

THE RELATIONSHIP BETWEEN EMPLOYEE COMMITMENT AND ORGANIZATIONAL PERFORMANCE: A MODERATED MEDIATION ANALYSIS OF EMPLOYEE EXPERIENCE AND INNOVATIVE BEHAVIOR

Shafique Ahmed Memon^{*1}, Prof. Dr. Aisha Bashir Shah²

¹PhD Scholar, Institute of Business Administration (IBA), University of Sindh, Jamshoro, Pakistan

²Professor, Institute of Business Administration (IBA), University of Sindh, Jamshoro, Pakistan

¹shafiquehrdhesco@gmail.com, ²aisha.shah@usindh.edu.pk

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Corresponding Author: *
Shafique Ahmed Memon

Abstract

In the modern competitive and dynamic business world, the role of employee commitment as a source of performance and innovation is becoming a significant element of organizations. Nevertheless, previous studies have tended to consider commitment as a single construct and have not addressed the processes by which it affects the outcome. This research fills this gap by discussing the connection between employee commitment and organizational performance in terms of moderated mediation model where innovative behavior of employees is a mediator and employee experience is a moderator. Based on Allen and Meyer's (1990) Three-Component Model, commitment is conceptualized as affective, continuance, and normative. Other theories that support the study include the Social Exchange Theory, the Resource-Based View and the AMO framework. A quantitative, cross-sectional design was used to collect data on 421 employees in the consumer goods industry of Sindh, Pakistan, and analyze with PLS-SEM. The results indicate that affective and normative commitment have a strong positive impact on innovative behavior, whereas continuance commitment has a lesser impact. Innovative behavior, in its turn, has a positive impact on organizational performance, and mediates the relation between commitment and performance. In addition, the influence of affective and normative commitment on innovation is enhanced by the employee experience, whereas continuance commitment is not. The research has a theoretical contribution in the form of the indirect and conditional character of the commitment-performance relationships. In practical terms, it implies that the organizations ought to encourage emotional and value-based commitment and use the experienced employees to facilitate innovation and attain sustainable performance.

Introduction

In the contemporary organizational landscape, the role of human resources has moved well beyond traditional administrative and operational functions. Organizations increasingly recognize that sustainable performance is not

merely a function of capital investment, technology, or market position, but is deeply rooted in employee attitudes, behaviors, and experiences. As competition intensifies and markets become more dynamic, the capacity of organizations to harness the commitment and

innovative potential of their employees has become a critical determinant of long-term success. Nevertheless, commitment is not a homogeneous concept, and it occurs in a variety of forms, where each is motivated by different psychological processes (Ajmal et al., 2024). The three-component model of commitment developed by Allen and Meyer (1990) was a breakthrough in the study of commitment by differentiating between affective, continuance, and normative commitment. This multidimensional approach has enabled researchers to go beyond simplistic explanations of employee attachment and to examine the effects of different types of commitment on behavioral outcomes. In line with progress in the field of commitment studies, organizational performance has also been reconceptualized. The modern performance models do not only look at the financial performance but also the operational effectiveness, flexibility, quality of service and innovation. Such dimensions are particularly relevant in very dynamic, competitive industries, like consumer goods. The environment of these organizations compels them to continuously optimize processes, introduce new products, and react quickly to the evolving consumer tastes.

Innovation at the employee level has emerged as one of the most significant behavioral processes that connect individual attitudes with the organizational performance. It is important to note that innovative behavior is discretionary, can never be enforced by the formal job descriptions alone and is highly sensitive to the motivational and experiential conditions of the employees. Another dimension of this nexus that is less researched is employee experience. Experience affects the cognitive structures, skills and perceptions of the organizational practices among the employees. Different employees with varying experience levels might respond differently to the same motivational stimuli, and the same type of commitment might not yield the same behavioral outcomes across experience groups. Nevertheless, the experience of employees is frequently considered as a control variable instead of a substantive moderator (Budiwati et

al., 2024). The consumer goods industry in Pakistan, especially in Sindh province, plays a central role in the economy. It plays a significant role in creating jobs and industrial production, but it is also associated with difficulties in productivity, innovation, and organizational performance. The administrative and managerial staff in this industry are essential for organizing work, ensuring compliance, and driving innovation. Nevertheless, few empirical studies examine the interaction among commitment, innovation, and experience to determine organizational performance in this regard.

Against this background, the present study aims at developing as well as empirically testing a moderated mediation model of employee commitment and organizational performance through employees' innovative behavior and employee experience as a moderator. Focusing on the consumer goods sector of Sindh, Pakistan, this study intends to produce contextually grounded insights that will contribute to the development of both theory and practice. Trust and knowledge sharing in this dynamic terrain has become a key process by which employee commitment is developed and maintained. Companies that promote trust-based cultures have higher chances of promoting teamwork, free communication, and creativity among staff members. Derqui et al. (2022) state that trust is a virtuous cycle in organizations and supportive practices provide employees with confidence, which further fosters knowledge sharing and innovation. This is especially applicable in consumer goods sector whereby speed of decision-making and constant improvement is heavily reliant on employee engagement.

Three-Component Model of Commitment

Organizational commitment has been a key construct in organizational behavior studies because of its far-reaching implications on employee attitudes and behaviors, as well as organizational performance. In the current research, this model will be used as the theoretical basis to examine the role of various types of commitments in innovativeness of employees and consequently organizational

performance in the consumer goods industry of Sindh, Pakistan. The recent researches have also highlighted the role of organization practices in affecting different factors of employee commitment and have shown that commitment is not a definite psychological phenomenon but a dynamic outcome of work experience and management intervention. As an example, training and development programs can substantially boost affective and normative commitment by making employees feel a sense of belonging, competence, and professional development, which boosts their emotional attachment and moral commitment to the organization (Khan et al., 2021).

Affective Commitment

Affective commitment refers to an employee's emotional attachment to, identification with, and involvement in the organization (Muhamad, et al., 2023). Affectively committed employees will internalize organizational goals and consider organizational success as an extension of their personal success. Affective commitment is especially important in the framework of innovative behavior. Innovation can be uncertain, risky and ready to break the routine. When employees feel emotionally attached to their organization, they are more likely to make such risks since they have confidence in the organization and feel that their input is appreciated. This emotional connection leads to psychological safety that is critical in the generation of ideas and experimentation. Affective commitment thus serves as a motivational driving force that stimulates employees to come up with new ideas, foster improvements, and engage in innovation processes (Rajãa and Mekkaoui, 2025).

Continuance Commitment

Continuance commitment is very dissimilar to affective commitment that involves emotional attachment. Continuance commitment is based on a rational decision regarding the investments of the employee in the organization economically, socially or psychologically. Such investments can be cumulative benefits, job security, specialized

skills that an individual can hardly transfer to another organization, or the inaccessibility of other alternatives to work (Syahril et al., 2022). Nevertheless, although this commitment can significantly decrease the risk of an employee leaving, its impact on discretionary behaviors such as innovation can be complicated and even conflicting. The workers who choose to remain mostly because it is cheaper to them are bound to perform only as well as they are supposed to, and this does not mean that they would be ready to go the extra mile or to be creative in problem-solving unless they are encouraged to do so.

Normative Commitment

Having high normative commitment, employees are more likely to remain not because they wish to do so, but due to the feeling that they have to do so, primarily because they have internalized the norms of loyalty, reciprocity, and ethical responsibility. This form of commitment is basically a product of individual socialization experiences, organizational culture and societal values. In a collectivist culture, normative commitment is very noticeable, as the emphasis is put on social relationships, loyalty, and group harmony. Under these circumstances, workers might view their association with the organization as a moral contract and not an economic transaction. Normative commitment can be strengthened by getting into debt, gratitude towards organizational support, or respect towards people in authority, which can affect behavior (Hammouch, 2025). Loyalty, respect, and social obligation are some of the cultural norms that have a great impact on organizational life in Pakistan.

Innovation and Employee Experience

Innovations are widely considered among the most potent agents for organizational survival, adaptability, and long-term performance (Patterson et al., 2012). This creative endeavor is realized through a set of requirements, among which are persistence, collaborative working, and the use of organizational structures (Papazafeiropoulou&Spanaki, 2020). Innovative employee behavior is actually the outcome of a

combination of their attitudinal, cognitive, and contextual factors (Mirza et al., 2024). Commitment is considered an important attitudinal factor, while employee experience is the major factor in changing employees' commitment into innovative behavior. The experience changes their knowledge, beliefs, perceptions of risk, and their ability to access different resources within the organization. Employees with a lower level of experience usually have the ability to bring new ideas and show their readiness for change. A lack of familiarity with existing procedures may foster a willingness to challenge the status quo and offer innovative suggestions (Carmeli & Spreitzer, 2009). The current study takes into account the employee experience as a moderating variable rather than a control variable, which recognizes this duality. The innovative behavior of employees is, of course, closely interrelated with the general processes of product and organizational innovation, which ultimately choose the performance and competitiveness of the company. Empirical research indicates that the process of developing an idea into a marketable product is complex and involves a set of factors of individual creativity as well as organizational support (Argente et al., 2025).

Innovation and Consumer Goods Sector

Consumer goods industry is a very dynamic and innovative sector primarily owing to the dynamism in consumer tastes, brief product life cycle, and stiff competition. This industry requires companies to invent new products, apply superior techniques, control their supply chains effectively, and enhance the manner in which they communicate with customers in case they wish to remain relevant and generate revenues. The consumer goods industry sector in Pakistan is grappling with the issues of infrastructural inadequacies, complex regulations and economic instability. The following factors render the organizational employees, particularly the administrative and managerial employees, who are in the front line, the pivot of the operations, compliance and cross-functional synergy, hard. Numerous researches indicate that in case these

employees are encouraged to be innovative, they may cause changes that influence the success of the organization by simplifying the operations, reducing the costs, and making the company more adaptable to the market needs (Putra et al., 2017).

Literature Review

Literature is critically examining theories and empirical research on the relationship between employee commitment and organizational performance. The major focus is on employees' role as innovative behavior, which acts as a mediator, and on employee experience as a moderator. By using previous studies, this study sets the theoretical basis of the current study and links it to wider areas of organizational behavior, human resource management, and innovation studies. Employee commitment has, for years, become one of the main concepts for explaining many organizational outcomes, such as performance, retention, adaptability, and competitive advantage. However, it is always unclear how commitment can improve organizational performance, even after many studies. Most existing studies rely on direct-effect models, which ignore the behavioral mechanisms that link psychological attachment to performance outcomes. New theories propose that employees' attitudes influence performance through voluntary behaviors, such as innovative work behaviors, knowledge sharing, and proactive problem-solving (Yousaf et al., 2024).

Meanwhile, the focus of innovation studies has been slowly moving towards the measurement of firm-level performance, to the explanation of micro-level processes, with employees being the primary source of innovation. Creative employee behavior, such as idea generation, promotion, and implementation, is well known to be a major contributor of organizational effectiveness in dynamic environments. However, innovation has been viewed as a separate product or merely an environmental condition, as opposed to a mediating process where employee attitudes translate to performance. Moreover, personal characteristics, including experience of employees, have been partially overlaid on the

commitment to innovation relationship. Experience has been most commonly regarded as a control variable, and a wealth of evidence has been presented that experience is the basis of how employees perceive organizational signals, make choices, and mobilize resources. This study claims that employee experience is an important moderating factor in the commitment-to-innovation relationship (Waheed et al., 2023).

Employee Commitment: Historical Perspective

Employee commitment has long been a key subject in organizational behavior research, dating back to the mid-1900s. Initial research mainly viewed commitment as a behavioral aspect, focusing more on employees' staying in the organization rather than on their mental attachment. Becker's side-bet theory was one of the first and influential views, as it stated that employees get committed as they make investments like skills, benefits, and social links, which they would be losing if they leave the company. Commitment, from this angle, was mainly seen as a calculation and economic matter (Porter et al., 1974). Nevertheless, the initial attitudinal frameworks normally regarded commitment as a single-dimensional concept, overlooking the diverse reasons employees choose to remain with their organizations. The model further understood that people have all three components at the same time, but each one's influence on their behavior is different. The three-component model has been widely confirmed across various industries, cultures, and occupational groups, and is now considered the main model in the field of commitment research.

Affective Commitment and Organizational Performance

Research evidence has shown that among the components of commitment, affective commitment is the most powerful and consistent predictor of organizational performance. The research done in different areas has shown that affective commitment leads to further productivity, quality of service, participation in extra work, and changeability. Affective commitment brings about the employee's sense of

ownership and dedication at the level of mind, which is further translated into the employee's willingness to work beyond the job description. Motivationally, employees with affective commitment are internally driven to help the organization achieve its aims. This internal motivation not only increases the level of commitment but also makes the employee ready to do something new without being told, which is the characteristic required for innovation. Affective commitment leads to a sense of safety, which comprises trust, as committed employees are more open to the organization and see the risks related to innovation as ones they are ready to take (Tajeddini et al., 2023).

Continuance Commitment and Organizational Performance

Continuance commitment concerns how employees view the costs of leaving their current job. These expenses can be financial, social, or psychological, and may include losing one's salary, benefits, job security, or previously made investments. Those employees who are highly committed remain mainly because they think leaving would be too costly, not because they are emotionally attached or feel a moral obligation. The link between continuance commitment and the organization's performance is complicated and, at times, contradictory. Even though continuance commitment helps reduce employee turnover, its effect on discretionary actions, such as innovation, may be quite negative. Research has shown that if employees feel that the only thing keeping them at the company is the idea that the options outside of work are limited, then they will mostly act in a way that is simply going through the motions and doing the minimum amount of work necessary rather than getting involved in change or improvement (Triguero-Sánchez et al., 2022). Findings from research confirm that continuance commitment can help maintain regular performance through employee stability and retention of organizational knowledge. However, it is not a good predictor of positive behavior, adaptability, or creativity (Salatun et al., 2025). Conversely, in a few cases, people with high commitment to continuance

have been reported to be dissatisfied at work and less involved, which may hamper their performance in the long run.

Normative Commitment and Organizational Performance

Normative commitment refers to how much an employee feels a moral obligation, or a duty, to stay with the organization. Frequently, this feeling of obligation comes from socialization, cultural norms, and a person's values, which are associated with loyalty and reciprocity. Simply put, people who have strong normative commitment will most likely stay at the job because they think it is the right thing to do (Valaei et al., 2022).

Employee Innovative Behavior as a Mediating Variable

Employees' innovative behavior means deliberately developing, advocating, and executing new ideas at work. Creativity, which is mainly about generating ideas, is different from innovative behavior as the latter covers the entire innovation process. Modern literature highlights innovative behavior as a vital way in which employee attitudes shape organizational outcomes. Differing theories consider commitment to be one of the factors that influence work performance indirectly through behavior. An employee who is emotionally or ethically committed to the organization will likely engage in more innovation-related work. Several studies have identified a strong positive association between affective and normative commitment and innovative behavior, while continuance commitment has been found to have little or no effect (Alkhalaf & Al-Tabbaa, 2024). This paper presents a commitment-performance linkage from a process perspective, where innovative behavior acts as a mediator, which is in line with current behavioral theories.

Employee Experience as a Moderating Variable

Worker experience is vital in resolving the extent to which commitment influences innovative behavior. Experience makes workers more knowledgeable, skilled, and confident, and

increases their ability to navigate the organizational structure. Experienced workers have a deeper understanding of the context and more social capital, which means they are better at putting ideas into practice. Studies indicate that experience alters the relationship between commitment and innovative behavior. As workers collect positive experiences and make organizational values a part of their work, affective and normative commitment could increase. Conversely, continuance commitment may not receive its share of the experience because cost-based attachment, on its own, does not lead to creativity and innovation (Haque et al., 2021).

Problem Statement

The nature of work and workplace environments has drastically changed in the twenty-first century. Fast technological development, changing socio-economic conditions, and the evolution of industry have greatly changed how people behave at work, making their behavior more complex and less predictable. These changes will continue to grow, placing new requirements on organizations and their employees. In this situation, the old ways of having a competitive edge no longer work, and human resources have become the main factor determining organizational success (Dessler, 2021). These research papers together indicate that employee commitment acts as a potent factor for top performance when it leads to employees engaging in innovative discretionary behaviors.

Most importantly, these discretionary behaviors vary among employees and generally intensify when they gain more job experience. Senior employees can use organizational knowledge, work system navigation, and innovation implementation more adeptly than others. Referring to this point of view, Xu et al. (2022) have pointed out that employees who perceive a very supportive environment at work are those who will feel very motivated to "repay" the organization by showing greater commitment and performing innovative work behaviors. In this paper, the authors seek to explain how employee commitment drives organizational performance

and, under what conditions, this influence strengthens in the modern workplace. While it has been widely accepted that employee commitment is a valuable strategic resource, few studies have examined the interactions among various commitment dimensions and contextual factors to identify their effects on organizational outcomes. Even though the past scholars have determined direct relationships between commitment and performance, they tend to ignore the behavioral and situational mechanisms that support the relationship, especially how knowledge sharing and organizational support systems promote employee performance (Mohd Rasdi & Tangarararaka, 2022). More specifically, the role of innovative behavior as a mediator and employee experience as a moderator in the commitment-performance relationship has not been extensively researched, especially in the context of developing countries, where institutional and structural constraints restrict the innovation process (Loiko et al., 2022). In addition, commitment and innovation based models are never integrated as the research on product innovation and firm performance seldom integrates employee commitment and motivation as the psychology constructs (Argente et al., 2025). This gap underscores the importance of an inclusive framework that is capable of capturing the multifaceted nature of employee attitudes, behaviors and contextual aspects that determine organizational performance. It is especially so in the case of organizations that thrive on trust as a factor and where innovation is the primary force (Derqui et al., 2022).

Research Objectives

This study has the following research objectives.

- To analyze the relationship between the Affective Commitment of employee and organizational performance.
- To analyze the relationship between the continuance commitment of employee and organizational performance.
- To analyze the relationship between the normative commitment of employee and organizational performance.

- To evaluate the moderating role of employee job experience between the Affective Commitment of employee and employee innovative behavior.
- To evaluate the moderating role of employee job experience between the continuance commitment of employee and employee innovative behavior.
- To evaluate the moderating role of employee job experience between the normative commitment of employee and employee innovative behavior.
- To investigate the mediating effect of employee innovative behavior between the Affective Commitment of employee and organizational performance.
- To investigate the mediating effect of employee innovative behavior between the continuance commitment of employee and organizational performance.
- To investigate the mediating effect of employee innovative behavior between the normative commitment of employee and organizational performance.

Research Gap

Despite many studies examining the link between employee commitment and organizational performance, a few gaps remain in the literature. Firstly, a lot of authors view commitment as a single-dimensional variable, and so they miss out on the separate impacts of affective, continuance, and normative commitment. Secondly, most people recognize innovation as one of the major factors contributing to performance, and research is mostly focused on treating innovation as the result. However, innovation really is a means through which attitudes can lead to performance (Salatun et al., 2025). Third, the employee experience is often treated as a control variable in research rather than a significant moderator of behavioral outcomes. Fourth, the number of empirical studies that use a moderated mediation framework is always very low, especially in developing countries and sectors like consumer goods (Waheed et al., 2023). There is little empirical research in the context of Sindh, Pakistan, on how different types of commitment

impact organizational performance through innovative behavior, and also, which of these relationships differ with experience level. This paper is a step in the right direction, as it first develops a comprehensive research model based on moderated mediation and then empirically tests it.

Research Hypotheses

Hypothesis#1: The Affective Commitment of employee significantly influences Organizational Performance.

Hypothesis#2: The Continuance Commitment of employee significantly influences Organizational Performance.

Hypothesis#3: The Normative Commitment of employee significantly influences Organizational Performance.

Hypothesis#4: The employee job experience moderates the relationship between the Affective Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.

Hypothesis#5: The employee job experience moderates the relationship between the Continuance Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.

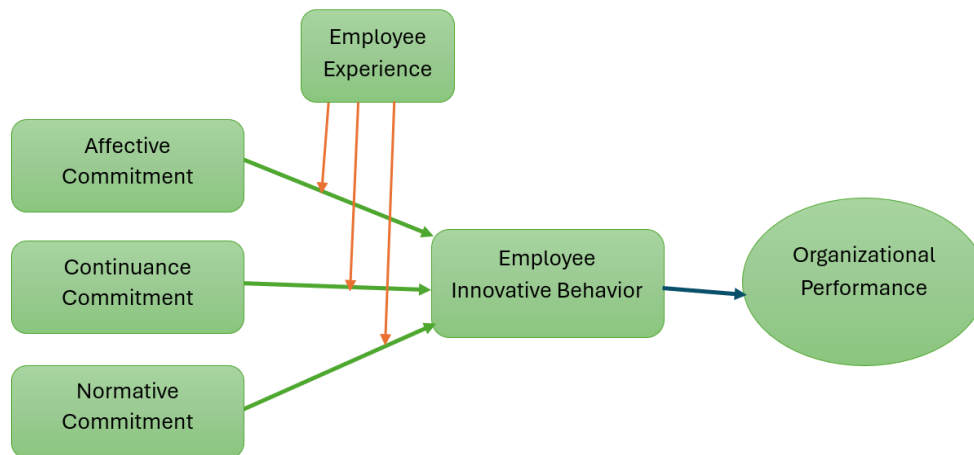
Hypothesis#6: The employee job experience moderates the relationship between the Normative Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.

Hypothesis#7: The employee innovative behavior significantly mediates the relationship between Affective Commitment of employee and organizational performance.

Hypothesis#8: The employee innovative behavior significantly mediates the relationship between Continuance Commitment of employee and organizational performance.

Hypothesis#9: The employee innovative behavior significantly mediates the relationship between Normative Commitment of employee and organizational performance.

Conceptual Model



This model was created based on the research of Allen and Meyer (1990) and Muhamad et al. (2023).

Research Methodology

Research Design

Employing a cross-sectional quantitative design, the research aims to evaluate the hypothesized moderated mediation model statistically. The selection of a questionnaire method was due to

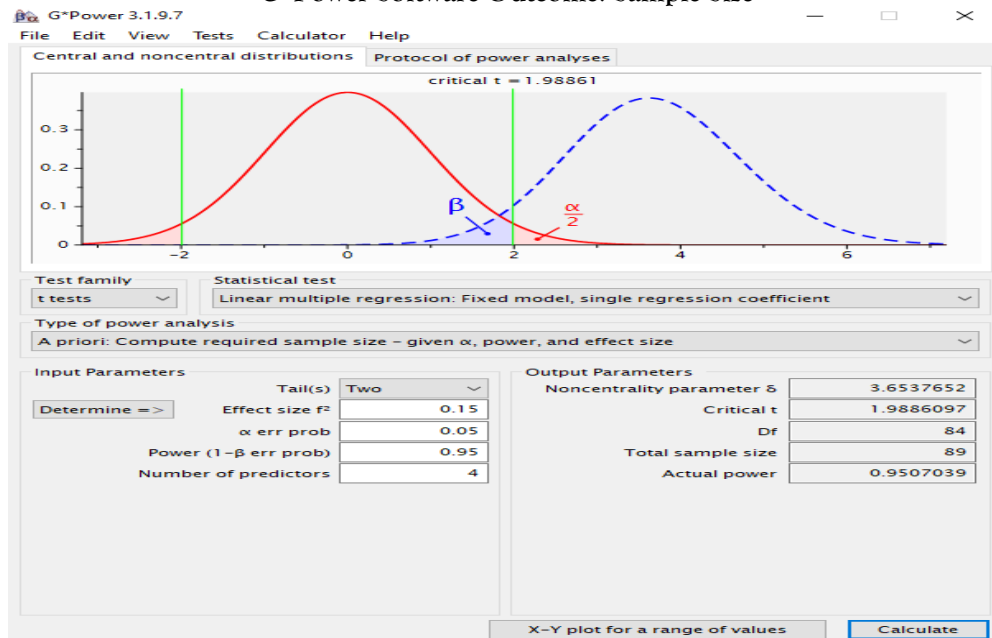
its capability for a systematic collection of uniform data from a large group of respondents and for enabling statistical generalization within the target population.

The calculation of the minimum sample size needed to conduct the current study was based

on the GPower software, which is a well-known and valid tool to perform statistical power analysis when doing social science research. GPower enables researchers to determine the proper sample size depending on several important parameters, including effect size, significance level (α), statistical power ($1 - \beta$), and the count of predictors utilized in the model. Given the complexity of the proposed moderated mediation model, the number of independent variables, and the necessity to reach the adequate level of statistical power (usually established at 0.80), the minimum number of respondents was estimated to be 89. The desirability part was a level that could ensure the study had sufficient power to detect meaningful relationships between variables and minimize the risk of Type II errors. Therefore, the data collection was aimed at a

considerably larger sample size to enhance the analysis and make the findings more generalizable. On this basis, 500 questionnaires were distributed to employees in the consumer goods industry in Sindh, Pakistan. This method was used to consider the possible non-responses, incomplete questionnaires and data quality concerns. Among the questionnaires that were distributed, 421 valid and complete responses were received and stored to be analyzed finally, which makes the response rate high (84.2). This response rate indicates high participation of the participants and increases the validity of the data collected. The sample size of 421 is very large in comparison with the minimum sample size that was determined with the help of G*Power analysis, thus enhancing the statistical reliability and precision of the results.

G*Power Software Outcome: Sample Size



Analysis and Discussions

This empirical analysis and discussion of the information gathered to test the proposed research model. The main goal of this study is to test the hypothesized relationships between employee commitment, employees' innovative behavior, employee experience, and organizational performance through statistical techniques. Besides that, the structural model is

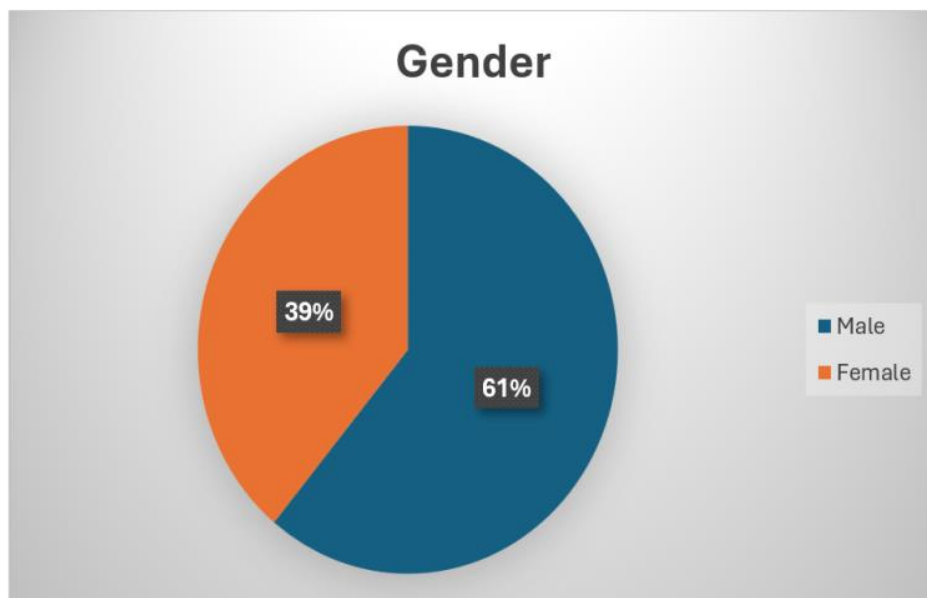
investigated by analyzing path coefficients, coefficients of determination (R^2), effect sizes (f^2), predictive relevance (Q^2 and PLS-Predict), and overall model fit indices. In addition, the study presents the mediation and moderation analyses results to examine the indirect effects of employee commitment on organizational performance through employees' innovative behavior and the conditional role of employee

experience. Lastly, the results are discussed in detail within the framework of the theoretical context of the study and the existing empirical studies. This discussion interprets the findings in terms of Social Exchange Theory, Three-Component Model of Commitment, innovation and creativity theories, and other organizational behavior literatures. This type of analysis in combination allows the study to provide a comprehensive understanding of how employee commitment leads to organizational performance and in what circumstances such a relationship is enhanced.

Respondents Profile

The respondents were distributed gender-wise with 61 percent of the participants being male and 39 percent being female. This disintegration demonstrates that consumer goods sector in Sindh, Pakistan, is a male dominated sector, particularly in administrative and managerial roles. Nevertheless, the fact that many of the female respondents also report the increasing role of women in organizational and administrative life also suggests that the sample is quite balanced and can offer behavioral insights.

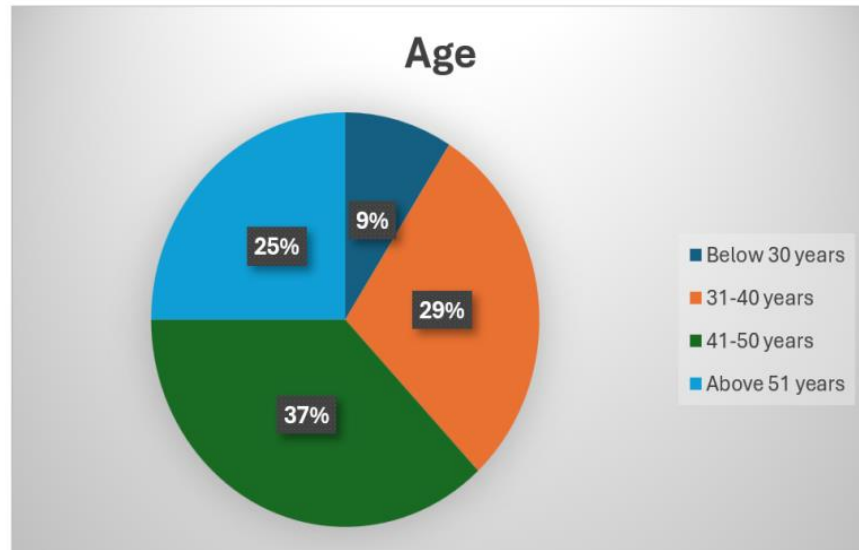
Respondents Profile: Gender



Based on the age of the respondents, 37% of the respondents fell in the age group of 41-50 years and 29% in 31-40 years. A quarter of the respondents were less than 30 years old and 9 percent were more than 50 years old. This kind of spread indicates that the majority of the

respondents are in the prime of their working and decision-making years, indicating that they are mature and experienced enough to be aware of and react to the problems of commitment, innovation, and organizational performance.

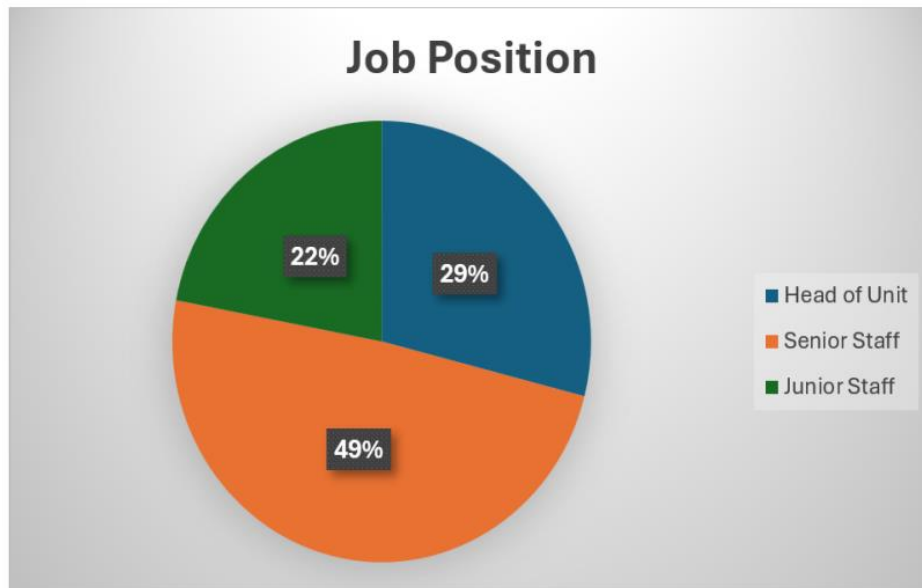
Respondents Profile: Age



Concerning work position, 49% of people questioned indicated that they are senior staff, 29% said they are heads of units, while 22% are junior staff members, which is a good spread of people at different organizational levels that can

provide a variety of views on commitment to the organization and performance. A large number of senior staff and unit heads reflects well on the reliability of the responses about the organization's performance and innovation.

Respondents Profile: Job Position

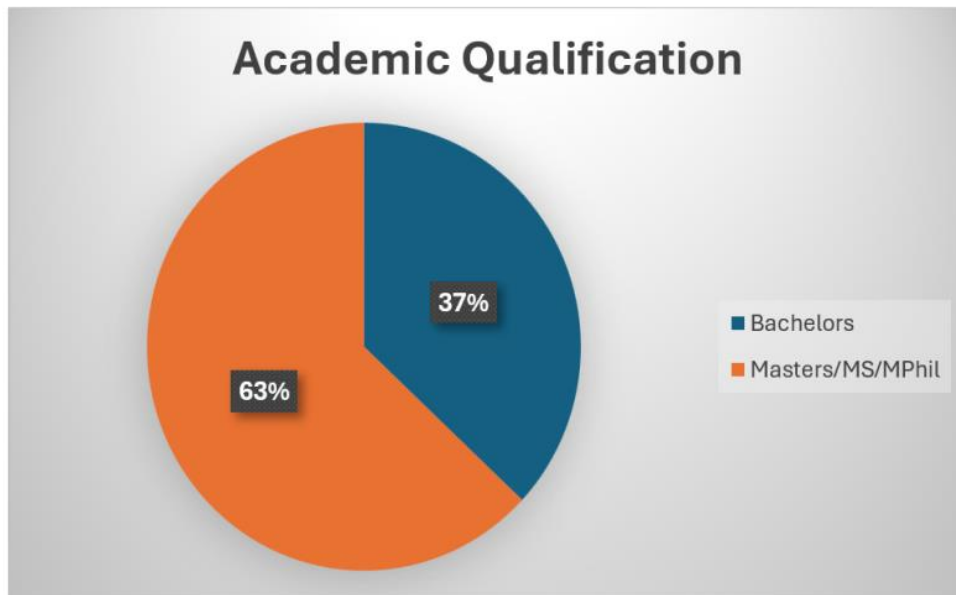


The academic qualification profile shows that 63 percent of the respondents have Master degree (MS/MPhil) and 37 percent have a Bachelor degree only. This means that the respondents have a relatively high educational level and

therefore are the right people to communicate with as they are probably knowledgeable and able to comprehend the dynamics of the organization, its innovation processes and strategic performance problems. In addition, the diversity

in the educational backgrounds helps to add to the quality and reliability of data collected.

Respondents Profile: Academic Qualification



According to the job experience distribution, a large percentage of respondents (48%) have 11 or more years of experience. Then, 38% have 7-10 years of experience. In the meantime, employees with 3-6 years of experience represent 11%, and just 3% have 1-2 years of experience.

Respondents Profile: Job Experience



Generally, the demographic profile indicates that the sample is diverse, experienced, and professionally mature, adequately representing different genders, age groups, job positions,

educational levels, and experience categories. Such diversity strengthens the study's findings and makes them more applicable within the consumer goods sector of Sindh, Pakistan.

Measurement Model Analysis: Convergent Validity

Cronbachs alpha, Composite Reliability (rhoa and rho c), and Average Variance Extracted (AVE). Cronbach alpha assesses internal consistency by assessing the intercorrelations of the items where the composite reliability gives a better estimate of reliability by considering the different item loadings. AVE, in contrast, is used to indicate the average percentage of variance that a construct explains in its indicators. Affective Commitment (ACM) has shown good internal consistency and convergent validity. The alpha of 0.712 of the Cronbach is a positive indicator that the items that measure affective commitment are adequately correlated and reliable. Likewise, the values of composite reliability (0.735 and 0.761) are greater than the recommended value, which proves that the construct is measured consistently and precisely. The alpha of Cronbach is 0.838 indicating a high internal consistency of the indicators. Moreover, the values of composite reliability (rhoa = 0.850 and rho c=0.868) also support the strength of the measure, meaning that the construct is operationalized reliably. The value of the AVE of 0.614 is much higher than the recommended value, indicating that the construct explains a significant percentage of variance in the indicators. This establishes the fact that the items are effective in measuring the perceived costs of leaving the organization.

Normative Commitment (NCM) has a high internal consistency and convergent validity. The alpha of 0.907 represents high reliability, which indicates that the indicators are very consistent in gauging the construct. The composite reliability values ($\rho_a = 0.912$ and $\rho_c = 0.926$) further validate the strength of the measurement model. The value of AVE is 0.647, which means that the construct accounts for almost 65 percent of the variance in the indicators, which proves the high degree of convergence. These results suggest that the items are effective in capturing the moral obligation and loyalty of employees towards the organization. The Innovative Behavior (EIB) of employees is also satisfactorily reliable and convergent. The alpha of Cronbach is 0.786, which is good internal consistency, and the composite reliability (0.795 and 0.808) show that the construct is reliably measured. The AVE of 0.572 is above the minimum required and this means that the indicators are sufficient to measure the underlying construct of innovative behavior, which is generation of ideas, promotion, and implementation. Organizational Performance (OPF) has a high internal consistency and convergent validity. The value of Cronbach alpha is 0.863 which indicates that the reliability is high and the values of the composite reliability (0.875 and 0.890) also prove that the measurement is strong. AVE of 0.636 means that the construct accounts a significant share of variance in indicators, which is a good sign of the sufficiency of the measurement.

Measurement Model Analysis: Convergent Validity

Variables	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
ACM	0.712	0.735	0.761	0.548
CCM	0.838	0.850	0.868	0.614
NCM	0.907	0.912	0.926	0.647
EIB	0.786	0.795	0.808	0.572
OPF	0.863	0.875	0.890	0.636

Measurement Model Analysis: Factor Loadings

Indicator loadings are the magnitude and the direction of the association between each observed item and the latent construct. In Partial Least Squares Structural Equation Modeling (PLS-SEM), indicator reliability is determined when the standardized loadings are 0.70 or above meaning that a significant percentage of variance in every indicator is attributed to the underlying construct. Loadings of 0.70 to 0.95 are usually acceptable as they represent good measurement properties, but do not imply a redundant item. The indicator loading is an important aspect of validating the measurement model since it would be necessary to determine that each item is adding some value to the construct it is supposed to measure. In the case of Affective Commitment (ACM), the loadings of all six indicators are satisfactory (between 0.728 and 0.764). These values are greater than the recommended value of 0.70 which means that every item is a reliable measure of the construct. The comparatively limited variation in loadings also indicates consistency between items, indicating high levels of internal coherence and indicating that the affective commitment scale is reliable.

Continuance Commitment (CCM) has a high indicator reliability with a loading between 0.721 and 0.892. Interestingly, CCM#3 has a very high loading of 0.892, which implies that it is a very

representative measure of the construct. The differences in loadings are not too large, indicating that although some of the items are more influential than others, all indicators are meaningful to represent the construct of continuance commitment. The indicator loadings of Normative Commitment (NCM) are very high with 0.827-0.915. These high values indicate that normative commitment is measured with a high level of precision and reliability as the relationship between the observed items and the latent construct is high. The high loadings are also consistent, indicating that the items are a good fit to the theoretical construct.

The Innovative Behavior (EIB) of employees also exhibits a strong indicator reliability with a loading of between 0.787 and 0.915. The high loading of EIB#4 (0.915) indicates that it has a significant contribution to the construct, and the rest of the items are also above the acceptable level, which confirms that the scale is effective in measuring different aspects of innovative behavior. In the same way, the Organizational Performance (OPF) has high loadings of between 0.792 and 0.909 indicating that the indicators are effective in reflecting the construct and capturing the multidimensional nature of the construct, which encompasses efficiency, innovation outcomes, and productivity. In general, the measurement items all show standardized

loadings of more than 0.70, which indicates sufficient reliability of the indicators and convergent validity. There were no items that needed to be deleted, and each of them added

value to their corresponding constructs. These findings verify that the measurement model is sound, and it can be further analyzed structurally.

Measurement Model Analysis: Factor Loadings

Items	Loadings	Items	Loadings
ACM#1	0.728	NCM#4	0.915
ACM#2	0.764	NCM#5	0.827
ACM#3	0.756	EIB#1	0.792
ACM#4	0.759	EIB#2	0.824
ACM#5	0.729	EIB#3	0.787
ACM#6	0.748	EIB#4	0.915
CCM#1	0.768	EIB#5	0.809
CCM#2	0.721	OPF#1	0.835
CCM#3	0.892	OPF#2	0.868
CCM#4	0.801	OPF#3	0.899
CCM#5	0.774	OPF#4	0.909
NCM#1	0.862	OPF#5	0.815
NCM#2	0.874	OPF#6	0.792
NCM#3	0.857		

Measurement Model Analysis: Discriminant Validity: FornellLarcker Criterion

Discriminant validity assesses the extent to which a construct is empirically distinct from other constructs in the model (Harter, et al., 2002). To satisfy this condition, the square root of the Average Variance Extracted (AVE) for each construct (which is given on the diagonal of the matrix) must be larger than its highest correlation with any other construct (which is given in the off-diagonal cells). Discriminant validity is confirmed when this criterion is fulfilled.

Affective Commitment (ACM)

The square root of the AVE for affective commitment is 0.805, which is greater than the correlations with continuance commitment (0.214), normative commitment (0.292), employees' innovative behavior (0.523), and organizational performance (0.343). In other words, affective commitment has more in common with its own indicators than with any other constructs. This is evidence of discriminant validity.

Continuance Commitment (CCM)

The continuance commitment's square root of AVE value is 0.852, which is greater than its correlations with affective commitment (0.214), normative commitment (0.735), employee innovative behavior (0.167), and organizational performance (0.196). However, the correlation between continuance and normative commitment is high, so it is always less than the square root of AVE, which shows that these two constructs are different in terms of data.

Normative Commitment (NCM)

The square root of AVE for normative commitment is 0.715, which exceeds its correlations with affective commitment (0.292), employees' innovative behavior (0.287), and organizational performance (0.556). Even though the correlation with organizational performance is moderate, the criterion is met, providing discriminant validity to normative commitment.

Employees' Innovative Behavior (EIB)

The square root of the AVE of employees' innovative behavior is 0.797, which is higher than their correlations with affective

commitment (0.523), continuance commitment (0.167), normative commitment (0.287), and organizational performance (0.608). Therefore, the results show that innovative behavior is an independent construct in the model.

Organizational Performance (OPF)

Organizational performance has a square root of AVE of 0.908, which is higher than its correlations with affective commitment (0.343), continuance commitment (0.196), normative commitment (0.556), and employees' innovative behavior (0.608). This indicates strong discriminant validity for the organizational performance construct.

Measurement Model Analysis: Discriminant Validity: FornellLarcker Criterion

	ACM	CCM	NCM	EIB	OPF
ACM	0.805				
CCM	0.214	0.852			
NCM	0.292	0.735	0.715		
EIB	0.523	0.167	0.287	0.797	
OPF	0.343	0.196	0.556	0.608	0.908

Measurement Model Analysis: Discriminant Validity: Heterotrait-Monotrait Ratio

The Heterotrait-Monotrait (HTMT) ratio is a more stringent and contemporary method for assessing discriminant validity in PLS-SEM. HTMT evaluates the ratio of correlations between constructs to correlations within constructs. It examines whether constructs that are supposed to be conceptually distinct are empirically distinguishable (Arsawan, et al., 2022).

According to established guidelines, HTMT values should be below 0.85 (conservative criterion) or below 0.90 (liberal criterion). Values below these thresholds indicate adequate discriminant validity.

Affective Commitment (ACM)

The HTMT values between affective commitment and other constructs are all well below the recommended threshold. Specifically, ACM shows HTMT values of 0.169 with CCM, 0.653 with NCM, 0.228 with EIB, and 0.357 with OPF. These results indicate that affective commitment is empirically distinct from continuance

commitment, normative commitment, innovative behavior, and organizational performance.

Continuance Commitment (CCM)

Continuance commitment shows low HTMT levels alongside other constructs, such as 0.237 for NCM, 0.335 for EIB, and 0.222 for OPF. These scores imply little to moderate correlations and validate that continuance commitment is a conceptually different aspect of employee commitment.

Normative Commitment (NCM)

Normative commitment displays moderate HTMT values with affective commitment (0.653) and organizational performance (0.739), but always stays under the critical limit. The HTMT values with continuance commitment (0.237) and innovative behavior (0.302) are much lower. These discoveries indicate that normative commitment correlates with other constructs, so it is, on the whole, a different construct from an empirical perspective.

Employees’ Innovative Behavior (EIB)

Innovative employee behavior has HTMT metrics of 0.228 with ACM, 0.335 with CCM, 0.302 with NCM, and 0.524 with OPF, respectively. All these numbers are much lower than the standard level of 0.85 and reveal that innovative behavior is a separate concept and not something that overlaps with commitment dimensions or organizational performance.

Organizational Performance (OPF)

Organizational performance shows fairly good HTMT values in comparison with other constructs as well, with the highest at 0.739 for normative commitment and 0.524 for innovative

behavior. These figures continue to be well within the acceptable range, supporting the discriminant validity.

Overall, all HTMT values are below the conservative threshold of 0.85, providing strong evidence of discriminant validity among the constructs. These findings indicate that affective commitment, continuance commitment, normative commitment, employees’ innovative behavior, and organizational performance are conceptually and empirically distinct constructs. Consequently, the measurement model satisfies discriminant validity requirements and is appropriate for proceeding to structural model analysis.

Measurement Model Analysis: Discriminant Validity: Heterotrait-Monotrait Ratio

	ACM	CCM	NCM	EIB	OPF
ACM					
CCM	0.169				
NCM	0.653	0.237			
EIB	0.228	0.335	0.302		
OPF	0.357	0.222	0.739	0.524	

Structural Path Model Analysis: Multicollinearity: Variance Inflation Factor
Multicollinearity Analysis: Variance Inflation Factor (VIF)

Multicollinearity is a statistical situation where two or more predictor constructs in a model are strongly correlated with each other, which may cause inflated standard errors, unstable parameter estimates, and problems in interpreting the effects of individual predictors. Variance Inflation Factor (VIF) is a typical measure of multicollinearity that is used to determine the extent of multicollinearity among predictor constructs in the measurement and structural models in PLS-SEM (Oke et al., 2019). VIF value is used to show to what extent the variance of a regression coefficient is inflated by collinearity. A VIF of 1 indicates that there is no correlation between predictors and higher VIF

values indicate that there is more multicollinearity. As per the generally accepted rules, VIF values lower than 5.0 are usually accepted, which means that there are no serious issues of multicollinearity. Nevertheless, more conservative thresholds suggest that VIF values are supposed to be less than 3.3 to guarantee the best model stability and reduce the possibility of bias in estimating parameters. Values that are above these thresholds can be an indicator of redundancy between the predictors and this can also lead to the structural model being unreliable.

Multicollinearity among Predictors of Employees’ Innovative Behavior (EIB)

The three dimensions of employee commitment in the present study are affective commitment (ACM), continuance commitment (CCM), and normative commitment (NCM) which predict the

innovative behavior of employees (EIB). These constructs have the following VIF values: affective commitment (VIF = 1.528), continuance commitment (VIF = 2.441), and normative commitment (VIF = 1.539). All these values are significantly lower than the conservative value of 3.3 to show that there is no issue of multicollinearity among these predictors. The VIF values are relatively low, which indicates that each aspect of commitment has a unique contribution to the explanation of the innovative behavior of employees. Despite the theoretical interconnection between these constructs, being different variations of organizational attachment, the findings confirm that they are empirically different and do not have problematic overlap. Although the continuance commitment has the highest VIF value in the three predictors, it is still in the acceptable range, which means that its addition to the model does not create instability. This result confirms the multidimensional conceptualization of commitment, in which affective, continuance and normative elements are independent but complementary predictors of employee behavior. Moreover, the fact that these predictors do not exhibit multicollinearity increases the interpretability of the structural model.

Multicollinearity among Predictors of Organizational Performance (OPF)

In the structural model, the behavior of employees in terms of their innovative behavior (EIB) is the main predictor with respect to organizational performance (OPF). VIF of EIB is 1.074, which is quite near to the ideal value of 1. This means that the degree of collinearity is extremely low, which supports the claim that innovative behavior is an independent predictor of organizational performance that is not affected by redundancy and overlap with other predictors.

Overall Assessment of Multicollinearity

In general, the VIF values of the model fall within 1.074 to 2.441, which significantly falls short of the conservative value 3.3 and the traditional value 5.0. These results are good indications that the multicollinearity is not an issue in the structural model. The low VIFs imply that the predictor constructs are independent enough to enable the path coefficients to be estimated consistently and reliably. The multicollinearity is non-existent, which increases the validity of the model since the relationships between constructs are not affected by the overlapping variance. It also helps in the strength of the findings, since the estimated coefficients may be interpreted with a lot of confidence. The structural model therefore satisfies the statistical requirements of multicollinearity and thus is appropriate in the analysis, such as hypothesis tests, mediation tests, and moderation tests.

Structural Path Model Analysis: Multicollinearity: Variance Inflation Factor

	EIB	OPF
ACM	1.528	
CCM	2.441	
NCM	1.539	
EIB		1.074

Structural Path Model Analysis: Path Model Fit Indices

The structural model assessment evaluates how well the proposed model explains the endogenous constructs and whether the

hypothesized relationships are meaningful and robust. Inside PLS-SEM, this evaluation generally incorporates the scrutiny of R-square values, model fit indices (SRMR, NFI), and effect sizes (f^2) (Sathyanarayana&Mohanasundaram, 2024).

R-square (R^2) measures the percentage of variance in an endogenous variable accounted for by its predictor variables, and the adjusted R-square adjusts for the complexity of the model.

- Employees' Innovative Behavior (EIB) shows an R^2 of 0.718 and an adjusted R^2 of 0.712, indicating that the combination of affective, continuance, and normative commitment accounts for about 71.8% of the variance in employees' innovative behavior. This is a very high explanatory power figure, suggesting that the various forms of employee commitment are major factors in employee innovation.

- Organizational Performance (OPF) shows an R^2 of 0.594 and an adjusted R^2 of 0.591, indicating that employees' innovative behavior accounts for about 59.4% of the variability in organizational performance.

Generally, the R-squared values indicate that the proposed model predicts both endogenous constructs.

While PLS-SEM is primarily geared toward prediction, more and more researchers are using global model fit indices to assess the overall adequacy of the model.

- The SRMR values for both a saturated and an estimated model have been 0.091, which is a very decent one. In general, values below 0.10 are an appropriate indicator of a good model fit in PLS-SEM, so the difference between the observed and model-implied correlations is quite reasonable.

- Values of the Normed Fit Index (NFI) were 0.938 (saturated model) and 0.936 (estimated model). Both results are higher than the commonly recommended cut-off value of 0.90, meaning that there is a good general agreement between the proposed model and the data observed.

Together, these indices confirm that the structural model demonstrates adequate global fit.

Effect Size (f^2) Analysis

Effect size (f^2) quantifies the extent to which an independent variable exerts influence on a dependent variable in a structural equation model through the variation in R-square if the predictor is excluded from the model. As per the standard criteria, f^2 of 0.02, 0.15, and 0.35 represent small, medium, and large effect sizes, respectively.

- Affective Commitment (ACM \rightarrow EIB) shows an f^2 of 0.573, indicating a large effect on employees' innovative behavior.

- Continuance Commitment (CCM \rightarrow EIB) has an f^2 of 0.486, also reflecting a large effect.

- Normative Commitment (NCM \rightarrow EIB) demonstrates an f^2 of 0.525, signifying a large effect on innovative behavior.

- Employees' Innovative Behavior (EIB \rightarrow OPF) exhibits an f^2 of 0.561, indicating a large effect on organizational performance.

The results show that each predictor construct seriously impacts the explanation of the corresponding endogenous variables.

The overall structural path model has high explanatory power. Besides that, the model globally fits well, and the effect sizes are big. This means that the employee commitment dimensions not only explain employees' innovative behavior but also that such behavior has a great effect on organizational performance. The model's strength confirms that it is appropriate to go on with testing the hypothesis and interpretation of the direct, indirect, and moderated effects.

Altogether, the R-square values, model fit indices, and effect size estimates are important indicators that the proposed structural model is adequate and has predictive power.

Structural Path Model Analysis: Path Model Fit Indices

	R-square	R-square adjusted
EIB	0.718	0.712
OPF	0.594	0.591
	Saturated model	Estimated model
SRMR	0.091	0.091
NFI	0.938	0.936

Effect Size: F-Square

	EIB	OPF
ACM	0.573	
CCM	0.486	
NCM	0.525	
EIB		0.561

Structural Path Model Analysis: PLS Predict

PLS-Predict is a method that uses a holdout sample to assess the PLS-SEM model's predictive ability outside the sample. While R^2 and Q^2 measure how well the model explains the data within the sample, PLS-Predict checks how accurate the model is at predicting the new or unseen data. The validity of the prediction is evaluated based on three major aspects: $Q^2_{predict}$ scores, differences in prediction errors (RMSE and MAE) between PLS-SEM and a simple linear model, and the overall pattern of prediction accuracy across indicators.

Representative of change in the above challenging process, $Q^2_{predict}$ values that exceed zero imply that the model is capable of forecasting the indicator in question based on common practices. In addition, PLS-SEM prediction errors (RMSE and MAE) that are equal to or lower than those of the linear model indicate that the PLS model has better predictive capabilities.

Predictive Relevance Based on $Q^2_{predict}$

The findings show that the majority of employee innovative behavior (EIB) and organizational performance (OPF) indicators have positive $Q^2_{predict}$ values, verifying that the model has predictive relevance.

- For Employees' Innovative Behavior, indicators EIB#1 (0.475), EIB#2 (0.526), EIB#3

(0.590), and EIB#5 (0.486) show strong predictive relevance.

- EIB#4 displays a marginal $Q^2_{predict}$ value (0.031), indicating weaker predictive accuracy for this specific item.
- For Organizational Performance, indicators OPF#1 (0.636), OPF#2 (0.536), OPF#3 (0.549), OPF#4 (0.496), OPF#5 (0.578), and OPF#6 (0.373) all demonstrate positive $Q^2_{predict}$ values, suggesting satisfactory predictive relevance across the construct.

In fact, many indicators show moderate to quite high predictive relevance, which, in turn, supports our model's predictive ability.

Comparison of Prediction Errors (RMSE)

Another way to assess the predictive capability of the PLS-SEM model was to compare its RMSE values with those of a simple linear benchmark model. Data points like EIB#4 and OPF#5 showed marginally higher PLS-SEM RMSE scores than the linear model, indicating relatively less accurate predictions by the PLS-SEM model at these points.

Comparison of Prediction Errors (MAE)

The same pattern applies to the Mean Absolute Error (MAE) values. For most indicators, the PLS-SEM MAE values are lower than or very close to the LM_MAE values, indicating a positive predictive accuracy. Conversely, only a few indicators, especially EIB#4 and OPF#5, show that the linear model outperforms the PLS-

SEM model. By cross-examining Q²_predict values and comparing RMSE and MAE between PLS-SEM and the linear benchmark model, the proposed structural model is capable of providing moderate to high out-of-sample predictive power. Even though some indicators may be identified with relatively weaker predictive accuracy, the general trend signifies that the PLS-SEM model renders significant and trustworthy predictions of employees' innovative behavior and organizational performance. Generally, the PLS-Predict outcome results validate that the proposed model is capable of explaining variance

in the endogenous constructs and has a high level of predictive relevance, especially for organizational performance indicators. These results have reinforced the solidity of the study. Not only has the model been good at predicting new observations, but it has also supported its practical applicability and generalizability. Taken together, the PLS-Predict results are a clear demonstration of the fact that the model has sufficient out-of-sample predictive validity, which is a nice supplement to the in-sample explanatory power that was determined through R² and Q² analyses.

Structural Path Model Analysis: PLS Predict

	Q ² predict	PLS-SEM_RMSE	LM_RMSE	PLS-SEM_MAE	LM_MAE
EIB#1	0.475	0.658	0.643	0.634	0.630
EIB#2	0.526	0.748	0.736	0.554	0.538
EIB#3	0.590	0.983	0.972	0.157	0.148
EIB#4	0.031	0.284	0.297	0.138	0.112
EIB#5	0.486	0.532	0.528	0.397	0.384
OPF#1	0.636	0.848	0.816	0.704	0.701
OPF#2	0.536	0.688	0.680	0.448	0.422
OPF#3	0.549	0.508	0.501	0.179	0.168
OPF#4	0.496	0.891	0.886	0.657	0.643
OPF#5	0.578	0.691	0.695	0.568	0.572
OPF#6	0.373	0.491	0.484	0.354	0.351

Structural Path Model Analysis: SEM Estimates: (Direct Paths)

Affective Commitment and Employee Innovative Behavior

The empirical results of the present study show that affective commitment and employee innovative behavior are positively and statistically very related ($\beta=0.224$, $t=5.838$, $p<0.001$). This discovery provides strong support for the idea that employees with a strong emotional bond to their organization are more willing to engage in workplace innovation. These activities cover coming up with new ideas, suggesting changes to the current ways of doing things, trying out different methods, and being a source of inventive solutions to the problems of the organization (Bratianu et al., 2022). Both the

power and the importance of this relationship significantly highlight how affective commitment is a major determining factor in the emergence of voluntary, innovation-oriented behaviors in employees.

Affective commitment is the expression of an employee's emotional attachment, identification, and involvement with the organization. It is not based on the employee's sense of obligation or the perceived costs of leaving the organization, but rather on the employee's sincere wish to stay with the organization. Employees with affective commitment usually feel a sense of belonging and psychological ownership, which leads them to consider the success of the organization as very

much their own personal success. This emotional link is a great source for innovative behavior because such employees are ready to put in their effort, time, and creativity to achieve better results for the organization (Hammouch, 2025). Therefore, affective commitment results from positive social exchanges between employees and the organization. Consequently, employees do not simply fulfill their jobs but go beyond by innovating.

Innovation represents a form of giving back at a high level of the spectrum, in this sense. In contrast to the mere completion of routine tasks, coming up with innovations requires active thinking, getting emotionally involved, and sometimes going so far as to take a personal risk, such as being the one to fail or the originator of ideas everyone rejects. Only when employees feel that they are in an emotionally safe environment, that they are worth it, and that the organization backs them, are they likely to exhibit this kind of behavior. The affective commitment is even more necessary in the consumer goods market, where competition is stiff and where market conditions are continuously evolving. Firms in this industry must continue innovating in order to efficiently meet changing consumer preferences, take advantage of technological changes and prevent competition. Studies indicate that employees who are emotionally attached to their organization are not only able to identify new challenges and opportunities but also come up with ideas that could be used to keep the organization competitive. The t-value achieved here is a good measure of the strength of this relationship in the case of Sindh, Pakistan, where organizations usually do not only possess fewer resources, but also count on employees to be innovative, more than formal R&D departments do. The fact that affective commitment is a significant factor that determines innovative behavior supports the idea that innovation is not only a matter of technical competence, formal rewards, and organizational systems. Although all these are needed, the outcomes reveal that innovation is the result of emotional and psychological attachment of employees to the company.

Continuance Commitment and Employee Innovative Behavior

According to the empirical results of this research, there is a positive, but relatively weak relationship between continuance commitment and employee innovative behavior ($\beta = 0.117$, $t = 3.128$, $p = 0.002$). Although the relationship is statistically significant, it is significantly less than those of affective and normative commitment. This finding indicates that those employees who stay in the organization mainly because they perceive costs involved in leaving the organization such as loss of benefits, no other job opportunities, or investments made are less likely to act innovatively compared to employees who are motivated by emotional attachment or moral obligation. Continuance commitment is a calculative type of attachment, in which the decision to remain is based on need and not on want or moral obligation. High continuance commitment employees are more likely to evaluate their relationship with the organization transactionally, considering the costs and benefits of staying and leaving (Chen, 2022). Consequently, they tend to be motivated by retaining employment and avoiding losses as opposed to engaging in discretionary actions that entail risk, uncertainty, and extra effort.

Theoretically, this result is consistent with the Motivation Crowding Theory, according to which externally motivated or constraint-based motivation is less conducive to creativity and innovation. Innovative behavior generally involves intrinsic motivation, curiosity, and experimentation spirit, which is unlikely to thrive when employees are forced to remain because of economic or structural factors. Employees with a strong continuance commitment might be more focused on compliance and stability than exploration and change. Although the positive and significant relationship in this study is weak, it still shows that continuance commitment is not totally irrelevant to innovation. Even in some organizational settings, where standardized processes and incremental innovation are the norm, high continuance commitment employees can still provide some types of innovation. As an example, they can propose small efficiency gains

or small process enhancements that can keep operations effective without endangering the status quo. This innovation is frequently risk-averse and compliance-based, as opposed to being exploratory or transformative.

Normative Commitment and Employee Innovative Behavior

The study results indicate that normative commitment is strongly and highly significant ($\beta = 0.317$, $t = 11.711$, $p < 0.001$) in predicting innovative behavior compared to the other two dimensions of commitment, meaning that normative commitment is the most effective predictor of innovative behavior. The strong influence of moral obligation, loyalty, and ethical responsibility on the readiness of employees to participate in discretionary and innovation-based behaviors is highlighted by this finding. Normative commitment is an internalized belief of the employee that it is right to stay and serve the organization. Such a feeling of duty is commonly influenced by the cultural values, socialization processes, and ethical standards that promote loyalty, responsibility, and long-term relationships. Normative commitment employees are not only driven by personal satisfaction or monetary factors, but by an ethical obligation to help the organization achieve its objectives and prosperity (Baritule&Enwin, 2021).

Theoretically, this result is very much in favor of Social Exchange Theory (SET) and Job

Embeddedness Theory. In the SET framework, normative commitment is formed when employees feel that the organization has invested in them such as through training, support, or trust to the extent that they have an obligation to give back. Innovative behavior in this respect is a kind of ethical reciprocation, the employees give ideas and solutions, as a means of respecting their perceived obligation to the organization. Job Embeddedness Theory also describes the fact that normative commitment is such a powerful generator of innovation. Normatively committed employees are well-integrated in the organizational networks, values and social relationships. This embeddedness makes them feel more responsible to the organizational success and be more willing to take proactive behaviors that can benefit the organization such as innovation. The strength of normative commitment that was noticed in this study is particularly applicable in the cultural context of Pakistan which is collectivistic, has loyalty and moral responsibility embedded in its culture. In this instance, the employees are likely to perceive their relationship with the organization as a social relationship in the long-term as opposed to a contractual relationship. Consequently, innovation is not considered to be only a personal accomplishment, but a share of the success.

Structural Path Model Analysis: SEM Estimates: (Direct Paths)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ACM -> EIB	0.224	0.222	0.038	5.838	0.000
CCM -> EIB	0.117	0.119	0.037	3.128	0.002
NCM -> EIB	0.317	0.316	0.027	11.711	0.000
EIB -> OPF	0.184	0.187	0.041	4.513	0.000

Employee Innovative Behavior and Organizational Performance: Mediating Path

The indirect effects indicate that the affective commitment has a statistically significant indirect impact on organizational performance (innovative behavior) (0.084, $p = 0.011$), normative commitment has a strong indirect impact (0.171, $p < 0.001$), and even continuance commitment has a statistically significant indirect impact (0.345, $p < 0.001$). All these findings confirm that commitment in itself does not necessarily translate into improved performance unless it is manifested in real behavioral processes, especially innovation. Innovative behavior in this sense serves as the channel through which psychological attachment is converted into concrete organizational results. Theoretically, these results are well consistent with the AbilityMotivationOpportunity (AMO) framework. The AMO model suggests that performance of employees depends on ability, motivation and opportunity. Employee commitment is the motivational element in the current study whereas innovative behavior is the behavioral manifestation of the motivational element. The high mediation effects prove that motivation, without actionable behavior, is not enough to enhance organizational performance. Performance gains need to be realized by employees taking onboard their motivation by engaging in innovative behaviors, like idea

generation, idea promotion, and implementation (Omada, et al., 2025).

4.6.5 Employee Experience and Employee Innovative Behavior: Moderating Path

The moderation analysis provides subtle and theoretically important results on the importance of employee experience in influencing innovative behavior. The findings show that the relationship between affective commitment and innovative behavior ($\beta = 0.057$, $p = 0.021$), normative commitment and innovative behavior ($\beta = 0.109$, $p = 0.012$) are significantly mediated by employee experience. Nonetheless, the employee experience does not play a significant role in mediating the relationship between continuance commitment and innovative behavior ($\beta = 0.023$, $p = 0.422$). These results emphasize that experience is a conditional intensifier of innovation and not a universal intensifier. The large moderation effects of affective and normative commitment indicate that experience enhances the transfer of value-based commitment to innovative behavior. Older workers who have a personal attachment to the organization or have a moral duty to the organization are in a better position to translate these psychological conditions into successful innovation. It is explained by the fact that they have the accumulated knowledge, skills, organizational awareness and social networks, which allow them to see opportunities, develop ideas and overcome implementation difficulties in a more efficient way (Thatrak, 2021).

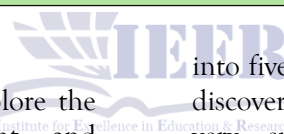
Structural Path Model Analysis: SEM Estimates: (Moderating & Mediating Paths)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
ACM -> EIB -> OPF	0.084	0.083	0.033	2.581	0.011
CCM -> EIB -> OPF	0.345	0.345	0.028	12.392	0.000
NCM -> EIB -> OPF	0.171	0.171	0.04	4.299	0.000
ACM*EJE -> EIB	0.057	0.058	0.025	2.308	0.021
CCM*EJE -> EIB	0.023	0.018	0.028	0.803	0.422
NCM*EJE -> EIB	0.109	0.12	0.043	2.517	0.012

H#	Hypothesis Description	Status
H#1	The Affective Commitment of employee significantly influences Organizational Performance.	P<.05; Supported
H#2	The Continuance Commitment of employee significantly influences Organizational Performance.	P<.05; Supported
H#3	The Normative Commitment of employee significantly influences Organizational Performance.	P<.05; Supported
H#4	The employee job experience moderates the relationship between the Affective Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.	P<.05; Supported
H#5	The employee job experience moderates the relationship between the Continuance Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.	P>.05; Not Supported
H#6	The employee job experience moderates the relationship between the Normative Commitment of employee and employee innovative behavior such that relationship becomes stronger for higher experienced employees.	P<.05; Supported
H#7	The employee innovative behavior significantly mediates the relationship between Affective Commitment of employee and organizational performance.	P<.05; Supported
H#8	The employee innovative behavior significantly mediates the relationship between Continuance Commitment of employee and organizational performance.	P<.05; Supported
H#9	The employee innovative behavior significantly mediates the relationship between Normative Commitment of employee and organizational performance.	P<.05; Supported

Conclusions

The main goal of this study was to explore the link between employee commitment and organizational performance, considering employees' innovative behavior as the mediator and employee experience as the moderator. This study is new, distinguishing itself from others in a few ways. It incorporates several theoretical view points to describe the commitment of employees to the organizational performance in a holistic and contextually applicable manner and puts the model to test in the consumer goods sector of Sindh, Pakistan. This research adopted a moderated mediation model as opposed to the past studies that considered commitment and performance as one, direct, and linear relationship to explain the behavioral and environmental complexity in contemporary workplaces. At the same time, it followed the trend in organizational research toward breaking out of simple models and investigating the factors and conditions that influence employee-oriented performance outcomes. The study is separated



into five general parts. Section 5.2 lists the major discoveries of the research. Section 5.3 provides very specific guidance to the leaders of organizations and human resource professionals. Section 5.4 discusses how the theory was developed and its practical uses. Lastly, Section 5.5 outlines future research areas. Collectively, the parts reveal the intellectual and pragmatic worth of the research and emphasize its contribution to the larger body of work on commitment, innovation, and organizational performance.

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