



IMPACT OF SELF-EFFICACY, BELONGINGNESS, CULTURE, PSYCHOLOGICAL SAFETY ON EMPLOYEE ENGAGEMENT IN MEDIATION OF EMPLOYEE RELATIONS: A PAKISTANI HEALTHCARE PERSPECTIVE

Hatf Rana^{1*}, Farah Ahmad², Tariq Mahmood Rehman³

^{1*} Additional Medical Superintendent Rahim Yar Khan Teaching Hospital

² Zia ud Din Medical College

³ Rahim Yar Khan Teaching Hospital

***Corresponding Author:** Hatf Rana

*Additional Medical Superintendent Rahim Yar Khan Teaching Hospital

Email: hatfrana@gmail.com, Cell Phone: 0321-8339999

Abstract

Background: In the realm of organizational dynamics, employee engagement stands as a pivotal determinant of success across various sectors. However, it is noteworthy that the healthcare sector in Pakistan has remained underrepresented in the body of employee engagement research.

Objective: To bridge this notable void by conducting a comprehensive examination of the determinants of employee engagement within healthcare institutions in Pakistan.

Material and Methods: The research methodology adopted for this study entails a cross-sectional examination within the healthcare sector of Pakistan. The anticipated findings of this research are poised to furnish invaluable insights into the intricate tapestry of factors that wield influence over employee engagement within the healthcare sector of Pakistan. This, in turn, carries profound practical implications for healthcare organizations, offering a roadmap for augmenting employee engagement, and thereby fostering a positive trajectory in both organizational performance and the well-being of their employees.

Results: There is strong evidence that Self-Efficacy significantly influences Employee Engagement. The path coefficient for Self-Efficacy (SE → EE) is 0.574 with a significant T statistic ($|O/STDEV| = 8.305$, $p = 0$). There is evidence that Belongingness significantly influences Employee Engagement. Since the path coefficient for Belongingness (BE → EE) is 0.111 with a significant T statistic ($|O/STDEV| = 2.753$, $p = 0.006$). There is insufficient evidence to support that Psychological Safety significantly influences Employee Engagement. The path coefficient for Psychological Safety (PS → EE) is 0.011, and the T statistic is not significant ($|O/STDEV| = 0.486$, $p = 0.627$). The path coefficient for Organizational Culture (OC → EE) is 0.057, and the T statistic is not significant ($|O/STDEV| = 1.579$, $p = 0.114$).

Conclusion: The findings of the study provide valuable insights into the factors influencing employee engagement in the Pakistan healthcare industry. Self-Efficacy and Belongingness

emerged as crucial determinants, showing a direct and significant influence on Employee Engagement. This highlights the importance of fostering a sense of competence and connection among employees to enhance their overall engagement in the workplace.

Keywords Self-Efficacy, Belongingness, Culture, Psychological Safety, Employee Relation, and Employee Engagement

INTRODUCTION

Engagement of employees plays a crucial role in the triumph of any company. In the healthcare sector, employers are now more focused on enhancing the connection between employees and their performance. Although numerous research works have investigated the contentment of healthcare workers, there remains a dearth of knowledge regarding the extension of engagement in healthcare environments. Moreover, the absence of reliable data concerning employee engagement within Pakistani healthcare institutions has posed challenges in leveraging this idea for enhancing workplaces, as seen in other sectors.^{1,2}

Employee engagement is impacted by numerous elements, including one's internal dynamics involving knowledge, skills, and self-efficacy. Studies have also established a direct connection between employee engagement and organizational culture. Kahn's (1990) framework for psychological safety has been employed to illustrate its correlation with employee engagement.³ According to Kahn (1990), psychological safety is described as an employee's capacity to work without apprehension or concern about potential repercussions to their career, status, or self-image. A psychologically safe environment promotes open, supportive, and trustworthy relationships among coworkers. In such an atmosphere, employees are comfortable taking risks and making minor mistakes without worrying about adverse consequences. The contentment of employees plays a crucial role in the success of any corporate entity. Only contented employees have the ability to cultivate positive relationships within their work environment, thereby bolstering their overall productivity.⁴

Research on employee engagement and the factors affecting employee engagement is crucial as engaged employees incorporate to higher productivity and better organizational performance. A Canadian study by Lowe et al. 2012 posited a consistently robust correlation between employee engagement and the performance of the organization.⁵ While in another research the outcomes uncovered statistically noteworthy connections between observed degrees of medical engagement and performance across a diverse array of established performance metrics.⁶ Kartal et al. (2018) unveiled that both the extent of work engagement and feelings of alienation had a substantial impact on the individual performances of healthcare professionals.⁷ Employee engagement has notably enhanced organizational performance not only in the healthcare sector but also in banking, telecommunication, hotel, petrochemical sectors, and public enterprises.^{8,9,10}

Undoubtedly exhaustive research has been conducted on the antecedents of employee engagement as well as its effect on organizational performance in both direct and indirect ways. This research paper utilizes Maslow's Hierarchy of Needs theory to assess the employee engagement in the Pakistani healthcare sector. The effects of self-efficacy, belongingness, culture, psychological safety and employee relation with management are used as pointers for assessing the engagement of employees. The research paper is structured as follows: Section 2 provides an in-depth review of the current literature related to the research topic. Section 3 covers the development of hypotheses and outlines the research methodology in detail. This section also involves a comprehensive analysis using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. Section 4 encompasses a thorough evaluation of the results of the study. Section 5 presents the conclusions and discusses the results.

Research Methodology

Questionnaire Design

In this study, the quantification of self-efficacy was achieved through the utilization of a five-item scale, thoughtfully adapted from Bandura's seminal work by Bandura et al. 2006.¹¹ Belongingness, a crucial element of interpersonal dynamics, was thoughtfully examined via a scale grounded in the conceptual framework put forth by Malone (2016).¹² Our exploration of organizational culture involved an assessment derived from Njuguna et al. 2016 comprehensive scale, carefully selecting five items tailored to evaluate cultural dimensions particularly pertinent to the healthcare sector in Pakistan.¹³

Sample and Data Collection

This research employed a cross-sectional study design, collecting data at a single point in time to examine the relationships between self-efficacy, belongingness, culture, psychological safety, employee engagement, with the mediation of employee relations in the healthcare sector in Pakistan.

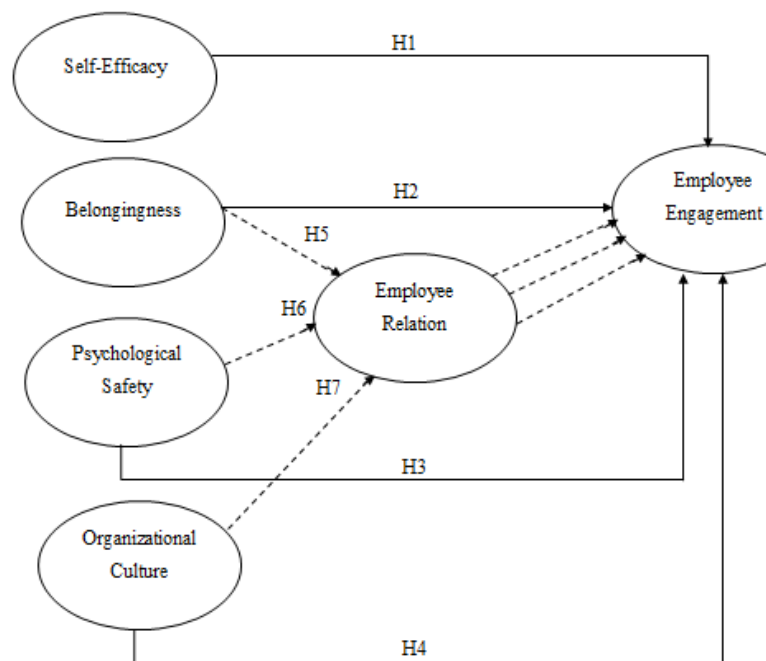


Figure 1: Conceptual Framework of the Model

Purposive Sampling was utilized to select participants from the healthcare sector in Pakistan, considering the relevance of their roles in employee relations and engagement. Participants provided responses by rating items on the Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire was distributed and responses were collected through Google Forms, ensuring ease of access for participants and efficient data management. A total of 236 responses were collected, offering a robust dataset for analysis. Informed consent was obtained from all participants, ensuring their privacy and confidentiality.

Methodology for Data Analysis

The analysis of the research data and the derivation of results were conducted using the Smart PLS software, with a focus on the partial least square structural equation model (PLS-SEM). Given the nature of this research, which explores relationships between various constructs, the PLS-SEM approach is deemed appropriate for analyzing information and testing the proposed hypotheses. The analysis involved two types of estimations: the measurement model and the structural model. The measurement model ensures the reliability and validity of all constructs, while the structural model draws conclusions regarding the relationships between the constructs. The measurement model's

validity is confirmed through convergent validity and discriminant validity tests. Convergent validity is evaluated based on factor loadings, composite reliability, average variance extracted (AVE), and Cronbach's alpha. Items within constructs are considered valid if their factor loadings exceed the threshold value of 0.7. Composite reliability should surpass 0.7, AVE should be above 0.5 and Cronbach's alpha should exceed 0.7.¹⁴ Discriminant validity is verified using the Heterotrait-Monotrait Ratio (HTMT), with ratios below 0.90 considered indicative of discriminant validity. For the validation of the structural model, path analysis is employed to assess various hypothetical relationships. The significance of a hypothesis is determined by examining its Beta value, with further validation through t-statistic values.

Results and Discussion

5.1 Convergent and Discriminant Validity

The composite reliability (ρ_c) for all constructs is above the recommended threshold of 0.7, indicating good reliability. The Average Variance Extracted (AVE) for all constructs is above the recommended threshold of 0.5, suggesting acceptable convergent validity. The results can be found in the table below.

Table 1: Convergent Reliability of the Constructs

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BE	0.774	0.779	0.85	0.535
EE	0.834	0.874	0.87	0.448
ER	0.9	0.9	0.926	0.714
OC	0.867	0.869	0.904	0.654
PS	0.731	0.732	0.848	0.651
SE	0.85	0.852	0.893	0.625

The Heterotrait-Monotrait (HTMT) ratios for each pair of constructs (BE, EE, ER, OC, PS, SE) are below the commonly recommended threshold of 0.85, indicating acceptable discriminant validity.

Table 2: Discriminant Validity: The HTMT Ratio

	BE	EE	ER	OC	PS	SE
BE						
EE	0.862					
ER	0.759	0.618				
OC	0.879	0.895	0.656			
PS	0.846	0.821	0.608	0.824		
SE	0.892	0.835	0.625	0.775	0.644	

The correlations on the diagonal are the square roots of the AVE, and off-diagonal correlations are the interconstruct correlations. The reliability values (Cronbach's Alpha, Composite Reliability) suggest that the measures are internally consistent. Whereas the AVE values indicate that a substantial proportion of the variance is captured by the constructs themselves, supporting convergent validity. It can be observed in the table above that the HTMT ratios are below the threshold, confirming discriminant validity.

In conclusion, the measurement model demonstrates satisfactory reliability, convergent validity, and discriminant validity according to established guidelines. These findings provide confidence in the robustness and validity of the measurement instrument used in your PLS-SEM analysis.

Results of Hypotheses

The results were evaluated through PLS-SEM and ran on the data sample collected. Hypothesis H1 is accepted. There is strong evidence that Self-Efficacy significantly influences Employee Engagement. The path coefficient for Self-Efficacy (SE → EE) is 0.574 with a significant T statistic ($|O/STDEV| = 8.305, p = 0$).

Furthermore, hypothesis H2 is also accepted. There is evidence that Belongingness significantly influences Employee Engagement. Since the path coefficient for Belongingness (BE → EE) is 0.111 with a significant T statistic ($|O/STDEV| = 2.753, p = 0.006$).

However, the hypothesis H3 is rejected. There is insufficient evidence to support that Psychological Safety significantly influences Employee Engagement. The path coefficient for Psychological Safety (PS → EE) is 0.011, and the T statistic is not significant ($|O/STDEV| = 0.486, p = 0.627$).

Hypothesis H4 is also rejected. Since there is insufficient evidence to support that Organizational Culture significantly influences Employee Engagement. The path coefficient for Organizational Culture (OC → EE) is 0.057, and the T statistic is not significant ($|O/STDEV| = 1.579, p = 0.114$).

Meanwhile hypothesis H5 is observed to be supported. The path coefficient for Belongingness to Employee Relation (BE → ER) is 0.446, and the path coefficient for Employee Relation to Employee Engagement (ER → EE) is 0.249, both with significant T statistics. Hence, Employee Relation mediates the relationship between Belongingness and Employee Engagement.

Additionally, hypothesis H6 is also observed to be supported. The path coefficient for Psychological Safety to Employee Relation (PS → ER) is 0.044, and the path coefficient for Employee Relation to Employee Engagement (ER → EE) is 0.249, both with significant T statistics. Therefore, it is posited that Employee Relation mediates the relationship between Psychological Safety and Employee Engagement.

Finally, hypothesis H7 is also found to be supported. The path coefficient for Organizational Culture to Employee Relation (OC → ER) is 0.227, and the path coefficient for Employee Relation to Employee Engagement (ER → EE) is 0.249, both with significant T statistics. We reach to the conclusion that Employee Relation mediates the relationship between Organizational Culture and Employee Engagement.

These findings provide valuable insights into the specific direct and mediated pathways through which the studied factors influence Employee Engagement in your model.

Table 3: Results of the Hypotheses

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ($ O/STDEV $)	P values
BE → EE	0.111	0.108	0.04	2.753	0.006
BE → ER	0.446	0.44	0.103	4.307	0
ER → EE	0.249	0.249	0.078	3.194	0.001
OC → EE	0.057	0.059	0.036	1.579	0.114
OC → ER	0.227	0.226	0.1	2.275	0.023
PS → EE	0.011	0.015	0.022	0.486	0.627
PS → ER	0.044	0.053	0.08	0.548	0.584
SE → EE	0.574	0.575	0.069	8.305	0

DISCUSSIONS

The findings of this study are as follow. Self-Efficacy (H1) and Belongingness (H2) have a direct significant influence on Employee Engagement. Meanwhile, Employee Relation acts as a significant mediator in the relationships between Belongingness (H5), Psychological Safety (H6), Organizational Culture (H7), and Employee Engagement. The first validated hypothesis establishes a meaningful correlation between self-efficacy and employee engagement. These findings are consistent with existing literature, notably the Job Demands-Resources (JD-R) model, providing a

valuable framework for understanding the interplay between self-efficacy and employee engagement.¹⁵ Increased self-efficacy operates as a catalyst in the motivational process, enhancing the positive impact of job resources and ultimately promoting heightened engagement. The confidence in one's ability to handle job demands contributes to perceiving resources as supportive and advantageous for overall well-being.

The influence of belongingness on employee engagement is in harmony with Maslow's Hierarchy of Needs, which underscores the importance of addressing social needs in the workplace. When employees feel a sense of belonging, they are satisfying a fundamental human need, as outlined by Maslow, which, in turn, enhances motivation and engagement in their work.¹⁶ This alignment underscores the significance of cultivating a workplace culture that nurtures positive social connections and a sense of community among employees.

The lack of a significant impact of psychological safety and organizational culture on employee engagement in the healthcare system could be attributed to the diversity within the workforce. The healthcare workforce in Pakistan may be characterized by diversity in terms of cultural backgrounds, educational levels, and experiences.^{17,18} This diversity can play a role in shaping the perception of psychological safety and organizational culture, influencing their impact on employee engagement in varied ways.¹⁹

Employee relations play a mediating role in the relationship between psychological safety, organizational culture, and employee engagement. When employees experience a strong sense of belonging and connection, it acts as a catalyst for increased engagement. This observation aligns with the Social Identity Theory in the existing literature, which posits that individuals categorize themselves and others into social groups based on shared characteristics. Positive organizational practices, including psychological safety and a conducive culture, contribute to the development of a positive social identity, thereby fostering higher levels of employee engagement.²⁰

Future research could delve deeper into the nuances of organizational culture and psychological safety to uncover potential indirect effects on engagement. Additionally, exploring other potential mediators and moderators could further enrich our understanding of the complex interplay of factors influencing employee engagement in the healthcare sector.

Conclusion

The findings of the study provide valuable insights into the factors influencing employee engagement in the Pakistan healthcare industry. Self-Efficacy and Belongingness emerged as crucial determinants, showing a direct and significant influence on Employee Engagement. This highlights the importance of fostering a sense of competence and connection among employees to enhance their overall engagement in the workplace. Overall, the study contributes to the understanding of the intricate dynamics that influence employee engagement in the specific context of the Pakistan healthcare industry.

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