- Makovšek, D., & Moszoro, M. (2018). Risk pricing inefficiency in public–private partnerships*. *Transport Reviews*, 38(3), 298–321. <https://doi.org/10.1080/01441647.2017.1324925>
- Marzouk, M., & El-Hesnawi, M. (2018). Framework for assessing serviceability and socio-economic risk associated with ppps projects in Libya. *Journal of Civil Engineering and Management*, 24(7), 556–567. <https://doi.org/10.3846/jcem.2018.5623>
- Korytářová, J., & Hromádka, V. (2020). Risk Assessment of Large-Scale Infrastructure Projects-Assumptions and Context. *Appl. Sci*, 2021, 109. <https://doi.org/10.3390/app1101>
- Brunnschweiler, C. N. (2010). Finance for renewable energy: An empirical analysis of developing and transition economies. *Environment and Development Economics*, 15(3), 241–274. <https://doi.org/10.1017/S1355770X1000001X>
- Jovanović, J., Mosurović, M., & Berić, I. (2020). Risk as a Factor of Decision Making in Projects Financing of Infrastructure Projects. *European Project Management Journal*, 10(2), 11–17. <https://doi.org/10.18485/epmj.2020.10.2.2>
- Mazher, K. M., Chan, A. P. C., Zahoor, H., Khan, M. I., & Ameyaw, E. E. (2018). Fuzzy Integral–Based Risk-Assessment Approach for Public–Private Partnership Infrastructure Projects. *Journal of Construction Engineering and Management*, 144(12). [https://doi.org/10.1061/\(asce\)co.1943-7862.0001573](https://doi.org/10.1061/(asce)co.1943-7862.0001573)
- Braeckman, J. P., Markkanen, S., & Seega, N. (2022). Financiers' perceptions of risk in relation to large hydropower projects. *Environmental Research: Infrastructure and Sustainability*, 2(1). <https://doi.org/10.1088/2634-4505/ac4e70>.

- Altman, E. I., Iwanicz-Drozowska, M., Laitinen, E. K., & Suvas, A. (2017). *Financial Distress Prediction in an International Context: A Review and Empirical Analysis of Altman's Z-Score Model*. *Journal of International Financial Management and Accounting*, 28(2), 131–171. <https://doi.org/10.1111/jifm.12053>.
- Altman, E. I. (1968). *Financial Ratios, Discriminant Analysis and the Prediction of Corporate Bankruptcy*. In *The Journal of Finance* (Vol. 23, Issue 4). <http://www.jstor.org/about/terms.html>.
- Anjum, S. (2012). *Business bankruptcy prediction models: A significant study of the Altman's Z-Score model*. Available at SSRN 2128475.
- Altman, E. I., Iwanicz-Drozowska, M., Laitinen, E. K., & Suvas, A. (2017). *Financial Distress Prediction in an International Context: A Review and Empirical Analysis of Altman's Z-Score Model*. *Journal of International Financial Management and Accounting*, 28(2), 131–171. <https://doi.org/10.1111/jifm.12053>.
- Al-Manaseer, S., & Al-Oshaibat, S. (2018). *Validity of Altman's Z-Score Model to Predict Financial Failure: Evidence From Jordan*. *International Journal of Economics and Finance*, 10(8), 181. <https://doi.org/10.5539/ijef.v10n8p181>.
- Mattio, F. (2024). *Altman's Z-Score Indicators* (Doctoral dissertation, Politecnico di Torino).
- Rashid, F., Khan, R. A., & Hussain Qureshi, I. (2023). *A Comprehensive Review of the Altman's Z-Score Model A Comprehensive Review of the Altman's Z-Score Model Across Industries*. <https://orcid.org/0000-0002-9402-2280>.
- Chuvakhin, N., & Gertmenian, L. W. (2003). *Predicting bankruptcy in the WorldCom age*. *Journal of Contemporary Business Practice*, 6(1), 3-8.
- Eidleman, G. J. (1995). *Z scores--a guide to failure prediction*. *CPA Journal*, 65(2).
- Pramudita, A. (2021). *The Application of Altman Revised Z-Score Four Variables and Ohlson O-Score as A Bankruptcy Prediction Tool in Small and Medium Enterprise Segments in Indonesia*.

Corporate Social Responsibility and Organizational Citizenship Behavior: The Mediating Role of Organizational Identification in Business Schools of Nepal

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Abstract

This research contributes to the available body of knowledge by integrating insights from social identity theory and perceived external prestige theory in examining Corporate Social Responsibility (CSR) perceptions and Organization Citizenship Behavior (OCB) among faculty in a specific cultural and organizational context, offering practical implications for management practices in educational institutions in underdeveloped economies. The study used a questionnaire survey method where data were collected from 298 full-time and part-time Business school faculty members, both within and outside Kathmandu, using a self-administered questionnaire. Step-wise regression analysis was used to analyse the collected data. The study's findings show a positive relationship between faculty perceptions of CSR activities and their involvement in OCB. Additionally, OID was found to be positively associated with OCB and partially mediated the relationship between CSR perceptions and OCB. These results suggest that enhancing faculty perceptions of CSR could develop greater engagement in OCB, thereby benefiting organizational effectiveness and culture within Business schools. More priority on communicating CSR initiatives and cultivating organizational identification among faculty members may be effective in promoting desired behaviors.

Keywords: *Organizational citizenship behavior, Corporate social responsibility, Organizational identification, Social identity theory, perceived external prestige theory*

Introduction

In today's fast changing educational landscape, colleges and universities are becoming more aware of the significance of Corporate Social Responsibility (CSR) initiatives in shaping not only their external image but also their internal social dynamics (Abubakar et al., 2022). Universities and colleges are increasingly offering courses on ethics and CSR to raise ethical standards in the corporate world (Khanal & Prajapati, 2023). These institutions often serve as a platform for cultivating a culture of social responsibility, and the faculty within business schools play a vital role in both influencing and reflecting the institution's commitment to CSR (Petković et al., 2022).

CSR, as a concept, includes a wide variety of ethical and sustainable practices performed by organizations to help solve societal and environmental concerns beyond their immediate profit motives. CSR is an important philosophy of working that helps people understand how well institutions can keep their business going while also looking after society's needs in different areas (Hazzi & Maldaon, 2022). It helps to build legitimacy, improve long term financial performance, and improve reputation (Aguilera et al., 2007; Porter & Kramer, 2006). The academic community has increasingly engaged with CSR, both as educators delivering lectures, knowledge and as role models within their respective institutions (Thanasi-Boçe & Kurtishi-Kastrati, 2020). Within the context of colleges and universities, faculty members'

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attitudes and beliefs regarding CSR can significantly influence the institution's overall approach to social responsibility and sustainability. Moreover, the impact of these attitudes extends to how faculty and staff engage in behaviors that contribute to the welfare and enhancement of the institution, collectively known as OCB. However, the pathway through which faculty members' CSR perceptions influence OCB may be intricately linked with their sense of organizational identification (OID) – the extent to which they connect with and feel a part of the academic institution's values, goals, and mission. It has been argued that the perceptions of CSR initiatives varies from industry to industry (Decker, 2004) and higher education can be an important sector to investigate. Thus, this research seeks to put light into the multifaceted relationships among business school faculty's perceptions of CSR initiatives, College/University OCB, and the mediating role of OID offering valuable insights for both academic institutions and the broader corporate social responsibility discussions.

This research attempts to investigate the perceptions of Business school faculty regarding CSR initiatives and their implications for College/University Organizational Citizenship Behavior (OCB). It also tries to examine the mediating role played by Organizational Identification (OID) in this intricate relationship. This study addresses two significant gaps in the literature. To begin with, it examines the impact of CSR initiatives on OCB in higher education, specifically focusing on the function of organizational identification in this relationship, rather than solely examining the direct effect of CSR. Lastly, it enriches the limited body of research on CSR within the college/university setting by investigating how employees perceive CSR within these higher education institutions.

Literature review

Corporate Social Responsibility (CSR): CSR refers to the business's social obligation, encompassing economic, legal, discretionary, and ethical obligations toward society at any given moment (Carroll, 1979). It is a strategy that helps both society and companies grow sustainably, while also enhancing a company's reputation and finding innovative business opportunities to stay competitive (Chang & Yoo, 2023; Khanal & Arora, 2023). It serves as a strategic instrument for differentiating and positioning companies within the global market. It has an important role in reputation management and offers a unique perspective on why a particular organization is preferable as an employer (Bharadwaj & Yameen, 2020). CSR aims to solve various social problems that go beyond legal obligations or the interests of shareholders (Wang et al., 2022). In developing nations, CSR is mostly viewed through a humanitarian lens, prioritizing immediate human needs over environmental or social concerns (Litvinenko et al., 2022; Abdelmotaleb, 2019). Limited resources, historical context, and cultural values shape this perspective here in Nepal, emphasizing philanthropic efforts and community welfare initiatives by businesses. These underdeveloped nations are mostly economically motivated and profit driven (Scherer & Palazzo, 2011). CSR initiatives not only transfer favorable corporate reputations (Jones et al., 2014) but also cultivate a true sense of value and respect among employees (Glavas & Kelley, 2014). CSR initiatives lead to organizational commitment, employee loyalty (Stajanovic et al., 2020), and intrinsic motivation in the workplace (Loor-Zambrano et al., 2022).

Perception is an important driving force behind employees' behaviour as people are likely to act based on their perceptions of reality rather than on reality itself (Zheng, 2010). Employees' perception of CSR initiatives is more crucial than CSR efforts themselves, because stakeholders base their opinions, attitudes, and decisions on those perceptions (Hansen et al., 2011).

Social Identity and Perceived external prestige theory: Social identity theory suggests that an individual's self-concept is formed by the groups they belong to, termed as the "social self"

(Tajfel & Turner, 1979). Given the significance of organizations among these groups, the organization occupies a central position within an individual's social self, influencing their self-concept. When employees view their company as effectively implementing CSR initiatives, they are inclined to view the organization as having a positive reputation in society, leading to the development of a positive social self. This enhanced self-concept develops stronger emotional connections to the organization, facilitating identification with the company (Dutton et al., 1994). Social identity theorists have used OID to explain how organizational policies can bring stronger identification among employees with the organization, consequently prompting heightened levels of OCB among them (Shen & Benson, 2014). Perceptions regarding CSR impact team members' inclination to assess their organization's internal and external image, and at the same time aligning personal values with organizational values enhances self-concept from a social identity perspective (Luu, 2017).

Perceived external prestige (PEP) theory suggests that employees' attitudes regarding CSR initiatives positively influence their OID. This concept, also known as "construed external image" or "perceived organizational prestige," shapes employees' OID. As the organization is significant to them, external perceptions greatly impact their self-esteem and self-concept (Mael & Ashforth, 1992). Effective CSR practices can enhance employees' perceived organizational prestige, leading to increased self-esteem and pride in belonging to a socially responsible company (Dutton et al., 1994). This cultivates stronger identification with the organization. Many studies have proposed that perceived external prestige affects OID (Mael & Ashforth, 1992; Pratt, 1998). Employees' favorable perceptions of their organization's external status and prestige correlate with their positive attitudes toward the organization and their strong identification with it (Carmeli, 2005; Bartels et al., 2007).

Organisational citizenship behaviour: The notion of OCB was officially acknowledged by Organ (1988), who started it as a factor that could improve organizational efficiency (Yow, 2017). OCB entails an employee's active involvement and contributions within the workplace that exceed the obligations outlined in their job description, essentially going beyond the standard expectations of their role which aren't recognized through formal organizational rewards (Organ, 1988; Kang & Hwang, 2023; Adil et al., 2021). Some visible instances of OCB include assisting others at work place, taking few extra works, and protecting and promoting the institution (Bolino & Turnley, 2003). Teachers and faculties with strong OCB help their colleagues voluntarily, assist students in their free time, and give priority to professional work (Yanci & Saglam, 2014). Employees prefer aligning themselves with socially responsible companies, which function as ideal social communities for them. This shift can transform their identity from individual to a collective, motivating them to engage in activities that bolster both their personal growth and the organization's standing. Studying these behaviours is important for comprehending social constructs which contribute to organization and team achievements (Smith et al., 1983).

Empirical findings have demonstrated that the introduction of CSR activities result in improved employee attitudes and conduct (Tian & Robertson, 2019). Companies practicing CSR initiatives for societal and environmental improvement inspire employee attachment to sustainability goals and initiate voluntary actions beyond their job duties. (Islam et al., 2022). OCB is linked to an ethical workplace atmosphere and the sustainable performance of a corporation (Fein et al; 2023).

As organizations participate in CSR activities, a parallel arises where staff proactively involve in OCBs contributing to organizational competitiveness, highlighting the interconnected and interdependent character of this relationship between CSR work and these behaviors (Ko et al., 2023). Positive CSR perceptions boost employees' OCBs as those who view their

organization's CSR activities favorably are more inclined to exhibit good citizenship behavior when they take pride in their organizational affiliation (Oo et al., 2018). OCB plays a vital role for organizations by boosting organizational performance and maintaining their competitive edge in the market (Chang et al., 2021). Similarly, OCB helps organizations deliver better performance (Abdullahi et al., 2020), improve customer satisfaction (Khalfan et al., 2022), and a sense of belongingness to a group or community (Sarfraz et al., 2022). Previous studies by Hansen et al (2011), and Ong et al (2018) reported the positive effect of CSR on OCB. Drawing from social exchange theory and above mentioned research studies, we hypothesized

H1: Faculty-perceived CSR initiatives have positive relationship with OCB.

Organisational identification (OID): OID, derived from the idea of social identity (Jones & Volpe, 2010), is a specific form of social identification which reflects the extent to which an individual define themselves based on the same characteristics they perceive to define an organization (Dutton et al., 1994). The effect of CSR initiatives on OID can be described by SIT (Ashforth & Mael, 1989) and PEP theory (Smidts et al., 2001). OID entails feeling a sense of unity with an organization, wherein an individual associates themselves closely with the organization they are a part of (Mael & Ashforth, 1992). By forming a sense of "identification" with an organization, individuals gradually develop their "identity" within the context of an organisations (Ashforth et al., 2008). Individuals often gravitate towards organizations that possess a favorable perceived identity, which can boost their self-esteem (Dutton et al., 1994). OID serves as a fundamental concept within an organization, playing a vital role in elucidating the understanding of member perceptions, attitudes, and behaviors (Ashforth & Mael, 1989). Organizational identification falls under the umbrella of social identification, which involves perceiving oneself as part of a collective and feeling a sense of belonging within that group (Nguyen & Sidorova, 2020). This attitude of organizational identification changes the relationship of employees to their employer and this in turn increases work performance, health and well being (Jetten et al., 2017; Blader et al., 2017). When an institution expands its CSR initiatives, employees experience a growing sense of pride in affiliating with the esteemed company, as their identification serves to uphold both external prestige and internal esteem (Farooq et al., 2014). A study by Kim et al. (2020) found that CSR initiatives significantly impact hotel employees intention to remain employed in the context of OID. Employees' views regarding CSR initiatives not only increase the attraction for the organization for workers but can also increase employees' OID (Fu et al., 2014). Organisations that are socially and environmentally responsible and are engaged in CSR initiatives tend to be attractive to employees and those individuals are more inclined to identify themselves with these organizations (Brammer et al., 2015; De Roeck et al., 2016). Considering all this, we hypothesized.

H2: Faculty-perceived CSR initiatives has a positive relationship with OID.

Mediation takes place when an independent variable influences a dependent variable via an intermediary variable, known as a mediator (Baron & Kenny, 1986). OID is likely to mediate the relationship between CSR perceptions and OCB due to the deep-seated psychological connection employees develop with their institution when they perceive it to be socially aware and accountable. When employees believe their organization is committed to ethical practices and societal well-being, they tend to experience a heightened sense of belonging and loyalty sometimes referred to as moral identity (Rupp et al., 2006). Prior research studies have stated that strong OID helps in supportive OCB (Gond et al., 2010). This heightened identification in turn cultivate a desire to contribute positively to the organization's success, leading employees to participate in discretionary behaviors that extend beyond their formal job roles, thus facilitating the mediation effect between CSR perceptions and OCB (Riketta, 2005).

H3: OID will mediate the relationship between CSR perceptions and OCB.

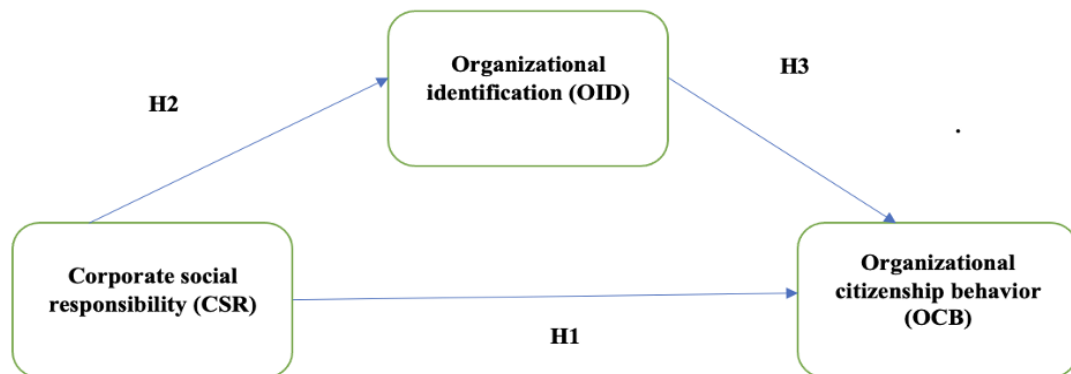


Figure 1: Conceptual model.

Source: The authors

Methodology

Sample and Data collection

Kostova (1997) and Eiadat (2023) emphasizes the need for country-specific and relevant measurement items for any construct, and Carroll (1991) suggests that cultural differences influence managers' understanding of CSR, implying that employees in Nepal, an underdeveloped south Asian country, likely have distinct perceptions of CSR actions. Using purposeful sampling, the data were collected from Business school faculty members (full time and part time both) all over Nepal. The questionnaire had all the details regarding objectives of the study, data confidentiality, respondent anonymity and informed consent. The researchers successfully collected data from 298 respondents out of around 670 distributed questionnaires. Among the surveyed samples, male respondents were higher (58.4 %) than females (40.3 %). Most of the respondents had a teaching experience of 0-5 years accounting for 33.9% followed by 6-10 years (23.5%). Regarding age, majority of the respondents are 31-35 and 36-40 old, 30.6% and 23.1% respectively. Majority of the respondents (62.7%) were married. When it comes to education, respondents with graduate (or Master) degree were predominant at 76.1% followed by undergraduate (or Bachelors degree) accounting for 15.7%. Based on income level, respondents with montly incomes in the range of 45001-60000 were the most, accounting for 32.8%. On the other hand, a total of 23.9% of respondents had an income of 60001- 75000.

Measures

A five-point Likert-type scale, “1 = strongly disagree to 5 = strongly agree” was used in this study. For CSR, A modified 3-item scale from Hur et al. (2016) and Wagner et al. (2009) was utilized to assess employees’ perception of CSR initiatives. The reliability of the scale was 0.877

OCB was measured through an 8- item scale developed by Lee & Allen (2002). The scale’s reliability was 0.917 And for OID , 5-item scale was adopted developed by Mael & Ashforth (1992). The reliability of the scale was 0. 915.

Analysis

SPSS was used to analyse the relationship among the variables. The mean for perceived CSR, OCB and OID were 4.13, 4.19 and 4.16 respectively (Table 1) which indicates that faculties have strong positive views regarding higher education institutions' CSR initiatives and OCB exhibited a significant level of OID.

Table 1: Descriptive analysis

Variables	Mean	SD	CSR	OCB	OID
CSR	4.1309	.78735	1		
OCB	4.1904	.68166	.683**	1	
OID	4.1636	.77269	.661**	.730**	1

Stepwise regression analysis was done to examine the hypothesis. The study used several control variables like years of experience, gender, age, education, marital status and income. The independent variable consisted of control variables, while the dependent variable was OCB, with perceived CSR initiatives serving as another independent variable. Mediation was assessed using the method proposed by Baron & Kenny (1986). The findings from the step-wise regression are outlined in table 2.

Table 2: Step-wise Regression

Dependent Variable = Organizational citizenship behavior				
	Model 1	Model 2	Model 3	Model 4
Controls	N.S.	N.S.	N.S.	
Experience	N.S.	N.S.	.169**	
Gender	.358**	N.S.	N.S.	
Age	N.S.	N.S.	N.S.	
Education	-.207**	N.S.	N.S.	
Marital	N.S.	N.S.	N.S.	
Income	N.S.	N.S.	N.S.	
Independent variables				
CSR		.580**		.293**
OID			.614**	.444**
R^2	0.314	0.685	0.741	0.692
Dependent Variable = OID				
Controls				
Experience			.084**	

Gender	N.S.
Age	N.S.
Education	N.S.
Marital	N.S.
Income	N.S.
Independent variables	
CSR	.642**
R^2	0.674

Note: N.S. (not significant), ** = $P < 0.01$

Results and Discussions

Among the constructs examined, OCB exhibited the highest mean score (4.19) and the lowest standard deviation (0.68), while perceived CSR showed the lowest mean (4.13) and the highest standard deviation (0.78). All three constructs demonstrate a positive correlation with each other at a significant level of $P \leq 0.01$. The correlation between perceived CSR initiatives and OCB is .683, between CSR initiatives and OID is .661, and between OCB and OID is .730.

We tested 4 different models to test the hypothesis in step-wise regression. In model 1, the control variables were used as an independent variables, with OCB serving as the dependent variable. Throughout all the four models, OCB remained as the dependent variable. In this model, gender ($\beta = .358^{**}$) and education ($\beta = -.207^{**}$) were statistically significant predictors of OCB, with p-values less than 0.01, indicating that these control variables did have a significant relationship with OCB at the start of the regression analysis. The other control variables (experience, age, marital status, and income) were not statistically significant (N.S.), meaning they did not have a significant predictive power for OCB in this model. The R-squared value for Model 1 was 0.314, which means that approximately 31.4% of the variance in OCB is explained by the control variables in this model.

In Model 2, perceived CSR initiatives were added as an independent variable along with the control variables. The results showed that CSR had a significant positive association with Organizational Citizenship Behavior (OCB), with a beta coefficient of $\beta = 0.580$, which was statistically significant at $p \leq 0.01$ level (denoted by **). This result supports Hypothesis 1, which shows that CSR initiatives are positively related to OCB. The results of the hypothesis are consistent with the findings of the prior research (Supanti & Butcher, 2019; Rodell, 2013). The R-squared in Model 1 was 0.314, and after including CSR in Model 2, the R-squared increased significantly to 0.685. This significant increase suggests that CSR initiatives are a strong predictor of OCB and adds significant explanatory power to the model beyond the control variables alone. Gender and education, which were significant in model 1, became non-significant (N.S.) in model 2, showing that the effect of these control variables on OCB may be mediated through CSR.

In model 3, in addition to the control variables, OID was introduced as an independent variable. It was observed that OID exhibited a positive correlation with OCB ($\beta = 0.614$ at $p \leq 0.01$), confirming Hypothesis 2 that OID is positively related to OCB. The R-squared for Model 3 is 0.741, which is an increase from model 2's R-squared of 0.685. This suggests that including

OID in the model improves the explanatory power of the model for OCB. Moreover, the beta coefficient for CSR is reduced from 0.580 in model 2 to 0.293 in model 3 when OID is added, which indicates that OID may be mediating the relationship between CSR and OCB.

In Model 4, alongside the control variables, both perceived CSR initiatives and OID were included as independent variables. Both perceived CSR initiatives and OID showed positive associations with OCB ($\beta = 0.293$ at $p \leq 0.01$ and $\beta = 0.444$ at $p \leq 0.01$, respectively). The impact of perceived CSR activity decreased from $\beta = 0.580$ (at $p \leq 0.01$) to $\beta = 0.293$ (at $p \leq 0.01$) upon including OID, suggests that OID has a mediating effect on the relationship between CSR and OCB. Since CSR remains significant, even when OID is included, it indicates partial mediation. Therefore, Hypothesis 4 was partially supported. The R-Squared values increases from 0.314 in model 1 to 0.692 in model 4 suggesting that the models explain more variance in OCB as variables are added.

A different group of regression equations was employed to find the relationship between perceived CSR initiatives and OID. Control variables from model 1 along with perceived CSR initiatives were treated as independent variables, while OID was regarded as the dependent variable. The analysis revealed a positive association between perceived CSR activity and OID ($\beta = 0.642$ at $p \leq 0.01$). The control variables appear to have no significant relationship with OID. The R-squared value of 0.674 suggests that a substantial portion of the variance in OID is explained by the model, particularly by the CSR variable. The results of the hypothesis are consistent with the results of the prior studies (Cheema et al., 2018; Afsar et al., 2018., Wells et al., 2015).

Among control variables, gender of faculty was found to be significantly related to OCB, with female faculty demonstrating greater OCB. The results are in consistent with other previous studies (Aftab et al., 2021; Mostafa et al., 2015; Hafidz et al., 2012). Historically, women have often been socialized to be more nurturing, empathetic and cooperative, which are traits commonly associated with OCB. As a result, female faculty members might be more willing to participate in actions that help their organisations past their formal job duties. We also found that prior educational background of faculties was negatively related to OCB. One potential explanation for the negative relationship between faculty education levels and OCB could be the increasing specialization and focus that comes with higher levels of education. Master's and PhD holders may spend more time and energy towards research and other academic tasks, leaving less resources for engaging in voluntary behaviors that contribute to organizational effectiveness. Additionally, advanced degree holders may perceive their roles differently, prioritizing their specialized expertise over general organizational responsibilities. Finally, the autonomy and independence that often accompany higher education levels may reduce the perceived need or pressure to engage in OCB compared to faculty with bachelor's degrees.

Years of experience or tenure was observed to be significantly related to OID. This result is in line with the earlier research studies (Shan et al., 2017; Hameed et al., 2019). At the same time, this finding is in contrast to a study done by Riketta & Van Rolf (2005) which found that organizational tenure is not related to OID. The positive relationship between years of experience/tenure and OID may be related to the strong sense of attachment, loyalty, and identification that employees develop with their organization over time. As individuals experience within the organization increases, they become more familiar with its culture, values, and mission, cultivating a deep understanding of belonging and identity alignment. Additionally, longer tenure and experiences bring more opportunities for employees to blend into the organizational community and internalize its identity as their own.

Conclusion, Implications, and Future Research Directions

The study's result show that perceived CSR initiatives significantly predict OCB, with CSR also strongly influencing OID. OID emerged as a partial mediator in the relationship between CSR and OCB, supporting the idea that faculties agreement with their organization's identity can increase their inclination to participate in behaviors beneficial to the College/University. The analysis across four models showed a consistent positive relationship between CSR, OID, and OCB, with the combined model explaining approximately 69.2% of the variance in OCB. This results implies the importance of CSR in shaping higher education institutions' dynamics and suggests that universities can potentially develop a more engaged and aligned workforce through relevant CSR initiatives. This research has certain shot comings. Primarily, because the data were gathered using a questionnaire, there is a chance of common method bias (Park et al., 2007). Second, this research is conducted on a single, limited and very specific higher education domain i.e B-schools. The generalizability of the findings relies on replicating the study in other diverse higher educational institutions and regions.

References:

- Abdelmotaleb, M. (2019). *Corporate social responsibility in developing countries*, *Global encyclopedia of public administration, public policy, and governance* (pp. 1-5). Springer.
- Abubakar, A., Yauta, S. A., & Khalifa, M. M. (2022). *Corporate Social Responsibility (CSR): Strategy for University Sustainable Competitive Advantage*. *Business Management and Strategy*, 13(2), ISSN 2157-6068.
- Adil, A., Kausar, S., Ameer, S., Ghayas, S., & Shujja, S. (2021). *Impact of organizational socialization on organizational citizenship behavior: mediating role of knowledge sharing and role clarity*. *Current Psychology*, 1–9. <https://doi.org/10.1007/s12144-021-01899>
- Afsar, B., Cheema, S., & Javed, F. (2018). *Activating employee's pro-environmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership*. *Corporate Social Responsibility and Environmental Management*, 25(5), 904–911. <https://doi.org/10.1002/csr.1506>
- Aftab, N., Shah, S. A. A., & Khan, Z. (2020). *The moderating effect of gender on the relationship between organizational commitment and organizational citizenship behavior in Pakistani university teachers*. *Cogent Psychology*, 7(1), 1860480.
- Aguilera, R. V., Rupp, D., Williams, C., & Ganapathi, J. (2007). *Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations*. *Academy of Management Review*, 32(4), 836–863. doi:10.5465/AMR.2007.25275678
- Ashforth, B. E., & Mael, F. (1989). *Social identity theory and the organization*. *Academy of Management Review*, 14(1), 20–39.
- Ashforth, B. E., Harrison, S. H., & Corley, K. G. (2008). *Identification in organizations: An examination of four fundamental questions*. *Journal of Management*, 34(3), 325–374.
- Baron, R. M., & Kenny, D. A. (1986). *The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations*. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.

- Bartels, J., Pruyn, A., De Jong, M., & Joustra, I. (2007). Multiple organizational identification levels and the impact of perceived external prestige and communication climate. *Journal of Organizational Behavior*, 28(2), 173-190.
- Bharadwaj S., & Yameen M. (2020). Analyzing the mediating effect of organizational identification on the relationship between CSR employer branding and employee retention. *Management Research Review*. <https://doi.org/10.1108/MRR-05-2020-0298>
- Blader, S. L., Patil, S., & Packer, D. J. (2017). Organizational identification and workplace behavior: More than meets the eye. *Research in Organizational Behavior*, 37, 19–34. <https://doi.org/10.1016/j.riob.2017.09.001>
- Bolino, M. C., & Turnley, W. H. (2003). Going the extra mile: Cultivating and managing employee citizenship behavior. *Academy of Management Perspectives*, 17, 60–71.
- Brammer, S., He, H., & Mellahi, K. (2015). Corporate social responsibility, employee organizational identification, and creative effort: The moderating impact of corporate ability. *Group & Organization Management*, 40(3), 323–352.
- Carmeli, A. (2005). Perceived external prestige, affective commitment, and citizenship behaviors. *Organization Studies*, 26(4), 443–464.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4(4), 497-505. <https://doi.org/10.5465/amr.1979.4498296>
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Chang, W.-J., Hu, D.-C., & Keliw, P. (2021). Organizational culture, organizational citizenship behavior, knowledge sharing and innovation: A study of indigenous people production organizations. *Journal of Knowledge Management*, 25(9), 2274–2292.
- Chang, Y. J., & Yoo, J. W. (2023). When CSR Matters: The Moderating Effect of Industrial Growth Rate on the Relationship between CSR and Firm Performance. *Sustainability*, 15(18), 13677. <https://doi.org/10.3390/su151813677>
- Cheema, S., Afsar, B., & Javed, F. (2019). Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit. *Corporate Social Responsibility and Environmental Management*. Advance online publication. <https://doi.org/10.1002/csr.1769>
- Cogswell, J. E., & Adams, C. (2023). Perceptions of Corporate Social Responsibility in a Post-Disaster Context: The Impact of CSR on Employee Trust and Identification. *Journal of Leadership, Accountability and Ethics*, 20(2). <https://doi.org/10.33423/jlae.v20i2.6303>
- De Roeck, K., El Akremi, A., & Swaen, V. (2016). Consistency matters! How and when does corporate social responsibility affect employees' organizational identification? *Journal of Management Studies*, 53(7), 1141–1168. <https://doi.org/10.1111/joms.12216>
- Decker, O. S. (2004). Corporate social responsibility and structural change in financial services. *Managerial Auditing Journal*, 19, 712–728

- Dutton, J. E., Dukerich, J. M., & Harquail, C. V. (1994). *Organizational images and member identification*. *Administrative Science Quarterly*, 39(2), 239-263.
- Eiadat, Y. (2023). *The CSR-19 scale: A measure of corporate social responsibility actions during COVID-19 pandemic*. *Business Ethics, the Environment & Responsibility*, 32, 257–269.
- Farooq, O., Payaud, M., Merunka, D., & Valette-Florence, P. (2014). *The impact of corporate social responsibility on organizational commitment: Exploring multiple mediation mechanisms*. *Journal of Business Ethics*, 125(4), 563-580.
- Fu, H., Ye, B. H., & Law, R. (2014). *You do well and I do well? The behavioral consequences of corporate social responsibility*. *International Journal of Hospitality Management*, 40(July Issue), 62-70.
- Fein, E. C., Tziner, A., & Vasiliu, C. (2023). *Perceptions of ethical climate and organizational justice as antecedents to employee performance: The mediating role of employees' attributions of leader effectiveness*. *European Management Journal*, 41, 114-124.
- Glavas, A., & Kelley, K. (2014). *The effects of perceived corporate social responsibility on employee attitudes*. *Business Ethics Quarterly*, 24(2), 165-202.
- Gond, J.-P., El-Akremi, A., Igalens, J., & Swaen, V. (2010). *Corporate social responsibility influence on employees*. *International Center for Corporate Social Responsibility*, 54, 1-47.
- Hameed, I., Khan, A. K., Sabharwal, M., Arain, G. A., & Hameed, I. (2019). *Managing successful change efforts in the public sector: An employee's readiness for change perspective*. *Review of Public Personnel Administration*, 39(3), 398-421.
- Hansen, S. D., Dunford, B. B., Boss, A. D., Boss, R. W., & Angermeier, I. (2011). *Corporate social responsibility and the benefits of employee trust: A cross-disciplinary perspective*. *Journal of Business Ethics*, 102, 29–45. <https://doi.org/10.1007/s10551-011-0903-0>
- Hazzi, O., & Maldaon, I. (2022). *Corporate social responsibility: a review with potential development*. *Management & Sustainability: An Arab Review*. <https://doi.org/10.1108/MSAR-09-2022-0041>
- Hur, W. M., Kim, H., & Jang, J. H. (2016). *The role of gender differences in the influence of CSR perceptions on corporate marketing outcomes*. *Corporate Social Responsibility and Environmental Management*, 23, 345–357. <https://doi.org/10.1002/csr.1380>
- Islam, T., Ahmad, S., & Ahmed, I. (2022). *Linking environment-specific servant leadership with organizational environmental citizenship behavior: The roles of CSR and attachment anxiety*. *Review of Managerial Science*, 1–25.
- Jetten, J., Haslam, S. A., Cruwys, T., Greenaway, K. H., Haslam, C., & Steffens, N. K. (2017). *Advancing the social identity approach to health and well-being: progressing the social cure research agenda*. *European Journal of Social Psychology*, 47, 789–802.
- Jones, C., & Volpe, E. H. (2010). *Organizational identification: Extending our understanding of social identities through social networks*. *Journal of Organizational Behavior*, 32, 413-434

- Jones, D.A., Willness, C.R., & Madey, S. (2014). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57, 383–404.
- Kang, E., & Hwang, H. (2023). How to Enhance an Employee's Organizational Citizenship Behavior (OCB) as a Corporate Strategy. *Journal of Industrial Distribution & Business*, 14(1).
- Khanal, K., & Arora, N. (2023). Corporate social responsibility expenditures and their impact on financial performance variables of listed commercial banks in Nepal. *Prayukti - Journal of Management Applications*, 3(1), 32-42.
- Khanal, K., & Prajapati, B. (2023). Unveiling Ethical Horizons: A Contemporary Analysis of MBA Students' Perceptions on Business Ethics in Nepal. *Scientific Researches in Academia*, 1(1), 36–50. <https://doi.org/10.3126/sra.v1i1.60094>
- Ko, S.-H., Choi, Y., Kim, J., & Kang, H.C. (2023). Employees' Perceptions of Corporate Social Responsibility and Their Extra-Role Behaviors: A Psychological Mechanism. *Sustainability*, 15, 13394. <https://doi.org/10.3390/su151813394>
- Kostova, T. (1997, August). Country institutional profiles: Concept and measurement. In *Academy of Management Proceedings* (Vol. 1997, pp. 180–184). Academy of Management.
- Litvinenko, V., Bowbrik, I., Naumov, I., & Zaitseva, Z. (2022). Global guidelines and requirements for professional competencies of natural resource extraction engineers: Implications for ESG principles and sustainable development goals. *Journal of Cleaner Production*, 32, 130530.
- Lloor-Zambrano, H. Y., Santos-Roldán, L., & Palacios-Florencio, B. (2022). Relationship CSR and employee commitment: mediating effects of internal motivation and trust. *European Research on Management and Business Economics*, 28(2), 1-11.
- Luu, T. T. (2017). CSR and organizational citizenship behavior for the environment in hotel industry: The moderating roles of corporate entrepreneurship and employee attachment style. *International Journal of Contemporary Hospitality Management*, 29(11), 2867–2900. <https://doi.org/10.1108/IJCHM-02-2016-0080>
- Mael, F., & Ashforth, B. E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior*, 13(2), 103-123.
- Nguyen, Q. N., & Sidorova, A. (2020). Organizational identification and user responses to online organization criticism. *Journal of Computer Information Systems*, 60(2), 124–135. <https://doi.org/10.1080/08874417.2017.1405295>
- Ong, M., Mayer, D. M., Tost, L. P., & Wellman, N. (2018). When corporate social responsibility motivates employee citizenship behavior: The sensitizing role of task significance. *Organizational Behavior and Human Decision Processes*, 144, 44–59.
- Oo, E.Y., Jung, H., & Park, I.J. (2018). Psychological factors linking perceived CSR to OCB: The role of organizational pride, collectivism, and person–organization fit. *Sustainability*, 10, 2481.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington books/DC heath and com

- Park, W., Kim, M., Jeong, S., & Huh, K. (2007). *Causes and remedies of common method bias. Korean Journal of Management*, 15, 89–133.
- Petković, S., Alfrević, N., & Zlatković Radaković, M. (2022). *Environmental sustainability and corporate social responsibility of business schools: Is there evidence of transdisciplinary effects? Economic Research-Ekonomska Istraživanja*, DOI: 10.1080/1331677X.2022.2048203.
- Pratt, M. G. (1998). *To be or not to be? Central questions in organizational identification*. In D. A.
- Riketta, M., & Van Rolf, D. (2005). *Foci of attachment in organizations: A meta-analytic comparison of the strength and correlates of workgroup versus organizational identification and commitment. Journal of Vocational Behavior*, 67(3), 490.
- Rodell, J. B. (2013). *Finding meaning through volunteering: Why do employees volunteer and what does it mean for their jobs? Academy of Management Journal*, 56(5), 1274-1294.
- Rupp, D. E., Ganapathi, J., Aguilera, R. V., & Williams, C. A. (2006). *Employee reactions to corporate social responsibility: An organizational justice framework. Journal of Organizational Behavior*, 27(4), 537-543.
- Scherer, A. G., & Palazzo, G. (2011). *The new political role of business in a globalized world: A review of a new perspective on CSR and its implications for the firm, governance, and democracy. Journal of Management Studies*, 48(4), 899–931. doi: 10.1111/j.1467-6486.2010.00950.x
- Shah, N., Irani, Z., & Sharif, A. M. (2017). *Big data in an HR context: Exploring organizational change readiness, employee attitudes and behaviors. Journal of Business Research*, 70, 366–378.
- Stojanovic, A., Milosevic, I., Arsic, S., Urosevic, S., & Mihajlovic, I. (2020). *Corporate social responsibility as a determinant of employee loyalty and business performance. Journal of Competitiveness*, 12(2), 149-166.
- Smith, C.A., Organ, D.W., & Near, J.P. (1983). *Organisational Citizenship behaviour: Its nature and antecedents, Journal of Applied psychology*, 68(4), 653-663.
- Shen, J., & Benson, J. (2014). *When CSR is a social norm: How socially responsible human resource management affects employee work behavior. Journal of Management*. doi:10.1177/0149206314522300
- Supanti, D., & Butcher, K. (2019). *Is corporate social responsibility (CSR) participation the pathway to foster meaningful work and helping behavior for millennials? International Journal of Hospitality Management*, 77, 8-18. <https://doi.org/10.1016/j.ijhm.2018.06.001>
- Tajfel, H. and Turner, J.C. (1979), "An integrative theory of intergroup conflict", pp. 33-47.
- Thanasi-Boçe, M., & Kurtishi-Kastrati, S. (2020). *Social responsibility approach among universities' community. Journal of Enterprising Communities: People and Places in the Global Economy*. <https://doi.org/10.1108/JEC-03-2020-0021>
- Tian, Q., & Robertson, J. L. (2019a). *How and When Does Perceived CSR Affect Employees' Engagement in Voluntary Pro-environmental Behavior? Journal of Business Ethics*, 155(2), 399–412.

- Wagner, T., Lutz, R. J., & Weitz, B. A. (2009). *Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions*. *Journal of Marketing*, 73, 77–91. <https://doi.org/10.1509/jmkg.73.6.77>
- Wang, H., Jia, M., Xiang, Y., & Lan, Y. (2022). *Social Performance Feedback and Firm Communication Strategy*. *Journal of Management*, 48, 2382–420.
- Wells, V. K., Manika, D., Gregory-Smith, D., Taheri, B., & McCowlen, C. (2015). *Heritage tourism, CSR and the role of employee environmental behaviour*. *Tourism Management*, 48, 399–413. <https://doi.org/10.1016/j.tourman.2014.12.015>
- Whetten & P. C. Godfrey (Eds.), *Identities in organizations: Building theory through conversations* (pp. 171-207). Thousand Oaks, CA: Sage.
- Yow, M. C. (2017). *Employee interpretations of organizational citizenship behavior in tertiary sector organizations: A generic qualitative study*.

Exploring the Role of Knowledge Sharing in Driving Innovative Work Behavior : A Multi-Dimensional Perspective

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Abstract

Innovation plays a pivotal and irreplaceable role in fostering a competitive edge and effectively responding to the ever-changing global marketplaces. In the contemporary global marketplace, companies that fail to engage in innovation have diminished prospects for survival. The acquisition of innovation within an organization may be facilitated by its employees. Therefore, it is imperative to recognize the significance of workers' innovative work behavior (IWB) at the workplace and discover approaches to developing it. Knowledge-sharing behavior has been identified as contributing to innovative work behavior. Therefore, this study aims to explore the multi-dimensional effect of knowledge sharing on three phases of innovative work behavior. Data was collected from 282 employees working in the telecom sector in two Indian states. PLS_SEM was utilized to test the hypothesized research model. The results revealed a positive impact of both dimensions of knowledge sharing on all three phases of innovative work behavior. Therefore, this study highlights the significance of knowledge-sharing behavior in fostering innovative work behavior. When employees freely exchange their insights and expertise within the organization, it fosters innovative thinking, inspiring colleagues to generate novel ideas. Sharing knowledge within organizations enhances employee engagement, enabling them to experiment with innovative solutions and strategies. Therefore, it is recommended that a knowledge-sharing culture be cultivated to improve innovative work behavior at the workplace.

Keywords: Knowledge sharing behavior, innovation, innovative work behavior

1. Introduction:

The growing interest in the capacity of innovation to provide a competitive edge is capturing more attention from scholars and practitioners in the current dynamic business landscape (Smith, 2018). Innovation is a fundamental component of corporate effectiveness (Atitumpong & Badir 2018). The prevalence of intense competition within business organizations necessitates the engagement of innovative activities by business organizations. The existing body of research about innovation has mostly emphasized the pivotal role played by workers in driving innovation inside businesses (Martins and Terblanche, 2003). According to Amabile and Pratt (2016), the capacity for innovation inside an organization is contingent upon the innovative conduct shown by its employees. Consequently, several organizations prioritize the cultivation of such discretionary behavior (Amabile and Pratt, 2016). Since the recognition of innovative work behavior is considered a crucial element for organizations to get a competitive

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advantage (Rao Jada, 2019), Organisations have been earnestly contemplating the precursors of innovative work behavior. Knowledge sharing is a characteristic that has been identified as a significant factor influencing innovative work behavior (Akram et al., 2018; Gow and Lim, 2014; Yeşil et al., 2013; Nguyen et al., 2020; Kmieciak, 2020; Islam, 2022). The acquisition of employee knowledge is crucial for firms to foster innovation and cultivate a sustainable competitive advantage (Shanker et al., 2017). The exchange of knowledge and skills within an organization plays a crucial role in driving the success and innovation capabilities of the organization (Nonaka and Takeuchi, 1995). Battistelli et al. (2019) argue that the engagement of employees in innovative endeavors necessitates contemporary knowledge, skills, and competencies that foster their inclination toward innovative work behaviors. This process enables members of a group, organization, or company to share their knowledge with other members, thereby facilitating the dissemination and utilization of valuable knowledge assets (Hu & Zhao, 2016). The exchange of knowledge plays a crucial role in enhancing an organization's competitive advantage, as well as contributing to its long-term viability and expansion (Yeşil et al., 2013; Lin, 2007). Knowledge sharing is a crucial approach for the accumulation and generation of knowledge within a professional setting. This practice has significant importance in the realm of effective knowledge management (Yeşil et al., 2013).

Moreover, Innovation is crucial in the telecommunications industry, as it drives growth and flexibility in response to technological advancements and changing customer preferences. Therefore, fostering innovation is essential for telecommunication firms to succeed in the rapidly evolving industry and maintain their relevance. Hence, the primary objective of this study is to examine the determinants that impact innovative work behavior within the telecommunications sector, recognizing its importance in organizational contexts as thrust upon by researchers in the literature (Akram et al., 2018). To the researcher's understanding, this work represents a novel endeavor in investigating the multi-dimensional impact of knowledge-sharing behavior on the three stages of innovative work behavior in the Indian Telecom Sector. Hence, the primary objective of this study is to address the gap present in the current body of scholarly research by exploring the impact of multi-dimensional knowledge-sharing behavior in terms of “knowledge donating” and “knowledge collecting” behavior with three phases of innovative work behavior i.e “idea generation”, “ideas promotion” and “idea application”.

2. Literature review:

2.1 Knowledge sharing behavior

Knowledge sharing (KS) is a fundamental aspect that motivates people to generate knowledge and transform it into a more powerful force (Liebowitz, 2001). The acquisition and use of knowledge are fundamental to the sustenance of an organization since it has been recognized as a vital component for the endurance of businesses in the current dynamic and competitive landscape (Haq and Anwar, 2016). Knowledge sharing (KS) is a focal point of interest that pertains to the reciprocal communication between workers, facilitating the exchange of information and expertise (Radaelli et al., 2014). Knowledge sharing (KS) refers to the process of employees engaging in social interactions to facilitate the exchange of information, skills, and experiences, intending to acquire new knowledge (Jimenez-Jimenez et al., 2014). Based on the research conducted by Lin (2007) and Yeşil et al. (2013), knowledge sharing may be seen as including two distinct dimensions, namely “knowledge donating” and “knowledge collecting”. These dimensions exhibit a significant role in shaping a firm's innovation capabilities, as they include the acquisition and contribution of knowledge from workers. Knowledge donation refers to the act of people transferring their intellectual capital to others (Yeşil et al., 2013; Lin, 2007). The process of knowledge collection involves seeking input

from others to acquire and use their intellectual resources (Yeşil et al., 2013; Lin, 2007). When workers exhibit higher levels of engagement in knowledge-sharing activities, they tend to internalize a higher quantity of knowledge. This phenomenon promotes the development of innovative behaviors among workers (Akhavan et.al, 2015). According to Holub (2003), the facilitation of quicker knowledge transmission via sharing plays a pivotal role in cultivating the capacity for critical thinking and creativity.

2.2 Innovative work behavior:

Innovative Work Behavior is defined “as the intentional creation, introduction and application of new ideas within a work role, group or organization, to benefit role performance, the group, or the organization” (Janssen 2000, p. 288). While “Innovative behaviors reflect the creation of something new or different. Innovative behaviors are by definition change-oriented because they involve the creation of a new product, service, idea, procedure, or process” (Spreitzer, 1995, p. 1449). Therefore, the deliberate introduction of novel concepts to address preexisting issues is referred to as innovative work behavior (Peerzada et al., 2022). A company's ability to adapt to changing market conditions and sustain a competitive edge is heavily dependent on its employees' ability to consistently generate innovative ideas (Wahyudi 2019). Organizations are under increasing pressure to expedite the development of new goods and services while retaining efficiency. Consequently, they are persistently endeavoring to foster employee innovative work behavior as a means of sustaining and enhancing long-term performance (Van Burg et al, 2014). The concept of innovative work behaviors encompasses three distinct tasks: idea generation, which involves the development of original ideas; idea promotion, which entails garnering external support for these ideas; and idea application or implementation, which involves the creation of a model or prototype based on the idea (Janssen, 2000). Battistelli, Montani, et al. (2013) argue that to satisfy the rigorous demands of contemporary organizations, the cultivation of innovative work behavior among workers may effectively facilitate their adaptation and enable them to achieve desired job and organizational results. According to Thompson and Werner (1997), mere fulfillment of fundamental job responsibilities is deemed inadequate for workers. Instead, individuals are required to demonstrate proactive behavior and provide innovative ideas to ensure organizational effectiveness. According to Afsar et al. (2018), employees who exhibit higher levels of innovative work behavior have a greater capacity to promptly adapt to the work environment, generate novel ideas, and provide a wider range of services and goods. Hence, the pursuit of continuous innovation has emerged as a crucial organizational imperative for ensuring survival. Consequently, organizations display a keen interest in exploring various aspects that might potentially influence innovative work behavior, (Agarwal, 2014), with knowledge-sharing behavior being one such element.

2.3 Linking Knowledge-sharing behavior and innovative work behavior:

In the pursuit of enhancing firm efficiency, it is imperative to recognize the importance of employee innovative work behavior within an organization (Katz, 1964). The scholarly investigation of the effects of knowledge sharing on the performance of individuals and organizations has gained considerable attention due to its significance, as emphasized by Anand et al. (2021), resulting in a substantial volume of research in this domain (Singh, 2019). According to Luu (2021), the act of sharing knowledge has the potential to enhance performance, foster employee creativity, and promote innovative work behavior. Prior research has shown a favorable effect of knowledge-sharing behavior on innovative work behavior. In a recent empirical investigation carried out by Islam, Zehra, et al. (2022) on the relationship between knowledge-sharing behavior and innovative work behavior within the IT sector in Pakistan with occupational self-efficacy as a mediator and the findings of the study provide

evidence supporting a positive impact of knowledge sharing behavior on innovative work behavior. Asurakkody and Kim (2020) conducted a study to assess the impact of knowledge-sharing behavior among nursing students on innovative work behavior, with self-leadership serving as a mediator, within a nursing school in Sri Lanka. The findings of the study indicated a favorable correlation between knowledge-sharing behavior and innovative work behavior. Furthermore, Akram et al. (2020) carried out a study in the Chinese telecommunication industry to examine the impact of organizational justice on innovative work behavior, with Akram et al. (2020) conducted a study in the Chinese telecommunication industry the mediating effect of knowledge sharing behavior and their findings indicated a positive correlation between knowledge-sharing behavior and innovative work behavior. In their study, Jnaneswar and Ranjit (2020) examined the correlation between organizational justice, knowledge-sharing behavior, and innovative work behavior within the context of manufacturing organizations in India. Their findings provided empirical evidence supporting a positive relationship between knowledge-sharing behavior and innovative work behavior among employees. Similarly, Kmiecik, (2021) investigated the effects of trust on knowledge-sharing behavior, and innovative work behavior in large Polish organizations in Poland and confirmed a positive effect of trust on knowledge-sharing behavior and innovative work behavior. Many previous studies have primarily focused on examining the influence of knowledge-sharing behavior on the overall concept of innovative work behavior. However, there is a notable gap in research that delves into the specific dimensions of innovative work behavior affected by the dimension's knowledge sharing. Investigating how knowledge sharing impacts various dimensions of innovative work behavior would provide valuable insights and enhance our understanding of this relationship. Therefore, we hypothesize that:

H₁: Knowledge donation has a positive impact on idea generation

H₂: Knowledge donation has a positive impact on idea promotion

H₃: Knowledge donation has a positive impact on idea implementation

H₄: Knowledge collection has a positive impact on idea generation

H₅: Knowledge collection has a positive impact on idea promotion

H₆: Knowledge collection has a positive impact on idea implementation

3. Methodology:

3.1 Measures:

To assess knowledge-sharing behavior, the study used an eight-item measure created by De Vries et al (2006). The scale used in this study assesses two distinct characteristics of knowledge-sharing behavior, namely “knowledge donation” and “knowledge collection”.

Innovative work behavior: The measurement of innovative work behavior included the use of a nine-item scale created by Janssen (2000). The scale used in this study assesses three distinct phases of innovative behavior, namely “Idea Generation”, “Idea Promotion”, and “Idea Application”.

3.2 Data collection: Data was gathered from individuals employed within a telecom organization across two states i.e. Jammu and Kashmir and Punjab in India. Data were collected from three telecom players in India i.e. Reliance Jio, Bharti Airtel, and BSNL. A total of 300 surveys were distributed, out of which 282 were successfully collected, indicating a 94 percent response rate. A proportionate stratified systematic sampling technique was used to gather data from respondents. Stratification was done based on the two states and data was gathered from

each state in proportion to its population. The demographic profile of the respondents is given below in Table 1.

Demographic variable	Category	Frequency	Percentage
Gender	Male	184	65.25%
	Female	98	34.75%
	Total	282	100%
Age	<30	52	18.43%
	31-45	150	53.19%
	Above 45	80	28.36%
Educational Qualifications	Diploma	20	07.09%
	Graduate	160	56.73%
	Postgraduate	102	36.17%
Experience	Up to 2	52	18.43%
	2-5 years	98	34.75%
	>5 years	132	46.80%

3.3 Data Analysis and Findings: The data analysis was conducted using structural equation modeling (SEM) with the assistance of smart PLS software. The reason behind choosing PLS-SEM is it works well with non-normal data and small-size samples. PLS_SEM is carried out in two steps: measurement evaluation and structural model evaluation.

3.4 Measurement model: Validity and reliability assessments were performed to evaluate the robustness of the measurement model (See Table 1). All the items exhibited factor loadings above the threshold limit of 0.70. Furthermore, Cronbach's Alpha and composite reliability of each dimension of the model surpassed the crucial threshold of 0.7 (Hair et al. 2019). The Average Variance Extracted (AVE) for all the dimensions was found to exceed the threshold of 0.5, as reported by Hair et al. (2019). Furthermore, the model was also checked for the discriminant validity through the Fornell and Larker Criterion (1961), and the discriminant validity of the model was also established since the square root of the average variance extracted (AVE) for each construct exceeds its highest correlation with other constructs. Consequently, our measurement model's validity and reliability were confirmed and the measurement model was deemed suitable for conducting structural analysis.

Table 1: Reliability and Validity analysis

Constructs	Items	Loadings	Cronbach's Alpha	Composite reliability	AVE
KSB	KDB1	0.791	0.837	0.891	0.671
	KDB2	0.833			
	KDB3	0.830			
	KDB4	0.822			
	KCB1	0.778	0.789	0.863	0.613
	KCB2	0.755			
	KCB3	0.841			
	KCB4	0.753			
IWB	IG1	0.858	0.829	0.897	0.745
	IG2	0.896			
	IG3	0.834			
	IP1	0.872	0.825	0.869	0.741
	IP2	0.876			
	IP3	0.834			
	IA1	0.887	0.864	0.917	0.786
	IA2	0.887			
	IA3	0.885			

Notes: KSB: Knowledge Sharing Behaviour; KDB: Knowledge Donating Behaviour; KCB: Knowledge Collecting Behavior; IWB: Innovative work Behaviour; IG: Idea Generation; IP: Idea Promotion; IA: Idea Application.

Table 2: Discriminant validity through Fornell and Larker Criterion

Dimensions	IA	IG	IP	KCB	KDB
IA	0.886				
IG	0.640	0.863			
IP	0.759	0.643	0.861		
KCB	0.477	0.469	0.392	0.783	
KDB	0.443	0.464	0.429	0.643	0.819

3.5 Structural model analysis:

The assessment of the structural model has been conducted in three steps. Initially, we analyzed the structural model to examine the presence of collinearity which is assessed in terms of the Variance Inflation Factor (VIF) values. For the present model, the VIF values for all the predictor constructs were much lower than the recommended threshold of 5, as proposed by

Hair et al. (2017). Therefore, the issue of collinearity does not exist inside our structural model. The subsequent phase included the assessment of path coefficients and their statistical significance. The hypotheses were examined using a bootstrapping approach, which included generating 5,000 bootstrap samples. Hypothesis 1 posited that knowledge donation has a positive impact on idea generation and the results indicated the positive impact of knowledge donation on idea generation (Beta value=0.277; t-value=4.065; p-value=0.000). Furthermore, H₂ stated that there is a positive impact of knowledge donation on idea promotion and the findings revealed a statistically significant and positive impact of knowledge donation on idea promotion (Beta value=0.302; t-value=4.426; p-value=0.000). Similarly, H₃ stated that knowledge donation has a positive impact on idea application and the results pointed out our positive impact of knowledge donation on idea application (Beta value=0.234; t-value=3.530; p-value=0.000). Therefore, the hypothesis H1 is supported. Furthermore, H₄ stated that knowledge collection has a positive impact on idea generation and the results revealed a positive impact on knowledge collection idea generation (Beta value=0.291; t-value=4.043; p-value=0.000). Concerning H₅ which stated that knowledge collection has a positive impact on idea promotion, the results a positive impact of knowledge collection on idea promotion (Beta value=0.199; t-value=2.799; p-value=0.005). Concerning the last hypothesis(H₆) which stated that knowledge collection has a positive impact on idea application, the analysis brought to light the positive impact of knowledge collection on idea application. Table 2 exhibits the results of the hypotheses (Beta value=0.327; t-value=4.822; p-value=0.000). Therefore, all our hypotheses are supported.

Moreover, in the next step, the study included an evaluation of the coefficient of determination (R^2 value) to assess predictive accuracy, as well as the Stone-Geisser's (Q^2) to evaluate the predictive significance of the model. The model explained 26.5% of the variation ($R^2 = 0.265$) in idea generation, 20.7 percent variation ($R^2 = 0.207$) in idea promotion, and 25.9 percent variation ($R^2 = 0.259$) in idea application indicating a satisfactory level of predictive accuracy for the model (Hair et al., 2017). In a similar vein, the Q^2 values obtained via the implementation of a blindfolding process are 0.191, 0.146, and 0.198 for the constructs of idea generation, idea promotion, and idea application respectively. The Q^2 values, as shown by Hair et al. (2017), exhibit a significant level of predictive importance for the model, since they are greater than zero.

Table 3: Results of hypotheses testing

Hypotheses	Beta coefficient	(STDEV)	T Statistics	P Values	Status
KDB -> IG	0.277	0.068	4.065	0.000	Supported
KDB -> IP	0.302	0.068	4.426	0.000	Supported
KDB-> IA	0.234	0.066	3.53	0.000	Supported
KCB-> IG	0.291	0.072	4.043	0.000	Supported
KCB-> IP	0.199	0.071	2.799	0.005	Supported
KCB-> IA	0.327	0.068	4.822	0.000	Supported

4. Discussions:

This study aimed to investigate the impact of two dimensions of knowledge sharing behavior i.e. “knowledge donating” behavior and “knowledge collecting” behavior on three stages of innovative work behavior i.e. “Idea Generation”, “Idea promotion” and “idea application”. The results confirmed the positive impact of both dimensions of knowledge-sharing behavior on all three stages of innovative work behavior. Knowledge donation had a positive impact on idea generation (Beta value=0.277; t-statistics=4.065; p value=0.000) which implies that the act of imparting knowledge allows colleagues to be exposed to diverse perspectives and a wider range of facts. The exchange of knowledge has the potential to initiate innovative ideas and foster new experiences. When colleagues engage in the sharing of their expertise, experiences, and viewpoints, it may stimulate innovative thinking and foster the development of new solutions. The willingness to consider other viewpoints may aid individuals in connecting seemingly diverse ideas, hence fostering the generation of novel ideas. However, knowledge donation showed the highest impact (Beta value=0.302; t-statistics=4.426; p value=0.000) on idea promotion. The reason could be that the dissemination or knowledge donation allows colleagues to scrutinize and evaluate ideas. When colleagues engage in open discussions on ideas, they have the opportunity to provide valuable feedback, improve ideas, and identify potential challenges or opportunities. This collaborative process facilitates the refinement of ideas and the identification of strategies for enhancing their feasibility and relevance. The process of knowledge donation also allows colleagues to advocate for their ideas, garnering support and generating enthusiasm among peers, thus facilitating the process of idea promotion. Furthermore, knowledge donation also exhibited a positive impact on idea application (Beta Value=0.234; t-statistics=3.530; p value=0.000) which implies sharing knowledge among peers plays a crucial role in expediting the application of ideas by proactively addressing potential problems, navigating complicated situations by generating innovative ideas and transforming novel ideas into useful application. Similarly, knowledge collection had a positive impact on idea generation (Beta value=0.291; t-statistics=4.043; p value=0.000). Knowledge collection being the process of obtaining facts, insights, experiences, and knowledge from a variety of sources increases the knowledge base of employees. Being exposed to many ideas leads to the generation of novel ideas. Knowledge collection also exhibited a positive impact on idea promotion (Beta value=0.199; t-value=2.799; p value=0.005). Knowledge collection serves to clarify the feasibility, benefits, and possible impact of an idea, thereby, facilitating well-informed discussions among colleagues. Consequently, this contributes to the strengthening and progression of an idea by garnering more support which leads to idea promotion. Moreover, knowledge collection exhibited a positive influence on Idea Application (Beta value=0.327; t-statistics=4.822; p value=0.000). Knowledge collection assists in building an effective strategy, identifies problems, and enables colleagues to coordinate efforts, make informed decisions, and adjust the plan as required. These factors together enhance the probability of effective execution or application of an idea.

5. Conclusion:

The objective of this research was to examine the influence of dimensions of knowledge-sharing behavior aspects on the three phases of innovative work behavior. To the best knowledge of the researcher, the study is the first of its kind to explore the multi-dimensional effect of knowledge-sharing behavior on the three stages of innovative work behavior of employees of the Indian telecom sector, thereby contributing to the existing body of knowledge. The results confirm the positive association between the aforementioned variables. Therefore, both dimensions of knowledge sharing are important for fostering innovative work behavior. The current research posits that the act of knowledge collecting has more significance

in facilitating idea generation compared to knowledge donation. These findings contradict the results of Roman Kmiecik, (2022) who found that knowledge donating has more impact on a generation of ideas than knowledge collecting. The results also confirmed the highest impact of knowledge donation on idea promotion. Furthermore, knowledge collection exhibited the highest impact on idea application. However, taking into consideration the holistic view, the results reveal that knowledge-sharing behavior exhibits a positive impact on innovative work behavior of employees. This study provides further validation of earlier empirical research that has shown the positive relationship between knowledge sharing and innovative work behavior (Islam et al, (2022); Asurakkody and Kim (2020); Jnaneswar and Ranjit (2020); Akram et al., 2018). Given the significance of knowledge-sharing behavior in fostering innovative work behavior, individuals should prioritize the sharing of useful knowledge and skills between themselves, as this will contribute to the improvement of their capabilities in innovative endeavors (Anser et al.,2022). Managers can drive the culture of knowledge sharing among employees by assigning new challenges, encouraging innovative approaches, and instigating processes geared towards knowledge development and the exchange of expertise and experiences such as mentoring or coaching (Kmiecik, 2022). Moreover, management should take the initiative and look for ways to motivate employees to share their knowledge. They should provide structural support mechanisms such as technological platforms and as a part of the organizational reward system, incentives must be provided to employees to encourage them to share knowledge. So, organizations should seek out means and ways to encourage their employees to donate and collect knowledge to cultivate innovative work behavior within the organization. This will eventually lead to organizational effectiveness. Furthermore, future researchers are advised to study different mediators or moderators to gain deeper insights into this relationship. This study did not account for the impact of various demographic variables on the variables under investigation. Consequently, future research should explore how different demographic factors influence this relationship.

References:

- A. Agarwal, U. (2014). *Linking justice, trust, and innovative work behavior to work engagement. Personnel Review*, 43(1), 41-73.
- Afsar, B., Masood, M., & Umrani, W. A. (2019). *The role of job crafting and knowledge sharing on the effect of transformational leadership on innovative work behavior. Personnel Review*, 48(5), 1186-1208.
- Akhavan, P., Hosseini, S. M., Abbasi, M., & Manteghi, M. (2015). *Knowledge-sharing determinants, behaviors, and innovative work behaviors: An integrated theoretical view and empirical examination. Aslib journal of information management*, 67(5), 562-591.
- Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2018). *Exploring the impact of knowledge sharing on the innovative work behavior of employees: A study in China. International Business Research*, 11(3), 186-194.
- Akram, T., Lei, S., Haider, M. J., & Hussain, S. T. (2020). *The impact of organizational justice on employee innovative work behavior: Mediating role of knowledge sharing. Journal of Innovation & Knowledge*, 5(2), 117-129.
- Amabile, T. M., & Pratt, M. G. (2016). *The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. Research in organizational behavior*, 36, 157-183.

- Anand, A., Muskat, B., Creed, A., Zutshi, A., & Csepregi, A. (2021). Knowledge sharing, knowledge transfer and SMEs: evolution, antecedents, outcomes and directions. *Personnel Review*, 50(9), 1873-1893.
- Anser, M. K., Yousaf, Z., Yasir, M., Sharif, M., Nasir, M. H., Rasheed, M. I., ... & Majid, A. (2022). How to unleash innovative work behavior of SMEs' workers through knowledge sharing? Accessing functional flexibility as a mediator. *European Journal of Innovation Management*, 25(1), 233-248.
- Asrar-ul-Haq, M., & Anwar, S. (2016). A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges. *Cogent Business & Management*, 3(1), 1127744.
- Asurakkody, T. A., & Kim, S. H. (2020). Effects of knowledge sharing behavior on innovative work behavior among nursing Students: Mediating role of Self-leadership. *International Journal of Africa Nursing Sciences*, 12, 100190.
- Atitumpong, A., & Badir, Y. F. (2018). Leader-member exchange, learning orientation and innovative work behavior. *Journal of Workplace Learning*, 30(1), 32-47.
- Battistelli, A., Montani, F., & Odoardi, C. (2013). The impact of feedback from job and task autonomy in the relationship between dispositional resistance to change and innovative work behaviour. *European Journal of Work and Organizational Psychology*, 22(1), 26-41.
- Battistelli, A., Odoardi, C., Vandenberghe, C., Di Napoli, G., & Piccione, L. J. H. R. D. Q. (2019). Information sharing and innovative work behavior: The role of work-based learning, challenging tasks, and organizational commitment. *Human Resource Development Quarterly*, 30(3), 361-381.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Goh, S. K., and Lim, K. Y. (2014), "Perceived Creativity: The Role of Emotional Intelligence and Knowledge Sharing Behaviour", *Journal of Information & Knowledge Management*, Vol. 13 No. 4, pp. 1450037-1450046.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Holub, S. F. (2003). Knowledge sharing is a change-management exercise. *Tax Practice Management*, 34(6), 361-363.
- Hu, B., & Zhao, Y. (2016). Creative self-efficacy mediates the relationship between knowledge sharing and employee innovation. *Social Behavior and Personality: an international journal*, 44(5), 815-826.
- Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2022). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership. *Global Knowledge, Memory and Communication*.
- Islam, T., Zahra, I., Rehman, S. U., & Jamil, S. (2022). How knowledge sharing encourages innovative work behavior through occupational self-efficacy? The moderating role of entrepreneurial leadership. *Global Knowledge, Memory and Communication*.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302.

- Jiménez-Jiménez, D., Martínez-Costa, M., & Sanz-Valle, R. (2014). Knowledge management practices for innovation: a multinational corporation's perspective. *Journal of Knowledge Management*, 18(5), 905-918.
- Jnaneswar, K., & Ranjit, G. (2020). Organisational justice and innovative behaviour: Is knowledge sharing a mediator?. *Industrial and Commercial Training*, 53(1), 77-91.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral Science*, 9, 131-133.
- Kmieciak, R. (2021). Trust, knowledge sharing, and innovative work behavior: empirical evidence from Poland. *European Journal of Innovation Management*, 24(5), 1832-1859.
- Liebowitz, J., & Yan, C. (2004). Knowledge sharing proficiencies: the key to knowledge management. *Handbook on knowledge management 1: Knowledge matters*, 409-424.
- Lin, H. F. (2007). Knowledge sharing and firm innovation capability: an empirical study. *International Journal of manpower*, 28(3/4), 315-332.
- Luu, T. T. (2021). Can human resource flexibility disentangle innovative work behavior among hospitality employees? The roles of harmonious passion and regulatory foci. *International Journal of Contemporary Hospitality Management*, 33(12), 4258-4285.
- Martins, E. C., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European journal of innovation management*, 6(1), 64-74.
- Nguyen, T., Tran, N., Doan, X., & Nguyen, H. (2020). The impact of knowledge sharing on innovative work behavior of Vietnam telecommunications enterprises employees. *Management Science Letters*, 10(1), 53-62.
- Nonaka, I. and Takeuchi, H., 1995, *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics for Innovation*. Oxford University Press, New York, NY.
- Peerzadah, S. A., Mufti, S., & Majeed, S. (2023). Mapping the scientific evolution of innovative work behavior: a bibliometric analysis of three decades. *International Journal of Innovation Science*.
- Radaelli, G., Lettieri, E., Mura, M., & Spiller, N. (2014). Knowledge sharing and innovative work behaviour in healthcare: A micro-level investigation of direct and indirect effects. *Creativity and innovation management*, 23(4), 400-414.
- Rao Jada, U., Mukhopadhyay, S., & Titiyal, R. (2019). Empowering leadership and innovative work behavior: a moderated mediation examination. *Journal of Knowledge Management*, 23(5), 915-930.
- Shanker, R., Bhanugopan, R., Van der Heijden, B. I., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of vocational behavior*, 100, 67-77.
- Singh, S. K. (2019). Territoriality, task performance, and workplace deviance: Empirical evidence on role of knowledge hiding. *Journal of Business Research*, 97, 10-19.
- Smith, K. (2018). Innovation policy in an evolutionary context. In *Evolutionary theories of economic and Technological change* (pp. 256-275). Routledge.

- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. Academy of Management Journal, 38(5), 1442-1465.*
- Thompson, J. L., Forster, C. B., Werner, C., & Peterson, T. R. (2010). Mediated modeling: using collaborative processes to integrate scientist and stakeholder knowledge about greenhouse gas emissions in an urban ecosystem. Society and Natural Resources, 23(8), 742-757.*
- Van Burg, E., Berends, H., & Van Raaij, E. M. (2014). Framing and interorganizational knowledge transfer: A process study of collaborative innovation in the aircraft industry. Journal of Management Studies, 51(3), 349-378.*
- Wahyudi, S. (2019). Person-organization fit, knowledge sharing behaviour, and innovative work behaviour: A self-determination perspective. International Journal of Innovation, Creativity and Change., 4(4).*
- Yeşil, S., Koska, A., & Büyükbeşe, T. (2013). Knowledge sharing process, innovation capability and innovation performance: An empirical study. Procedia-Social and Behavioral Sciences, 75, 217-225.*

Examining Psychological Contract Breach and Commitment Relationship Evidences from Higher Education

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Abstract

As higher education institutions face increasing financial pressure and competition, there is a growing reliance on contingent workers. Despite similar educational qualifications, these workers often experience disparities in compensation and working conditions compared to their permanent counterparts. Drawing on psychological contract theory, this study aims to address management strategies for diverse university workforce segments, thereby providing insights into fostering institutional reputation, equity, and quality. Specifically, the study examines the relationship between psychological contract breaches and commitment within the higher education sector of Jammu and Kashmir, comparing the experiences of contingent and permanent workers. Employing a cross-sectional descriptive design, the research tests several hypotheses related to these dynamics. Findings indicate a significant negative correlation between psychological contract breaches and organizational commitment, with contingent workers perceiving breaches more frequently than permanent employees. The implications of these findings are discussed, offering suggestions for future research and practical strategies for university administrators aiming to enhance equity and commitment among their workforce.

Keywords: *Financial pressure; contingent workers; institutional reputation; psychological contract; commitment; breach*

Introduction

The concept of the psychological contract, as introduced by Rousseau (1989) and expanded upon by Laulie, Vos, Jong, and Shapiro (2020), underscores employees' perceptions of mutual obligations within the employer-employee relationship. This foundational element shapes employer-employee dynamics, influencing employee satisfaction, well-being, and health (Isakson et al., 2003). Psychological contracts, though unwritten, delineate the expectations and promises between employees and their organizations (White, Lockett, & Currie, 2019; Kissler, 1994). Robinson (1996, p. 574) defines these contracts as the perceived mutual obligations between employees and employers. These contracts can either be fulfilled or breached, the latter occurring when employees perceive that their employers have not met their obligations (Morrison & Robinson, 1997).

A breach in the psychological contract can lead to varied emotional responses from employees, ranging from disappointment to resentment (Roberts, 2008). The significance of understanding psychological contracts has grown in the context of globalization, increased competition, and significant organizational changes, including those spurred by the COVID-19 pandemic (Altman & Post, 1996; Kanter & Mirvis, 1989). In an era marked by the erosion of traditional long-term job security in exchange for loyalty, employees have grown increasingly cynical and

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mistrustful of employer commitments (Guest, 1998 and Topa & Maria, 2022).

Research indicates that fulfillment of psychological contracts leads to positive employee behaviors, whereas breaches often result in negative outcomes, such as emotional exhaustion and diminished performance (Gakovic & Tetrick, 2003; Demerouti et al., 2001; Cropanzano, Rupp & Byrne, 2003). Employees also anthropomorphically relate to their organizations, interpreting statements and promises from organizational representatives as binding commitments (Eisenberger et al., 1986; Levinson et al., 1962).

This study explores the distinctions between transactional and relational contracts, the latter being viewed as traditional and derived from long-term relationships, while the former are seen as economic exchanges based on short-term agreements (Hassan, Rahman, & Basit, 2017; Anderson & Schalk, 1998). In the academic sector, especially in Jammu and Kashmir, there has been a significant shift towards contingent academic positions—often termed as adjunct, casual, or contractual faculty—driven by financial pressures and competitive demands (Kezar & Maxey, 2015; Kehm & Teichler, 2007 and Botha & Steyn (2020). This shift towards transactional contracts poses risks to the quality of education and institutional reputation (Percy & Beaumont, 2008 and Jayaweera, Chudzikowski & Jong 2021). The present study, therefore, seeks to assess the impact of psychological contract breaches on employee commitment within the higher education sector in Jammu and Kashmir, focusing particularly on contingent academic staff.

Literature Review

The Evolution and Categorization of Psychological Contracts

The concept of psychological contracts has evolved significantly over time, generally categorized into two key periods: the Pre-Rousseau and the Rousseau Periods. The earliest significant contribution to this theory is credited to Barnard (1938), who posited that people are an organization's most crucial resource. Barnard emphasized the continuous need for management to motivate organizational participants to secure the desired results, laying the foundational idea that mutual expectations drive employee contributions and organizational rewards.

Building on these early ideas, Rousseau (1990, p389), redefined the psychological contract as “the representation of mutual beliefs, perceptions, and informal obligations between an employer and an employee,” which act as antecedents for the contract’s creation. This definition marks a pivotal shift toward understanding the dyadic nature of employer-employee relationships, highlighting the role of mutual beliefs and expectations in forming these contracts.

Robinson (1996) further explored the complexity of psychological contracts, noting their variance due to subjective interpretations and the evolution over time. This evolution is influenced by changing organizational contexts as outlined by Shore and Tetrick (1994) and Collins (2010), suggesting that these contracts develop and are renegotiated over time as organizational and individual goals change.

Rousseau categorizes psychological contracts into four types: transactional, relational, balanced, and transitional. Each type reflects different underpinnings and expectations:

1. **Transactional contracts** are economically focused, of defined duration, and narrow in scope (Robinson and Rousseau, 1994; Alcover, Martínez-iñigo, & Chambel, 2012).
2. **Relational contracts** are based on socio-emotional exchanges, characterized by long-term, open-ended engagements built on mutual trust (Rousseau, 2000; Rousseau & Parks, 1993).

3. **Transitional contracts**, as identified by Rousseau (1995), reflect a cognitive state more than a contract type, characterized by high turnover and uncertainty due to organizational changes.
4. **Balanced contracts** incorporate elements of both relational and transactional contracts, suggesting a more nuanced understanding of employer-employee dynamics.

Conway and Briner (2002) and Henderson & Kelly (2022) highlight that psychological contracts are crucial for understanding the relationships between employees and their employers, impacting outcomes such as psychological contract fulfillment or breach. Fulfillment occurs when employees perceive that their employers have met their obligations, which Lee et al. (2011) and Gong and Wong (2022) suggest as a primary measure of psychological contract performance. Similarly on the other hand perception of non-fulfillment of obligations from the employer leads to breach of psychological contract.

This discussion between the fulfillment and breach underscores the complexity and dynamic nature of psychological contracts, which are crucial for navigating the modern employment landscape, especially as organizational structures and employee expectations continue to evolve.

Psychological Contract Breach and their Implications

Contract breach or violation is a central focus of contemporary psychological contract research (Ming, 2018; Bari, Ghaffar and Ahmad 2022). As explained earlier in the paper, it occurs when an organization fails, either partially or entirely, to fulfill its obligations to employees (Bal & Vink, 2011; Morrison & Robinson, 1997). Importantly, breaches are subjective perceptions, meaning employees may perceive a breach even if none has occurred, leading to changes in behavior (Robinson, 1996; Robinson & Rousseau, 1994). While fulfillment may seem like the opposite of breach or violation, it may not necessarily be the direct reciprocal (Rousseau & Tijoriwala, 1998).

Scholars traditionally ground the concept of contract breach in Social Exchange Theory, where both employers and employees derive satisfaction from fair exchanges of effort and resources (Blau, 1960). Studies have consistently shown a negative correlation between psychological contract breach and work behaviors, with employees intentionally reducing their contributions to the organization (Robinson & Rousseau, 1994; Robinson & Morrison, 1995). Furthermore, the failure of employers to fulfill promises can lead to employee frustration, anger, and disappointment, ultimately resulting in lower levels of commitment (Kaya & Kadatapé 2020; Lam, Ng, & Feldman, 2012; Conway, Guest & Trentberth, 2011; Johnson & Kelly, 2003).

This reduction in commitment may manifest in various ways, such as increased intentions to leave the organization (Lemire & Rouillard, 2005) or decreased organizational citizenship behaviors. Notably, the severity of breach varies between transactional and relational contracts, with relational breaches often perceived as more severe due to their long-term nature (Robinson, Kraatz & Rousseau, 1994). Morrison and Robinson (1997) identify two main causes of violation: incongruence and reneging. Incongruence occurs when there are divergent beliefs about contract terms between employer and employee, while reneging involves the deliberate or unintentional breach of promises by the employer. Both types of violation can significantly impact organizational variables, including employee commitment (Coyle-Shapiro & Kessler, 2000).

Employee Commitment in Psychological Contracts

Employee commitment is a crucial aspect of organizational behavior, encompassing the psychological bond between employees and their employing organization (Allen & Meyer, 1990). The three-dimensional model proposed by Allen and Meyer (1990) offers a comprehensive framework for understanding different facets of commitment: affective, continuance, and normative.

Affective commitment reflects employees' desire to stay in an organization due to their satisfaction with their work and alignment with organizational goals. Employees with high affective commitment are considered assets to the organization as they willingly contribute to its success.

Continuance commitment, on the other hand, arises from employees' perceived need to stay in the organization, often due to limited alternative employment options. While these employees may continue working despite dissatisfaction, they may not be fully engaged or motivated.

Normative commitment stems from employees' sense of duty or obligation to remain with the organization. These employees feel a moral obligation not to leave, fearing that their departure would negatively impact their colleagues or the organization's operations.

The relationship between psychological contracts and employee commitment has garnered significant attention in organizational research. Contingent workers, in particular, are subject to fluctuations in commitment based on the fulfillment of their psychological contracts (Connelly & Gallagher, 2004). While it is commonly assumed that contingent workers exhibit lower levels of commitment compared to permanent employees, empirical evidence is mixed (Isakasson& Bernhard, 2006; Martinez, Cuyper, & Witte, 2010).

The impact of psychological contract breach on employee commitment and performance is also a subject of debate. Some studies suggest that breaches lead to lower commitment and job performance (Chen, Tsui, & Zhong, 2008), while others report inconsistent findings (Conway & Briner, 2000; Dyne & Ang, 1998). These discrepancies highlight the need for further research to contextualize and refine the psychological contract construct (Guest & Clinton, 2006).

H1: Psychological Contract Breach and Organizational Commitment

Organizational commitment among employees is cultivated gradually as they develop a firm understanding of their job roles, organizational goals, performance expectations, and the means of maintaining organizational membership (Gilst, Schalk, Kluijtmans and Poell 2022; Mowday et al., 1982). Psychological contract theory aligns with this notion, proposing that when employers fulfill their obligations and uphold promises regarding future rewards, employees are more likely to demonstrate higher motivation and reciprocation (Shapiro, 2002). Incongruence in fulfilling obligations is associated with reduced organizational citizenship behavior (Shapiro & Kessler, 2002) and job performance (Turnley & Feldman, 2000). Conversely, breaches of the psychological contract have been linked to intentions to leave (Tackleab& Taylor, 2003) and absenteeism (Johnson & Kelly, 2003). Moreover, studies have reported a negative relationship between breach and commitment, particularly among young graduates (Stuges et al., 2005). Therefore, we propose:

H1: Psychological contract breach among employees will be negatively correlated with their commitment to the organization.

H2: Psychological Contract Breach and Contingent Employment

Research indicates that a significant portion of contingent workers aspire to secure permanent positions, considering them the preferred form of employment (Gillani, Kutaula and Badhwar,

2021; Isaksson et al., 2006). However, contextual factors such as chronic unemployment and limited opportunities in the private sector often compel individuals to accept contingent employment as a means to avoid unemployment. While contingent employees may not be entirely satisfied with their employment situation, personal motives such as flexibility and freedom can influence their preference for contingent work (Tan & Tan, 2002). Contrary to the assumption that contingent employees lack commitment, studies have shown that they may exhibit higher levels of job satisfaction and organizational commitment compared to permanent workers (Ellingson, Gruys & Sackett, 1998; Lee & Johnson, 1991). This may be attributed to their focus on economic objectives rather than socio-emotional relationships within the organization (Chambel & Castanheira, 2007). Therefore, we hypothesize:

H2: Contingent academics perceive more breaches in the psychological contract compared to their counterparts working on substantive basis.

Design, Sample, and Data Collection

The research problem identified in this study necessitates a deductive approach with a mixed research design incorporating both cross-sectional and causal designs. Cluster sampling was employed for data collection, with each university operating in Jammu and Kashmir representing a unique cluster. Four universities were selected based on their age and size for administering the questionnaire.

Data collection took place between June and July 2021. Offline self-administered questionnaires were distributed to 470 faculty members of the selected institutions, with 273 questionnaires returned. Twenty-one incomplete questionnaires were discarded, leaving a total of 252 completed questionnaires for hypothesis testing.

Sample Profile

Demographic analysis revealed that the majority of respondents were male (74.2%), with a median age between 31 and 40 years. Approximately 43.7% of respondents reported working for their current university for 11 or more years, followed by 31.3% for one to five years, and 25.0% for six to 10 years. A significant percentage (77.0%) of respondents held a Doctor of Philosophy (PhD) degree and the rank of Assistant Professor (77.8%), followed by Associate Professor (7.1%) and Professor (15.1%). Thirty-one percent of respondents were contingent academics relative to substantive workers.

Survey Measures

Psychological contract breach was measured using a scale developed by Robinson & Morrison (2000), which has demonstrated reliability and validity across various studies. Employee commitment was assessed using a scale developed by Allen & Meyer (1990), encompassing affective, normative, and continuance commitment sub-scales. This scale has been validated in both Western and non-Western contexts.

Reliability, Validity, and Descriptive

The reliability and validity of the scales were ensured through established and well-accepted instruments with sound psychometric properties. Reliability was assessed using Cronbach's alpha to check inter-item consistency, while validity was evaluated through item-to-item and item-to-total correlations. Both reliability and validity coefficients surpassed threshold levels. Refer to Table 1.1 for detailed results.

Table 1.1: *Descriptive and internal consistency*

Constructs	Psychological Contract Breach (PCB)	Affective Commitment (AC)	Continuance Commitment (CC)	Normative Commitment (NC)	Employee Commitment (EC)
N	252	252	252	252	252
Mean**	2.72	3.75	3.28	3.44	3.49
SD	0.87	0.73	0.79	0.54	0.5
Maximum	5	5	5	5	4.9
Minimum	1	2	1	1.57	1.97
Cronbach's Alpha	.727	.823	.789	.78	.734
Number of items	6	5	6	5	8

Source: Primary data

***Scored on a 5-point Likert scale where 1= strongly disagree and 5= strongly agree*

Descriptive Results

Subsequently, we computed the latent variables, and the descriptive results of all latent variables revealed a wide range of responses. The mean value concerning the Psychological Contract Breach (PCB) of respondents was 2.7 (S.D = 0.87), indicating that respondents experienced a contract breach rather than fulfillment.

The Employee Commitment construct yielded a mean value of 3.5 (S.D = 0.5), indicating a moderately high commitment of faculty towards their institutions. Furthermore, the three sub-latent variables of commitment revealed little variations from each other, with Affective Commitment (AC) showing a mean of 3.7 (S.D = 0.73), Continuance Commitment (CC) with a mean of 3.2 (S.D = 0.78), and Normative Commitment (NC) with a mean of 3.4 (S.D = 0.53), suggesting that employees exhibited moderately high commitment levels.

Hypotheses Testing

The study aimed to ascertain the link between Psychological Contract Breach (PCB) and Employee Commitment (EC), as well as the existence of a breach between contingent and permanent academics. Pearson's correlation and multiple linear regressions were used to test Hypothesis 1 (H1), while an independent sample t-test was employed for Hypothesis 2 (H2).

Table 2 indicates a high correlation of PCB with AC ($r = -0.498$, $p < 0.01$), and moderately high correlations of PCB with CC ($r = -0.102$, $p < 0.01$), and PCB with NC ($r = -0.270$, $p < 0.01$). This suggests that PCB decreases AC proportionally at higher rates compared to CC and NC. PCB also showed a moderately high negative correlation with EC ($r = -0.395$, $p < 0.01$), indicating that an increase in PCB significantly reduces EC.

Table 1.2: Correlation and Regression Analysis

Independent Variable	Dependent Variable	Pearson Correlation &Sig. (2-tailed)	Regression Estimates	R-squared
Psychological Contract Breach	Affective Commitment	-.498** ≤.000	-.401	.116
Psychological Contract Breach	Continuance Commitment	.102 ≤.107	-.045	.006
Psychological Contract Breach	Normative Commitment	-.270** ≤.000	-.231	.031
Psychological Contract Breach	Employee Commitment	-.395** ≤.000	-.17	.074

Source: *Primary data*

Regression Analysis Results

Similarly, the results of the regression analysis indicate that PCB has a negative and significant relationship with EC ($\beta = -0.17$, $p < 0.05$), AC ($\beta = -0.401$, $p < 0.05$), and NC ($\beta = -0.231$, $p < 0.05$), and a negative but not significant relationship with CC ($\beta = -0.045$, $p < 0.05$). Therefore, we partially confirm H1.

Assessment of Assumptions

Before testing H2, we assessed the latent variables for normality of data and homogeneity of variance. Since we used an independent sample t-test to assess the significance of PCB between contingent and permanent respondents, PCB scores needed to be approximately normally distributed for both categories of workers. Visual inspection of histograms, normal Q-Q plots, and Box plots indicated that the data was approximately normally distributed.

Furthermore, we examined skewness and kurtosis z-values, both of which fell within the threshold levels of -1.96 to 1.96 (Cramer, 1998; Cramer & Howitt, 2004; Doane & Seward, 2011). Additionally, we conducted the Shapiro-Wilk Test, which yielded a statistically insignificant p-value (>0.05) (Shapiro & Wilk, 1965; Razalia& Wah, 2011).

Similar procedures were followed for other non-hypothesized variables. Having satisfied ourselves with these measures, we proceeded with the independent sample t-test.

Table 1.3: Independent Sample t-test

Constructs	status	N	Mean	Std. Deviation	t	p
Psychological Contract Breach	Contingent	79	2.9299	.86145	2.017	0.045
	Permanent	173	2.6859	.90342		
Affective commitment	Contingent	79	3.6278	.85078	-2.444	0.015

	Permanent	173	3.8844	.73488		
Continuance commitment	Contingent	79	3.3713	.75294	1.304	.194
	Permanent	173	3.2235	.86946		
Normative commitment	Contingent	79	3.3852	.63779	-1.100	.273
	Permanent	173	3.4756	.59085		
Commitment	Contingent	79	3.0844	.91827	-5.115	.000
	Permanent	173	3.5615	.55125		

Source: Primary data

Hypothesis Testing Results

The descriptive statistics, t-values, and p-values are summarized in Table 1.3. Contingent workers have a mean score of 2.93 (SD .86) on PCB, which is slightly higher than permanent workers, who have a mean score of 2.68 (SD .90). This suggests that there is more breach among contingent workers than among permanent workers. Moreover, the mean difference is statistically significant, although the effect size is small. The t-value returned was 2.017, exceeding the threshold level of 1.96, with a p-value of < 0.05. Consequently, we confirm H2.

Discussion

The study explored the impact of PCB on the commitment of academia in the leading universities of Jammu and Kashmir, while also examining the differences in perception between permanent and contractual workers regarding the psychological contract. The findings revealed a significant negative relationship between PCB and Commitment, aligning with previous research in different contexts and populations.

The results suggest that parameters of contingent workers have a greater influence on the correlation coefficients than those of permanent workers. This reflects the changing landscape of careers, with individuals taking more responsibility for their career management. The expectation of new careers in different organizations alters existing psychological contracts, signaling the end of the traditional promise of lifelong careers.

The results also indicate significantly higher levels of PCB among contingent workers, highlighting pay disparities and asymmetric working conditions in the local context. Relying on contingent faculty as a cost-saving strategy may have unintended consequences, potentially impacting the quality of teaching and student learning. The breach also stems from lack of efforts from the HEIs to give a sense of organizational citizenship to the contingent workers by giving them membership and say in the committee system in vogue for decentralized decision making. The participation of these workers in designing curriculum, student affairs, administrative and financial decision making is wanting too. These partisan policies breed discrimination and affect the psychologically contract materially.

Moreover, the persistent desire for permanent jobs among contingent workers has led to legal battles with institutions, diverting their focus from teaching and creating division within universities especially colleges in J&K. More often than not these teachers are seen on roads or in media pressing for their demands. Pay disparity between and among the universities have also contributes to the sense of alienation resulting in low psychological contract fulfillments. The low psychological contract fulfillment may also stem from issues faced by permanent workers, such as delays in career progression, insufficient training opportunities, work-life balance issues to name a few.

Implications for Future Research

An inter-university/college or inter-state cross-cultural comparison would provide valuable insights into how diverse cultural contexts influence fulfillment relative to more homogeneous workplaces. This could inform the development of a more comprehensive analytical framework and advance practical knowledge in the field of psychological contracts and contingent employment.

References:

- Alcover, C. M., Martinez-Inigo, D., & Chambel, M. J. (2012). *Perceptions of employment relations and permanence in the organization: Mediating effects of affective commitment in relations of psychological contract and intention to quit. Psychological Reports, 110*(3), 839-853.
- Allen, N. J., & Meyer, J. P. (1990). *The measurement and antecedents of affective, continuance and normative commitment to the organization. Journal of occupational psychology, 63*(1), 1-18.
- Altman, B. W., & Post, J. E. (1996). *Beyond the "social contract": An analysis of the executive view at twenty-five large companies. DT Hall & Associates, The career is dead—Long live the career, 46-71.*
- Anderson, N., & Schalk, R. (1998). *The psychological contract in retrospect and prospect. Journal of organizational behavior, 19, 637-647.*
- Arthur, M. B., & Rousseau, D. M. (1996). *A career lexicon for the 21st century. Academy of Management Perspectives, 10*(4), 28-39.
- Arthur, M. B., & Rousseau, D. M. (Eds.). (2001). *The boundary less career: A new employment principle for a new organizational era. Oxford University Press on Demand.*
- Bal, P. M., & Vink, R. (2011). *Ideological currency in psychological contracts: The role of team relationships in a reciprocity perspective. The International Journal of Human Resource Management, 22*(13), 2794-2817.
- Bari, M. W., Ghaffar, M., & Ahmad, B. (2020). *Knowledge-hiding behaviors and employees' silence: mediating role of psychological contract breach. Journal of knowledge management, 24*(9), 2171-2194.
- Barnard, C. I. (1938). *The functions of the executive. Cambridge, MA: Harvard University.*
- Barrett, S. (2004). *Emotional Labour and the Permanent Casual Lecturer: Ideas for a Research Project. International Education Journal, 4*(4), 92-101.
- Blau, P. M. (1960). *Structural effects. American sociological review, 178-193.*
- Botha, L., & Steyn, R. (2020). *Psychological contract breach and innovative work behaviour: Systematic literature review. The Southern African Journal of Entrepreneurship and Small Business Management, 12*(1), 8.
- Bridges, W. (1995). *Jobshift. London: Nicholas Brealey.*
- Bryman, A., & Bell, E. (2015). *Business research methods (Vol. 4th). Glasgow: Bell & Bain Ltd.*
- Chambel, M. J., & Castanheira, F. (2007). *They don't want to be temporaries: Similarities between temps and core workers. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 28*(8), 943-959.
- Chen, Z. X., Tsui, A. S., & Zhong, L. (2008). *Reactions to psychological contract breach: A dual perspective. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 29*(5), 527-548.

- Chiaburu, D. S. & Takleab, A. G. 2005. Individual and contextual influences on multiple dimension of training effectiveness. *Journal of European Industrial Training*, 29(8), pp. 604-626.
- Cho, E. (2016). Making Reliability Reliable: A Systematic approach to reliability coefficients. *Organizational Research Methods*, 19(4), 651-682.
- Collins, M.D. (2010), "The effect of psychological contract fulfilment on manager turnover intentions and its role as a mediator in a causal, limited-service restaurant environment", *International Journal of Hospitality Management*, Vol. 29 No. 4, pp. 736-742.
- Connelly, C. E., & Gallagher, D. G. (2004). Managing contingent workers: Adapting to new realities. *Leading in turbulent times*. Malden, MA: Blackwell, 143-64.
- Conway, N., & Briner, R. B. (2002). Full-time versus part-time employees: Understanding the links between work status, the psychological contract, and attitudes. *Journal of Vocational Behavior*, 61(2), 279-301.
- Conway, N., & Briner, R.B (2002). Full-time versus part-time employees: Understanding the links between work status, the psychological contract and attitudes. *Journal of Vocational Behaviors*, 61 (2), 279-301
- Conway, N., Briner, R. B., & Rousseau, D. M. (2000). Psychological contract inventory technical report. Pittsburgh: Carnegie Mellon University, 23,71-130.
- Conway, N., Guest, D., & Trenberth, L. (2011). Testing the differential effects of changes in psychological contract breach and fulfillment. *Journal of Vocational Behavior*, 79(1), 267-276.
- Coyle, Shapiro, J. A. M., & Kessler, I. (2002). Contingent and non-contingent working in local government: contrasting psychological contracts. *Public administration*, 80(1), 77-101.
- Coyle. Shapiro, J., & Kessler, I. (2000). Consequences of the psychological contract for the employment relationship: A large scale survey. *Journal of management studies*, 37(7), 903-930.
- Coyle-Shapiro, J. A. M. (2002). A psychological contract perspective on organizational citizenship behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 23(8), 927- 946.
- Cramer, D. (1998). *Fundamental statistics for social research: step-by-step calculations and computer techniques using SPSS for Windows*. Psychology Press.
- Cramer, D., & Howitt, D. L. (2004). *The Sage dictionary of statistics: a practical resource for students in the social sciences*. Sage.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied psychology*, 88(1), 160.
- Dailey, R. C. & Kirk, D. J. (1992). Distributive and procedural justice as antecedents of job dissatisfaction and intent to turnover. *Human Relation*, 45, (3), 305(13).
- De Croon, E. M., Sluiter, J. K., Blonk, R. W., Broersen, J. P., & Frings-Dresen, M. H. (2004). Stressful work, psychological job strain, and turnover: a 2-year prospective cohort study of truck drivers. *Journal of applied psychology*, 89(3), 442.
- De Cuyper, N., & De Witte, H. (2006). The impact of job insecurity and contract type on attitudes, wellbeing and behavioural reports: a psychological contract perspective. *Journal of occupational and organizational psychology*, 79(3), 395-409.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), 499.

- Doane, D. P., & Seward, L. E. (2011). *Measuring skewness: a forgotten statistic?* *Journal of statistics education*, 19(2).
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). *Perceived organizational support*. *Journal of Applied psychology*, 71(3), 500.
- Ellingson, J. E., Gruys, M. L., & Sackett, P. R. (1998). *Factors related to the satisfaction and performance of temporary employees*. *Journal of applied psychology*, 83(6), 913.
- Fink, A. (2003). *The survey handbook*. Sage.
- Gakovic, A., & Tetrick, L. E. (2003). *Psychological contract breach as a source of strain for employees*. *Journal of business and Psychology*, 18(2), 235-246.
- Gillani, A., Kutaula, S., & Budhwar, P. S. (2021). *Psychological contract breach: Unraveling the dark side of business-to-business relationships*. *Journal of Business Research*, 134, 631-641.
- Gong, T., & Wang, C. Y. (2022). *The effects of a psychological contract breach on customer-directed deviance*. *Journal of Business Research*, 138, 374-386.
- Guest, D. E. (1998). *Is the psychological contract worth taking seriously?* *Journal of Organizational Behaviour: The International Journal of Industrial, Occupational and Organizational Psychology and Behaviour*, 19(S1), 649-664.
- Guest, D. E., Isaksson, K., & De Witte, H. (Eds.). (2010). *Employment contracts, psychological contracts, and employee well-being: An International Study*. Oxford University Press.
- Guest, D., & Clinton, M. (2006). *Temporary employment contracts, workers' well-being and behaviour: evidence from the UK*. King's College London: Working Paper.
- Hassan, Z., Abdul-Rahman, A., & Basit, A. (2017). *The impact of psychological contract on organisational commitment: A study on public sector of Maldives*. Available at SSRN 3056216.
- Henderson, K. E., & O'Leary-Kelly, A. M. (2021). *Unraveling the Psychological Contract Breach and Violation Relationship: Better Evidence for Why Broken Promises Matter*. *Journal of Managerial Issues*, 33(2).
- Isaksson, K., & Bernhard, C. (2006). *Psychological contracts across employment situations (PSYCONES)*. Stockholm: National Institute for Working Life (Arbetslivsinstitutet).
- Jayaweera, T., Bal, M., Chudzikowski, K., & De Jong, S. (2021). *The impact of economic factors on the relationships between psychological contract breach and work outcomes: a meta-analysis*. *Employee Relations*, 43(3), 667-686.
- Johnson, J. L., & O'Leary Kelly, A. M. (2003). *The effects of psychological contract breach and organizational cynicism: Not all social exchange violations are created equal*. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(5), 627-647.
- Johnson, J. L., & O'Leary, Kelly, A. M. (2003). *The effects of psychological contract breach and organizational cynicism: Not all social exchange violations are created equal*. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(5), 627-647.
- Kanter, D. L., & Mirvis, P. H. (1989). *The cynical Americans: Living and working in an age of discontent and disillusion*. Jossey-Bass.
- Kaur, K., & Sandhu, H. S. (2010). *Career stage effect on organizational commitment: Empirical evidence from Indian banking industry*. *International Journal of Business and Management*, 5(12), 141.

- Kaya, B., & Karatepe, O. M. (2020). Attitudinal and behavioral outcomes of work-life balance among hotel employees: The mediating role of psychological contract breach. *Journal of Hospitality and Tourism Management*, 42, 199-209.
- Kehm, B. M., & Teichler, U. (2007). Research on internationalisation in higher education. *Journal of studies in international education*, 11(3-4), 260-273.
- Kezar, A., & Maxey, D. (2015). *Adapting by design: Creating faculty roles and defining faculty work to ensure an intentional future for colleges and universities. Delphi Project on the Changing Faculty and Student Success.*
- Kissler, G.D. (1994). The new employment contract. *Human Resource Management*, 33, 335-352.
- Klein, H. J., Molloy, J. C., & Cooper, J. T. (2009). Conceptual foundations: Construct definitions and theoretical representations of workplace commitments. *Commitment in organizations: Accumulated wisdom and new directions*, 1, 3-36.
- Lam, S. S., Ng, T. W., & Feldman, D. C. (2012). The relationship between external job mobility and salary attainment across career stages. *Journal of vocational behavior*, 80(1), 129-136.
- Lee, C., Liu, J., Rousseau, D. M., Hui, C., & Chen, Z. X. (2011). Inducements, contributions, and fulfillment in new employee psychological contracts. *Human Resource Management*, 50(2), 201-226.
- Lee, T. W., & Johnson, D. R. (1991). The effects of work schedule and employment status on the organizational commitment and job satisfaction of full versus part time employees. *Journal of Vocational Behavior*, 38(2), 208-224.
- Lemire, L., & Rouillard, C. (2005). An empirical exploration of psychological contract violation and individual behaviour. *Journal of Managerial Psychology*.
- Levinson, H., Price, C. R., Munden, K. J., Mandl, H. J., & Solley, C. M. (1962). *Men, management, and mental health.*
- Lo Si Ming (2018), *Employment status and the psychological contract: Hong King Academics. Unpublished theses, University of Newcastle, Australia.*
- Martínez, G., De Cuyper, N., & De Witte, H. (2010). Review of temporary employment literature: Perspectives for research and development in Latin America. *Psyke*, 19(1), 61-73.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application.* Sage.
- Meyer, J. P., Allen, N. J., & Gellatly, I. R. (1990). Affective and continuance commitment to the organization: Evaluation of measures and analysis of concurrent and time-lagged relations. *Journal of applied psychology*, 75(6), 710.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of vocational behavior*, 61(1), 20-52.
- Morison E.W., & Robinson, S.L. (1997). When employees feel betrayed. A model of how psychological contract violation develops. *Academy of Management Review*, 226-256.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of management Review*, 22(1), 226-256.
- Mowday, R. T., Porter, L. W., & Steers, R. (1982). *Employee-organization linkages academic press.* New York.
- Ng, T. W., Feldman, D. C., & Butts, M. M. (2014). Psychological contract breaches and employee voice behaviour: The moderating effects of changes in social

- relationships. *European journal of work and organizational psychology*, 23(4), 537-553.
- Noblet, A. J., & Rodwell, J. J. (2009). Integrating job stress and social exchange theories to predict employee strain in reformed public sector contexts. *Journal of Public Administration Research and Theory*, 19(3), 555-578.
- Percy, A., & Beaumont, R. (2008). The casualisation of teaching and the subject at risk. *Studies in Continuing Education*, 30(2), 145-157.
- Percy, A., & Beaumont, R. (2008). The casualisation of teaching and the subject at risk. *Studies in Continuing Education*, 30(2), 145-157.
- Quratulain, S., Khan, A. K., Crawshaw, J. R., Arain, G. A., & Hameed, I. (2018). A study of employee affective organizational commitment and retention in Pakistan: The roles of psychological contract breach and norms of reciprocity. *The International Journal of Human Resource Management*, 29(17), 2552-2579.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of shapiro-wilk, kolmogorov-smirnov, lilliefors and anderson-darling tests. *Journal of statistical modeling and analytics*, 2(1), 21-33.
- Roberts, C. L. (2008). Restitutionary Disgorgement for Opportunistic Breach of Contract and Mitigation of Damages. *Loy. LAL Rev.*, 42, 131.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative science quarterly*, 574-599.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative science quarterly*, 574-599.
- Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of organizational behavior*, 15(3), 245-259.
- Robinson, S. L., & Wolfe Morrison, E. (2000). The development of psychological contract breach and violation: A longitudinal study. *Journal of organizational Behavior*, 21(5), 525-546.
- Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the psychological contract: A longitudinal study. *Academy of management Journal*, 37(1), 137-152.
- Rousseau, D. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Sage publications.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal*, 2(2), 121-139.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee responsibilities and rights journal*, 2(2), 121-139.
- Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of organizational behavior*, 11(5), 389-400.
- Rousseau, D. M., & McLean Parks, J. (1993). The contracts of individuals and organizations. *Research in organizational behavior*, 15, 1-1.
- Rousseau, D. M., & Tijoriwala, S. A. (1998). Assessing psychological contracts: Issues, alternatives and measures. *Journal of Organizational Behavior*:
- Rousseau, D.M. (2000) Psychological contract inventory: Technical report (Technical Report Number 2), Carnegie Mellon University, Pittsburgh, PA.
- Sebastian, S., George, A. P., & Aishwarya, N. (2019). Psychological Contract and Organisational Commitment of the employees in Indian Aviation Sector. *Asian Journal of Management*, 10(2), 109-114.
- Sekaran, U., & Bougie, R. (2013). *A Skill Building Approach*. pp245.

- Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*, 52(3/4), 591-611.
- Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework. *Trends in organizational behavior*, 1, 91-109.
- Sigrid M. Hamilton, Kathryn von Treuer, (2012), "An examination of psychological contracts, careerism and ITL", *Career Development International*, Vol. 17 Iss: 5 pp. 475 - 494
- Sonnentag, S., Kuttler, I., & Fritz, C. (2010). Job stressors, emotional exhaustion, and need for recovery: A multi-source study on the benefits of psychological detachment. *Journal of vocational Behavior*, 76(3), 355-365.
- Sturges, J., Conway, N., Guest, D., & Liefooghe, A. (2005). Managing the career deal: The psychological contract as a framework for understanding career management, organizational commitment and work behavior. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 26(7), 821-838.
- Sweeney, P. D., & McFarlin, D. B. (1993). Workers' evaluations of the "ends" and the "means": An examination of four models of distributive and procedural justice. *Organizational behavior and human decision processes*, 55(1), 23-40.
- Tan, H. H., & Tan, C. P. (2002). Temporary employees in Singapore: what drives them? *The Journal of Psychology*, 136(1), 83-102.
- Tekleab, A. G., Laulié, L., De Vos, A., De Jong, J. P., & Coyle-Shapiro, J. A. (2020). Contextualizing psychological contracts research: a multi-sample study of shared individual psychological contract fulfilment. *European Journal of Work and Organizational Psychology*, 29(2), 279-293.
- Tekleab, A. G., & Taylor, M. S. (2003). Aren't there two parties in an employment relationship? Antecedents and consequences of organization–employee agreement on contract obligations and violations. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(5), 585-608.
- Topa, G., Aranda-Carmena, M., & De-Maria, B. (2022). Psychological contract breach and outcomes: a systematic review of reviews. *International journal of environmental research and public health*, 19(23), 15527.
- Turnley, W. H., & Feldman, D. C. (2000). Reexamining the effects of psychological contract violations: unmet expectations and job dissatisfaction as mediators. *Journal of organizational behavior*, 21(1), 25-42.
- Van Dyne, L., & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of management Journal*, 41(6), 692-703.
- van Gilst, E., Schalk, R., Kluijtmans, T., & Poell, R. (2020). The role of remediation in mitigating the negative consequences of psychological contract breach: A qualitative study in the banking sector. *Journal of Change Management*, 20(3), 264-282.
- White, L., Lockett, A., & Currie, G. (2019). How does the availability and use of flexible leave influence the employer–employee relationship? *Human Resource Management*.
- Zagenczyk, T. J., Smallfield, J., Scott, K. L., Galloway, B., & Purvis, R. L. (2017). The moderating effect of psychological contract violation on the relationship between narcissism and outcomes: An application of trait activation theory. *Frontiers in psychology*, 8, 1113.

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