

Relationship between Training and Development, Employer Branding and Talent Retention: The Mediating Effect of Employee Engagement

Abdullah Arif

University of Karachi, Pakistan
abdulahghori@hotmail.com

Hammad Zafar

University of Karachi, Pakistan

Shaikh Muhammad Fakhr e Alam

University of Karachi, Pakistan

Abstract

The research examines the relationship between employer branding, training and development, and employee engagement, as well as how these factors influence talent retention within Pakistan's pharmaceutical sector. The study aims to investigate the relationship between training and development, employer branding, employee engagement, and talent retention in Pakistan's pharmaceutical industry. Using PLS-SEM, the study seeks to determine the mediating effect of employee engagement on training and development, employer branding, and talent retention. The findings reveal a significant positive relationship between training and development, employer branding, and employee engagement, indicating the importance of these factors in enhancing employee engagement. Employee Engagement, however, does not have a significant direct impact on talent retention, suggesting that additional factors are necessary to enhance retention rates. Research findings also indicate a significant negative correlation between employer branding and talent retention, suggesting that employees working for strong brands may have greater confidence to pursue other opportunities in the external market. The findings caution that employee turnover is a complex phenomenon; therefore, a more comprehensive HR approach, including training, appropriate branding, and career development, would be beneficial. The findings of the current study would be helpful for HR managers and policymakers in the pharmaceutical industry in Pakistan in addressing employee turnover issues and building a more effective workforce.

Keywords: Training and development, employer branding, employee engagement, talent retention, employee turnover, career development.

Introduction

Special attention was given to identifying models for measuring and analyzing key aspects of employer branding and engagement models. In conclusion, the study proposes an action plan for analyzing brand perception within the pharmaceutical industry. It contains target solutions and their operational implementation. Key employees and leaders in this highly competitive environment consistently turn to strategic human resource management models that prove more efficient in engaging top talent.

The pharmaceutical sector in Pakistan faces significant challenges due to high employee turnover rates, which hinder its ability to retain qualified staff. Studies agree that employee engagement, along with company branding, acts as a key driver of employee retention; however, researchers have not established how training and development specifically impact employee retention. The literature reveals a gap in the pharmaceutical industry, underscoring the need for further research. Employee engagement functions as a linking mechanism to track the associations between training and development, employer branding, and talent retention.

This study aims to investigate the relationship between employer branding and talent retention in Pakistan's pharmaceutical sector. It seeks to investigate the impact of investing in workforce training and development on talent retention, specifically within the pharmaceutical sector in Pakistan. The objective is to investigate the impact of employee engagement on the correlation between employer branding and talent retention. It further examines the impact of employee engagement on the relationship between training and development, as well as talent retention. This study aims to investigate the impact of training and development, as well as employer branding, on talent retention, while also examining the role of employee engagement as a mediating factor.

The pharmaceutical sector in Pakistan plays a vital role in national healthcare and the economy; however, it faces challenges related to staff retention and struggles with global market competitiveness due to high staff turnover rates. Insufficient research exists regarding the combination of employee training and development with employee engagement and employer branding in Pakistan's pharmaceutical sector, as these factors have been proven essential for employee retention. The research examines relationships between the mentioned variables through employee involvement as an intermediary to address this research gap. Results from this work will provide pharmaceutical organizations with valuable insights to enhance their competitive position, improve employee retention, and inform their human resource plans.

This research serves as a convenient guide for HR managers in the pharmaceutical industry in Pakistan as well as policymakers. This framework asserts

that approach strategies need to tackle the issue of retaining key talent. It focuses on the training and development of the organization's employees, which improves the way the company brands itself to its employees by fostering their engagement, consequently altering the retention rate. Moreover, this research aims to fill the gap in the current literature regarding the role of employee engagement in the Pakistani pharmaceutical sector.

This study addresses several research questions: (1) How does the employer brand support the retention of talent within the Pakistani pharmaceutical industry? (2) How does the ability to train and develop lead to talent retention in Pakistan's pharmaceutical industry? (3) Does employee engagement moderate the impact of employer branding on talent retention in the Pakistani pharmaceutical industry? (4) Does employee engagement moderate the impact of training and development on talent retention in the Pakistani pharmaceutical industry? (5) What is the combined effect of training and development and employer branding on the retention of talent, with employee engagement as a moderator for the Pakistan pharmaceutical industry?

Literature Review

Training & Development

Training and development play a vital role in enhancing employee skills, fostering commitment, and ensuring organizational sustainability. Shorouk et al. (2023) emphasized the mediating role of training in leadership and teaching performance in Egyptian higher education. Jaiswal et al. (2021) emphasized the importance of upskilling for AI in India's IT sector, identifying key skills essential for success. Hussain et al. (2020) demonstrated the significant impact of training and development on organizational commitment among Pakistani academic faculty. Rawashdeh and Tamimi (2019) found that training perceptions positively correlated with commitment and negatively with turnover intentions in Jordanian hospitals. Ahmad et al. (2019) examined the effect of training and development on employee commitment in the Malaysian hospitality industry. Khan (2018) linked training and development with enhanced retention. Butali and Njoroge (2017) reported that training and development improved organizational performance in Kenya with commitment as a moderator.

Alamri and Al-Duhaim (2017) found that training has a positive impact on various commitment dimensions in Saudi industries. Silva and Dias (2016) found that training has positive effects on commitment and turnover intentions in Portugal's security industry. Hanaysha (2016) demonstrated that training, teamwork, and empowerment enhanced commitment in Malaysian higher education. Dhar (2014) observed the role in improving service quality and commitment in India's hospitality sector. Newman et al. (2014) noted cultural factors influencing the impact of training on commitment in Chinese firms. Kucherov and Zavyalova (2012) highlighted the role

of employer branding in training and development for talent management in Russia. Bulut and Culha (2010) linked training to increased loyalty in Türkiye's hospitality sector. Kyndt et al. (2009) identified learning readiness as crucial for retention. Ahmad and Bakar (2003) found that training has a positive influence on commitment among white-collar employees in Malaysia.

Employer Branding

Employer branding encompasses the design and marketing of an organization's employer characteristics, focusing on its culture, leadership, values, and overall image. Silva and Dias (2022) focused on the intricate relationships between employer branding, corporate reputation, and job application intentions. They sought to determine the impact of employer branding on corporate image and the propensity to apply for a job, using a sample of 225 Portuguese adults. Vaneet Kashyap and Neha Verma expounded on this relationship by elaborating on the multiple dimensions relevant to employer branding and turnover intentions in the Indian IT sector. The results obtained portrayed a negative relationship between social and developmental values and turnover intentions. Sultan Alshathry and others focused on the investment of the company's effort towards employer brand equity and its effects on the attraction and retention of employees. Graeme Martin and others examined the impact of employer branding on a firm's reputation and employee engagement and explored the shifts in institutional logics across borders. In their research,¹ Kamlesh Kumar Maurya and Manisha Agarwal examined the efforts to build the employer's brand in the coal and iron ore mining sector of India from the perspective of talent management practices.

In their 2017 study, Gilani and Cunningham focused on e-branding and its impact on employee retention by developing seven conceptual brands, which encompassed training, rewards, and internal communication. According to Kristin Backhaus (2016), employer branding has evolved into a human resources strategy that focuses on improving retention and attraction. Ibrahim (2016) analyzed employer branding from an Islamic perspective, explaining it in conjunction with job satisfaction and the employee value proposition. In his 2015 study, Hoppe linked employer branding with internal branding, highlighting the importance of perceived employer brand image as an antecedent of desirable brand attitudes and behaviors in a German hospital. Biswas and Suar (2014) developed a model that identifies organizational support and reward parity as crucial components of employer branding. The competitive advantage of employee branding was illustrated by Miles and Mangold (2005) through a case study by Southwest Airlines. A synthesis of employer image theory, distinguishing it from concepts of reputation and identity, was conducted by Lievens and Slaughter (2001), outlining its advantages for recruitment and competitive benefits.

Talent Retention

Strategies related to talent retention focus on essential members of the organization, aiming to improve motivation, recognition, and engagement to reduce employee turnover. A recent study by Adnan and Tamimi (2019) found links between employees' perception of training, his/her commitment to the organization, and turnover intention for nurses in hospitals located in Jordan. In their meta-analysis, Pandita and Ray (2018) discussed the relationship between training practices within an organization and its effectiveness in terms of retention, talent management, and employee engagement strategies. Separately, Agarwal and Gupta (2016) examined the relationship between job characteristics, work engagement, and turnover intentions among Indian managers in the private sector in their study. These studies provide valuable information for defining effective retention strategies. An analysis of Dineen and Allen (2016) focused on turnover related to "Best Companies to Work for" awards. It proved that such awards increase the attractiveness of smaller, less established firms to managerial talent.

Kennedy, E., and Daim, T. U. (2010) developed a Hierarchy Decision Model (HDM) for workforce engagement and retention in engineering firms, revealing the essential presence of systematic growth, measurement, and human capital development. These technology-oriented strategies are beneficial for developing engagement and retention policies that cater to the needs of employees and align with the firm's objectives.

Employee Engagement

Employee engagement refers to the state of emotional and rational connection that an employee has with their organization, encompassing components such as enthusiasm, commitment, and a sense of attachment. This emotional connection has a strong influence on performance, retention, and growth of the organization. Ancarani et al. (2019) studied "Work Engagement in Public Hospitals: A Social Exchange Approach," which emphasizes the importance of LMX and TMX on engagement among healthcare professionals. In the case of Chinese employees, Erli Liu and Jiatao Huang also assessed the relationships between occupational self-efficacy, organizational commitment, and work engagement. Their results suggest that self-efficacy has a significant impact on commitment, which in turn leads to increased engagement. In 2017, Ancarani and others applied Social Exchange Theory to examine the level of engagement medical staff in public hospitals have, and LMX and TMX, establishing the positive benefits of LMX and TMX. In their January 2016 publication, Agarwal and Gupta examined the internal interrelations among job and work characteristics, work engagement, and the creativity and intentions of managers to leave the organization, highlighting the moderating impact of conscientiousness.

In Employees' physical, cognitive, and emotional engagement or disengagement in a workplace setting, Kahn (1990) elaborated on three essential components of engagement and disengagement, describing them as meaningful, safe, and available. All three components, described in detail, had a significant impact on how people engage with their work.

Supplementary Literature Review

In their 2022 paper, Brian Harney and colleagues highlight future research directions in "Advancing the Understanding of HRM in SMEs," emphasizing the unique characteristics of SMEs that differentiate their human resource management (HRM) practices. Chaubey and Sahoo (2021) explored comprehension of business intelligence in the setting of the new pandemic," focusing on the influence of external forces and top management on the assimilation of business intelligence in Indian auto-component firms, thereby contributing to information management theories. Henseler et al. (2015) analyzed the Fornell-Larcker criterion in PLS-SEM, proposing alternative methods for discriminant validity, including Monte Carlo simulations for moderation techniques. Kock (2015) introduced a "full collinearity assessment approach" to identify common method bias (CMB) in PLS-SEM, utilizing variance inflation factors, and validated this approach through Monte Carlo simulations. John W. Michela, Michael J. Tews, and David G. Allen (2011) examined "Fun in the Workplace," critiquing literature on workplace fun and proposing a theoretical framework for understanding its impact on employees. Lastly, Franz Faul et al. (2009) presented "Statistical Power Analyses Using GPower 3.1," offering updates to the GPower program for enhanced statistical investigations.

Conceptual Model Development and Hypothesis

Conceptual Framework

An empirical model explaining the relationships between training and development, employer branding, and employee engagement, as well as employee engagement and retention, has been included. The relationships described above generated four direct hypotheses as well as three mediating ones.

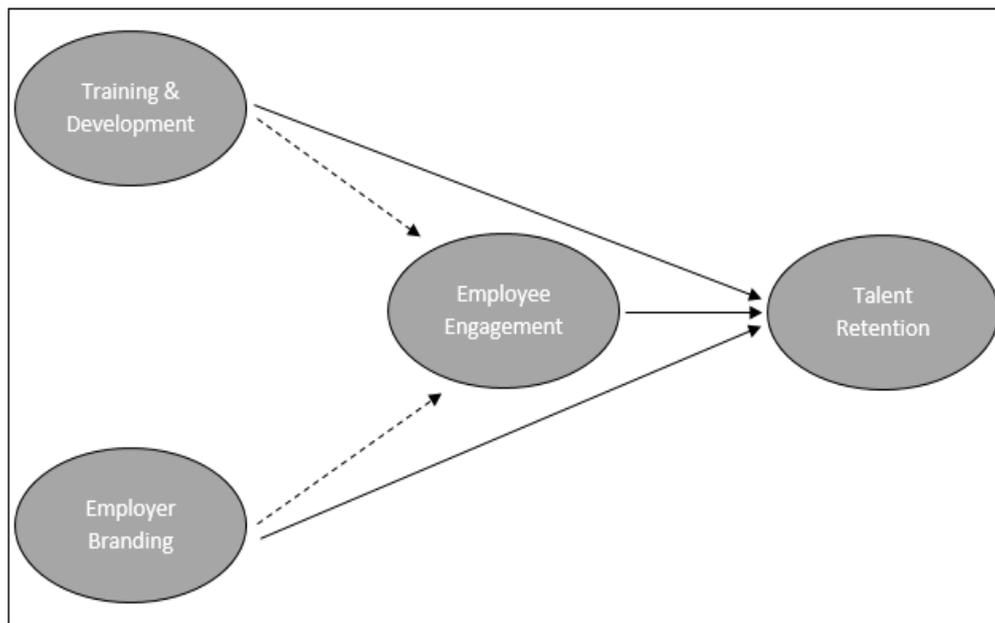


Figure 1. Conceptual Model

Relationship between Variables and Hypotheses

Training and development contribute to personal, career, and skill enhancement, which gives employees a sense of importance that resonates with the organization's values. As a result, employees become more productive, dedicated, and engaged in their work. Therefore,

H1: Training and development have a positive relationship with employee engagement.

A well-crafted employer brand can foster trust, pride, and a sense of belonging, thereby tying employees to the organization. This combination of emotional and rational elements significantly increases the employee's engagement level.

H2: Employer branding has a positive relationship with employee engagement.

Actively involved employees are likely to possess the highest morale, job satisfaction, and commitment towards the organization. This level of engagement is associated with a lower intention to leave the organization and contributes to creating a positive organizational culture.

H3: Employee engagement has a positive relationship with talent retention.

The goal of undertaking training and development activities is to enhance employee engagement through career development and job satisfaction. Improved

skills development, coupled with heightened commitment, is linked to low intentions to quit, which is beneficial for talent retention.

H4: Training and development have a positive relationship with talent retention.

Effective employer branding instills faith, pride, and loyalty among employees, enabling them to buy into the corporate concept and, in turn, helping the organization reduce its turnover rate.

H5: Employer branding has a positive relationship with talent retention.

The connection between training and development, employer branding, and talent retention is primarily dependent on the level of employee engagement within the organization. Training and development programs enhance skills, while employee branding cultivates pride in the organization, which in turn leads to increased engagement and reduced intentions to leave, ultimately improving retention rates.

H6: Employee engagement mediates the relationship between training and development and talent retention.

H7: Employee engagement mediates the relationship between training and development and talent retention.

Research Methodology

The research centers on pharmaceutical organizations because they face significant challenges in maintaining their workforce and retaining valuable talent, which is crucial to their success. The pharmaceutical industry is a cornerstone of Pakistan's economy, making employee retention of skilled personnel essential for maintaining competitiveness and driving innovation. Research examines the interplay between employer branding, employee engagement, and training and development efforts to determine their impact on talent retention, with the goal of developing improved human resource plans that reduce employee turnover. This investigation benefits from the pharmaceutical industry because it faces specific hurdles while becoming progressively vital in national and international markets.

Sampling Size and Data

To examine the relationship between training and development, employer branding, and talent retention, with a focus on employee engagement as a moderating factor, the study was conducted among employees of pharmaceutical companies in Pakistan. All employees were given a fair chance to be included in the study by employing an appropriate random sampling method. This was done to increase the representativeness of the sample. This approach was employed to minimize bias and ensure a comprehensive understanding of the inter-organizational dynamics within the industry. A target population of 100 to 150 subjects was adequate as it achieved

sufficient statistical power to yield accurate and significant outcomes. Data were, however, drawn from a multiplicity of respondents to enhance the understanding of the study in the context of the Pakistani pharmaceutical industry by exploring the factors that influence organizational commitment, turnover intentions, and employee engagement.

Sampling Technique

The research employed convenience sampling as its primary method of participant selection. The study employed convenience sampling because it offered convenient opportunities to contact pharmaceutical industry participants in Pakistan. This research selected participants because they were available and eager to help with the study, primarily targeting team members who could be easily reached and actively involved in branding responsibilities, as well as training and development, and employee engagement roles. The research faced constraints in terms of resources and time, so convenience sampling was selected as the most suitable approach.

Data Collection and Questionnaire

The study's participants were recruited via a secure online platform. Data collection took place over one month through a questionnaire. The study maintained a strong emphasis on the anonymity and confidentiality of all participants. A total of 104 individuals responded, with 5 being excluded due to incomplete or invalid data. Consequently, the analysis was conducted using 99 valid responses to explore the relationships between training and development, employer branding, and talent retention, mediated by employee engagement, within the context of Pakistan's pharmaceutical industry.

This paper modifies the questionnaire used in this study by drawing on established instruments employed in previous studies. The constructs incorporated in the study demonstrate strong reliability, as assessed by recognized measurement tools. It is worth noting that when modifying questionnaires for studies from developed countries, issues related to social desirability may arise in cultures with different frameworks. To alleviate this issue, the instrument was adjusted to suit the local context, and a pilot test was employed to understand the respondents' perceptions on the issue of cultural sensitivity and appropriateness.

This research utilized the 1-5 Likert scale, which is widely accepted as an effective tool in assessing public views. The respondents are required to rate their level of agreement with a statement by marking their response on a scale that ranges from "strongly disagree" to "agree strongly". This method is helpful as it simplifies and quantifies the opinions and views of people.

Measurement Model Assessment

The evaluation of the model in this study sought to determine how the model formulated within the context of the pharmaceutical industry was structured and it sought to verify this structure by means of Confirmatory Factor Analysis (CFA). Important indices like factor loadings, composite reliability and average variance extracted were examined for verification of the constructs (Hair et al, 2010).

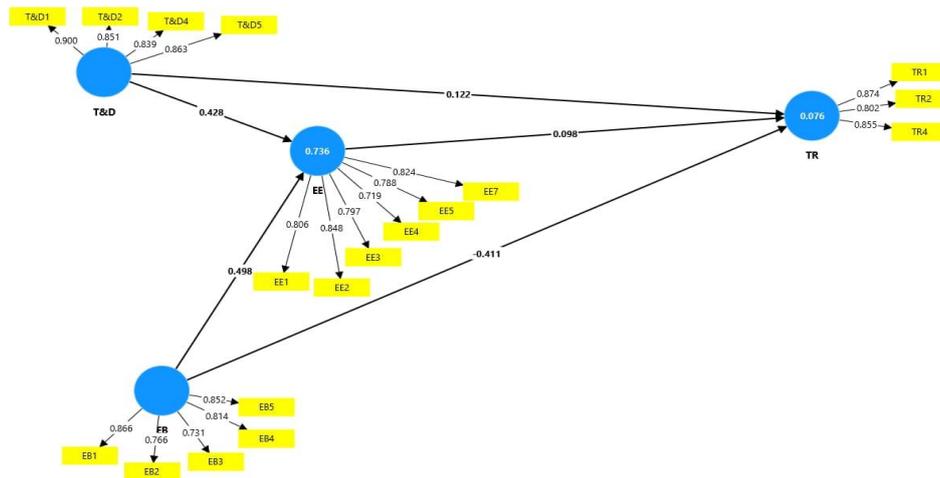


Figure 2. Measurement Model Analysis

Structural Model Assessment (SEM)

To evaluate the intricate connections between training and development programs, employer brand, employee engagement, and talent retention variables, a primary evaluation of the structural model was conducted. The direct and indirect relationships, as well as the model fit, were calculated using structural equation modeling (SEM), which is included in the evaluation of fit indices (Kline, 2015).

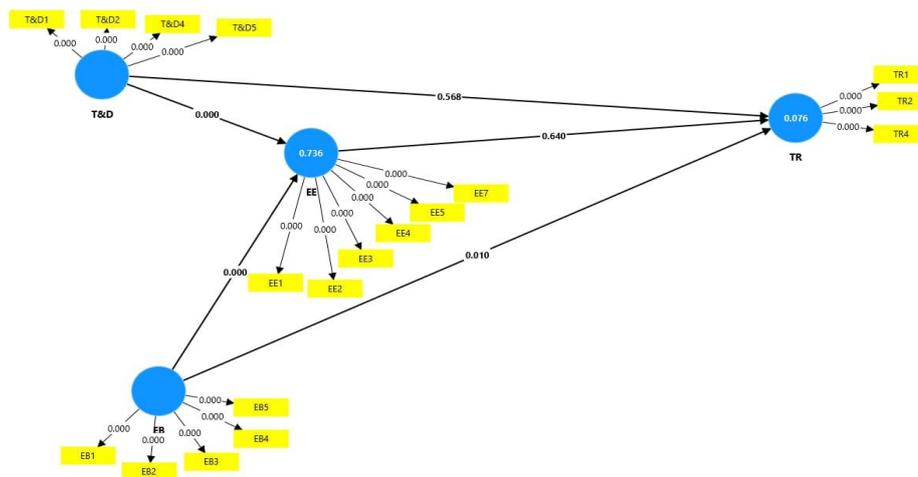


Figure 3. Structural Model Analysis

Data Analysis and Results

The survey focuses on analyzing the impact of employee training and development on organizational commitment and turnover intentions in the pharmacy industry, specifically in Karachi. The availability of training and management support is crucial in fostering a learning climate that, in turn, positively influences organizational commitment. Furthermore, it also examines how organizational commitment affects turnover intentions. This research aims to provide solutions to some of the issues highlighted in existing literature by offering evidence and theoretical approaches relevant to the pharmaceutical industry, with a focus on practical measures that enhance organizational performance and reduce employee turnover.

Demographics Profile

The demographic analysis of the respondents reveals diverse insights into their gender, age, qualifications, and experience. Of the 99 total respondents, 71% were male (70 respondents), and 29% were female (29 respondents). Regarding age, the majority of participants (53%) belonged to the 18–27 age group, followed by 36% in the 28–37 age group, 9% in the 38–47 age group, and 2% in the 48–50 age group. In terms of qualifications, 54% of respondents were graduates, 35% were postgraduates, 9% were undergraduates, 1% held higher secondary education, and 1% held doctorates. Examining the experience levels, 36% of respondents had 0–2 years of experience, 28% had 3–5 years, 18% had 6–10 years, 7% had 10–12 years, 4% had 13–15 years, 5% had 16–20 years, and 2% had over 20 years of experience. This demographic composition provides a comprehensive overview of the study's participant pool.

Descriptive Analysis

To understand the distribution characteristics, the study conducted a detailed analysis of key constructions using descriptive statistics. The constructions of this study include, but are not limited to, training and development, employer branding, talent retention, and employee engagement. These variables are fundamental in understanding how talent within the pharmaceutical industry is retained through training, employer branding, and employee engagement. This would help give a comprehensive understanding of the distributional patterns of each construct since the mean, standard deviation, kurtosis, and skewness of each respective variable. The table below presents the statistical measures that serve as a foundation for further analysis and interpretation of the study's context.

Measurement Model Analysis

The study's analysis evaluated the construct reliability and validity measures, including employer branding, employee engagement, training and development, and talent retention, using various metrics. Without these constructs, the metrics used in the study cannot be accurate or dependable since they are evaluated in the first instance.

Table 1
Descriptive Statistics

Construct	Mean	Standard deviation	Excess kurtosis	Skewness
Employer Branding	0.000	1.000	-0.536	-0.395
Employee Engagement	0.000	1.000	-0.636	-0.427
Training & Development	0.000	1.000	-0.792	-0.477
Talent Retention	0.000	1.000	-0.274	-0.329

Table 2
Reliability Analysis

Construct	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Employer Branding	0.866	0.879	0.903	0.652
Employee Engagement	0.886	0.894	0.913	0.637
Training & Development	0.887	0.890	0.922	0.746
Talent Retention	0.798	0.801	0.881	0.712

Confirmatory Factor Analysis

According to Table 03, confirmatory factor analysis is a practical approach to confirm the factor composition of specific measured variables.

It has been demonstrated that factor loadings of each matrix of the indicator variables are greater than 0.70, which suggests that all indicator variables were theoretically related to the individual constructs. In a more particular manner, the metrics for Employer Branding (EB1 = 0,866, EB2 = 0,766, EB3 = 0,731, EB5 = 0,852), Employee Engagement (EE1 = 0,806, EE2 = 0,848, EE3 = 0,797, EE4 = 0,719, EE5 = 0,788, EE7 = 0,824), T&D1 =0,900, T&D2=0,851, T&D4=0,839, T&D5=0,863), and Talent Retention (TR1= 0.874, TR2= 0.802, TR4 = 0.855) support strong factor loadings and hence are valid as indicators of their parental constructs.

Structural Model Analysis

Table 3

Hypotheses Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
EB → EE	0.498	0.501	0.098	5.078	0.000	supported
EB → TR	-0.411	-0.438	0.160	2.578	0.010	supported
EE → TR	0.098	0.105	0.209	0.468	0.640	rejected
T&D → EE	0.428	0.429	0.097	4.409	0.000	supported
T&D → TR	0.122	0.142	0.214	0.571	0.568	rejected

This research performed a structural model analysis to examine the relationships between various constructs. The following table presents the path coefficients, their corresponding t-statistics, and p-values for each hypothesized relationship. Here is an explanation of the results, which can be incorporated into the research.

Discussion

This research aims to fill the gap left by previous studies examining the relationship between training and development, employer branding, employee engagement, and talent retention in Pakistan's pharmaceutical industry. The results of this study provide insights into the relationships and impacts of these variables.

Training and development exhibit a strong positive relationship with employee engagement, underscoring the importance of equipping employees with relevant skills to enhance their emotional and psychological involvement. This aligns with prior research that emphasizes the role of development programs in fostering commitment and satisfaction. Employer branding has a significant impact on employee engagement by enhancing employees' pride, dedication, and identification with organizational goals. This aligns with recent studies that emphasize the importance of a strong employer brand in fostering effective relationships between employers and employees. Employee engagement does not show a strong direct link to talent retention, suggesting that industry-specific factors, competition, or personal career aspirations may moderate the relationship. Employer branding can reduce turnover rates, as employees in well-branded organizations may perceive themselves as highly employable and seek opportunities elsewhere, warranting further investigation into the moderating role of employer branding in retention. Training and development do not have a direct impact

on talent retention, suggesting that other factors, such as compensation and promotion opportunities, may mediate the relationship between training and retention.

Whereas the other works have focused on the triad of MEB, MEE, and talent retention only, the study adds training and development with MEB as an independent variable, employee engagement as a mediating variable, and talent retention as a dependent variable, further adding details to the framework, addressing the gap within the scope jointly with other scholars. In a more detailed research plan, a quantitative cross-sectional approach is employed, along with Partial Least Squares Structural Equation Modeling (PLS-SEM), which is used to analyze the data. They use model checking to assess the strength of their models based on reliability, AVE, and HTMT. Still, the current study extends beyond them by formulating, among other things, seven hypotheses regarding the influence of training and development on employee engagement and talent retention, as well as considering employee engagement as a mediating variable between training and development and talent retention. Existing research tends to be limited in scope due to the considerable overlap in their objectives and research questions; for example, they address the same brand triad of employer branding, employee engagement, and talent retention, but with topsy-turvy three hypotheses.

The outcome of previous research suggests that employer branding, in conjunction with training and development, has a significant and positive impact on employee engagement, underscoring the importance of both training and branding in enhancing employee participation. Returning to the previous remarks, however, such an employment brand may help engagement, but how does it affect retention? Here, employment branding appears to be inversely related to talent retention. It further means that a strong employment brand may increase engagement, but it may also motivate employees to leave the company and seek opportunities elsewhere. Also, T&D directed toward talent retention or employee engagement, as well as their effects, has been proven to be insignificant. The results presented here contrast with the current body of literature, which indicates positive and significant associations among all its constructs, such as employer branding, employee engagement, and talent retention. As part of the existing body of work, it further notes that EE acts only as a partial mediator between employer branding and talent retention, highlighting the relevance of engagement in terms of employee retention.

The diagnosis of distinct factors is the focus of recent research, and this is how the business context in Pakistan is positioned in terms of the pharmaceutical industry. From the analysis, a combinative effect of engagement, employee benefits, and training development appears to be present, implying that aspects such as career growth, skills enhancement, and competitive pay packages are best suited for ensuring employee retention. On the other hand, there is an increasing focus on the IT industry, and strategies such as establishing emotional bonds and strengthening brand identity are being suggested for use in broader retention strategies. The results of the most recent

study suggest the need for a more integrated model that encompasses training and development, employee benefits, and other factors that enhance retention strategies. It also underlines the scope for future research on the mediation effects of training and development on retention. The present body of work tends to focus more on the short term, examining the effects of employer branding on engagement and retention strategies in competitive IT settings. The new study contributes to the existing body of work. It introduces new aspects that are more holistic and detailed regarding the factors that contribute to talent retention across various industries.

As the results of the study show, there is a need for wider approaches that incorporate employer branding, training and development with other elements such as pay structure, chances for advancement, and the culture of the organization to maximize retention. HR practitioners need to focus on developing and implementing complex approaches that include the development of training courses designed specifically for individuals, enhancing employer loyalty while fulfilling individual career aspirations.

Conclusion

With innovation as a key factor in sustaining competitive advantage within Pakistan's pharmaceutical sector, ensuring regulatory compliance becomes paramount. This underscores the significant challenge of employee retention, which is currently one of the critical issues in the industry. There are also proactive measures regarding trainer and organizational transfer climate that are aimed at enhancing talent retention. Such measures can lead to improved organizational management and effective personnel retention. The results suggest that employee satisfaction should be prioritized, as it determines both the emotional attachment of employees to the organization and their productivity. The pursuit of employee satisfaction can be fostered through improved training and development processes coupled with relevant employee benefits. The findings underscore the importance of enhancing positive employer branding while promoting professional growth to achieve high levels of employee engagement.

Exploring the more sensitive aspects of the analysis reveals a more complex picture than initially expected, particularly regarding the influence these factors have on talent retention. Noteworthy is the absence of a notable connection between employee engagement and talent retention, suggesting that engagement alone may not be sufficient for ensuring long-term retention. This suggests that while employees experience satisfaction and commitment within the habitual cycle of engagement, other aspects, such as compensation schemes, opportunities for career growth, and the organizational setting, should also be examined. Furthermore, the unexpected negative correlation between employer branding and talent retention highlights a contradiction in which an effective employment brand may make workers more optimistic about their employability, leading to an increased likelihood of them seeking additional

employment opportunities. Similarly, the absence of a strong relationship between training, development, and talent retention also highlights that while training contributes to employee engagement, the transfer of training will still require other retention strategies to address turnover intentions.

The study emphasizes the need for improved human resource (HR) strategies, branding, and providing groups with training and work integration opportunities. Management and policymakers would need to develop multiple strategies to manage the internal and external factors that affect retention. Such considerations could include aligning training needs with individual career objectives, establishing clear pathways for advancement, offering competitive salary packages, and promoting an inclusive and supportive organizational culture. Thus, understanding the dynamics behind these relationships can help organizations in Pakistan's pharmaceutical industry develop effective retention strategies to optimize their key personnel, enhance organizational effectiveness, and build a workforce that ensures future success.

Questionnaire

Training and Development

My organization provides learning/training opportunities to meet the changing needs of the workplace

Training and development are encouraged and rewarded in my organization.

Overall, the training I receive on the job meets my needs.

Overall, I am satisfied with the amount of training I receive on the job.

Employer Branding

My organization is highly recommended as the best place to work.

My organization gets first preference in campus recruitment drives.

I firmly believe that the characteristics borne by my employer differentiate it from its competitors.

I am offered attractive career prospects by my employer.

I am proud to tell others that I work for my current organization.

Employee Engagement

My organization takes every possible step to keep us engaged and motivated.

My organization provides training sessions for improving my skills and knowledge.

I believe that my organization involves its employees in decision-making.

I feel a strong sense of belonging to my job.

Working at my current organization has a great deal of personal meaning to me.

I feel a sense of satisfaction working with my current employer.

Talent Retention

I am planning on working for another company within a period of three years.

If I received an attractive job offer from another company, I would take the job.

I intend to seek related work at another firm in the foreseeable future.

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