



Psychological Capital, Affective Commitment, and Citizenship Behavior: PLS-SEM Modelling Approach

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Abstract: *Psychological capital (PC) has become critical to positive workplace outcomes, including supporting organizational citizenship behavior (OCB). This research explores the relationships between PC and OCB with the mediating role of affective commitment (AC) as contextualized in Bangladeshi small and medium-sized enterprises (SMEs). A total of 200 full-time employees working in different SMEs of Bangladesh are included in the study, based on a purposive sampling method. Drawing on variance-based structural equation modelling (SEM), the research examines how psychological resources (optimism, resilience, hope, and self-efficacy) facilitate employees' discretionary efforts to achieve organizational goals. The results identify AC as an important mediation mechanism through which strong emotional attachment in employees can transform psychological capital into OCB. The research contributes critically to theoretical development and offers actionable implications for practice by providing empirical insights into the mediating role of AC in the PC-OCB relationship. The managers and entrepreneurs can promote PC through relevant training and a supportive environment that increases the employees' commitment and leads them to perform behaviors beyond the demands of their formal role. Consequently, this study emphasizes the roles of psychological capital and affective commitment in developing an organizational citizenship culture critical to the long-term success of SMEs in Bangladesh.*

Keywords: *Affective commitment; Organizational citizenship; Psychological capital; Small and medium-sized enterprises.*

1. Introduction

Small and medium-sized enterprises (SMEs) constitute the key drivers of any economy, and Bangladesh is no different. As per the Bangladesh Bureau of Statistics (2023), SMEs account for 25% of GDP and provide 7.8 million jobs, 87% of industrial establishments in Bangladesh. However, SMEs experience problems including resource scarcity, employee turnover, and a lack of advanced technologies (Radicic & Petković, 2023). Therefore, encouraging constructive employee behaviors, particularly organizational citizenship behavior (OCB), is pivotal in ensuring sustainability and success. OCB includes voluntary employee behaviors outside formal job duties and increases organizational effectiveness (Wood et al., 2024). Studies have shown that high OCB in an organization can lead to enhanced productivity, heightened resilience, and effective teamwork (Ojebola et al., 2020). Psychological capital – defined as optimal levels of self-efficacy, optimism, hope, and resilience – has been positively related to OCB, implying that developing employees' psychological resources can lead to behaviors that support organizational success.

Psychological capital (PC), affective commitment (AC), and organizational citizenship behavior (OCB) are the variables chosen for the current study because these.

factors substantially influence organizational performance and employee performance in the SMEs sector in Bangladesh. As one of the essential psychological resources, PC plays a significant role in promoting individual performance, motivation, and resilience, which is important for SMEs under limited resources (Nolzen, 2018; Zeng et al., 2023). As an emotional bond to the organization, AC affects employees' involvement in behaviors that improve organizational objectives, increasing job satisfaction, lowering attrition, and higher productivity (Zhou et al., 2024). OCB consists of optional behaviours not covered in jobs and contributes to an organization by improving effectiveness, teamwork, and innovation, which are crucial for SMEs working towards sustainability and success (Ojebola et al., 2020; Wood et al., 2024). These variables, combined, are critical to grasping the influence of employee attitudes and behaviors on the success of SMEs, particularly in Bangladesh, where SMEs grapple with obstacles such as resource scarcity, employee attrition, and technological constraints. The current study seeks to understand the relationship of these variables to highlight the importance of psychological and emotional elements in helping SMEs achieve employee commitment and discretionary behaviour.

This research has meaningful theoretical and practical implications. Theoretically, it adds to the literature on positive organizational behavior by exploring relationships among PC, AC, and OCB. It offers empirical findings regarding the mediating effect of AC, contributing to a greater understanding of how the effect of PC on OCB works. The findings will thus practically inform and offer insights to SME managers in Bangladesh on how they can use emotional and psychological resources to create a proactive and committed workforce. Since SMEs play a vital role in Bangladesh's economy, the outcomes emanating from employee engagement would have far-reaching effects on the overall economy and society.

This study is motivated by the research gaps in the existing literature on employee discretionary behaviors, especially in the context of SMEs in Bangladesh. Even though the significant impact of employee Psychological Capital (PC) and discretionary behaviors on the success of organizations has been increasingly recognized in recent years, most Bangladeshi SMEs, however, lack advanced employee development programs, and this directly affects employee commitment and Organizational Citizenship Behavior (OCB) (Pongvachirint, 2022). PC has been identified as a promising approach to enhancing employee commitment (Geremias et al., 2024). However, the relationship between PC and OCB within Bangladeshi SMEs has yet to be explored. Also, very few studies have been conducted to examine the antecedents of OCB in this context, indicating a clear gap in the literature (Wood et al., 2024). Additionally, the mediating role of Affective Commitment (AC) between PC and OCB has been little studied. Such a gap hinders the understanding of how psychological factors influence employee behaviours at SMEs (Aziz, 2022). Thus, this novel study endeavors to fill these gaps by examining the impact of PC on OCB, analyzing the influence of PC on AC, and investigating the mediating role of AC between PC and OCB. This study adds to the emerging research on employee PC in SMEs, particularly in developing countries. It offers an important consideration for organizations that seek to boost employee commitment and discretionary behaviours.

2. Literature Review & Hypotheses Development

2.1. Social Exchange Theory

Based on the social exchange theory (SET), this study assumes that relationships at work are based on carrying out exchanges of resources and support. SET indicates that people tend to engage in behaviors that reciprocate the benefits they receive through their organization's actions (Ahmad et al., 2023). In this study, psychological capital (PC) is a resource that helps cultivate positive emotions and trust. It motivates individuals to give back through organizational citizenship behavior (OCB) (Yuwono et al., 2023). The choice of SET is appropriate for this research, contributing these missing links as it elucidates how psychological and emotional resources drive discretionary behaviors arising from a resource-constrained environment such as SMEs. Theory of reciprocity explains PC's direct and indirect effects on OCB because high PC leads to supportive behavior, which drives employees to exhibit high OCB. Previous researchers built a proposition on the two-way relationship between employees and the organization in SET, positing that employees with positive PC have affective commitment (Gustari & Widodo, 2021). This, in turn, leads to discretionary behaviors like OCB for the organization. In another study, Melkamu (2023) used SET to show that high-quality leader-member exchange and strong perceived organizational support foster affective commitment that, in turn, strengthens OCB. SET focuses on OCB based on the premise that employees develop reciprocal relationships by offering OCBs in response to an organization that they feel has offered them support or favorable treatment.

2.2. Psychological Capital (PC) and Organizational Citizenship Behavior (OCB)

A reasonable scientific justification is found for the hypothesis that "PC is positively related to OCB". PC—made of hope, optimism, resilience, and self-efficacy—enhances employees with the intellectual and emotional capital needed to go above conventional roles, not just the formal job requirements (Nolzen, 2018). Existing studies indicated that employees with a high PC level are likelier to perform voluntary behaviors contributing to the organization (Alshahrani & Iqbal, 2021; Zeng et al., 2023). Additionally, other research argues that psychological resources allow people to deal with obstacles encountered within the workplace, improving their capacity to give what they can above and beyond their job descriptions (Yuwono et al., 2023). Previous studies have suggested that PC engenders organizational loyalty and mutual benefits, consistent with the formulations of Social Exchange Theory (SET). In line with SET, employees with high PC view what they contribute as part of a give-and-take relationship with their organization and, therefore, show higher OCB (Gupta et al., 2017; Qian et al., 2020). Thus, the following hypothesis is formulated:

H₁: There is a positive relationship between PC and OCB.

2.3. Psychological Capital (PC) and Affective Commitment (AC)

The hypothesis suggesting "PC is positively related to AC" has strong support in the extant literature. Research shows that those who score high on PC tend to have stronger affective

ties and perceive their organization as a supportive organization that nurtures their development and well-being (Zhou et al., 2024). Previous literature shows that employees with higher PC can better cope with workplace stressors and strengthen their commitment and trust towards the organization (Geremias et al., 2024; Papacharalampous & Papadimitriou, 2021). This relationship is further underpinned by social exchange theory (SET), which suggests that employees will reciprocate organizational support by developing deeper emotional attachments. As a result, PC plays a key role in workplace performance and substantially enhances AC, thus delivering a strong theoretical and empirical basis for this hypothesis. Hence, we propose the following hypothesis:

H₂: There is a positive relationship between PC and AC.

2.4. Affective Commitment (AC) and Organizational Citizenship Behavior (OCB)

Academic literature supports the hypothesis that "AC is positively related to OCB". AC, which reflects an employee's emotional acceptance and identification with their organization, has robustly been associated with discretionary behaviors beyond formal job requirements (Zhou et al., 2024). The emotional connection of high AC employees makes them feel responsible and willing to give their best to make organizational success possible, which is why they tend to be more prone towards OCB (Erum et al., 2020; Ribeiro et al., 2022). Furthermore, past researchers have documented that when employees feel emotionally attached with their organization, they also exhibit behaviors that seek to enhance organizational synergy and productivity (Khaskheli et al., 2020; Wang et al., 2021). The theory behind this relationship is rooted in Social Exchange Theory (SET), suggesting that employees with high levels of AC consider their OCB as a way to reciprocate the emotional and professional support received. Thus, the following hypothesis is formulated:

H₃: There is a positive relationship between AC and OCB.

2.5. The Mediating Role of Affective Commitment (AC)

Research suggests that a higher Psychological Capital (PC) level, including hope, optimism, resilience, and self-efficacy, increases employees' willful, extra-role behavior (Zeng et al., 2023). AC is associated with the mediating influence of PC on OCB because employees with high PC are more likely to develop stronger emotional bonds to their organization, which not only causes them to act in ways that exceed formal job expectations. Furthermore, previous researchers indicate that employees with a greater level of AC are more eager to engage in the organization beyond their jobs (Ribeiro et al., 2022). This mediation effect of AC is in line with the social exchange theory, which states that employees who are valued and committed to their organization tend to perform OCB. Therefore, we propose the following hypothesis:

H₄: AC as a mediator of the relationship between PC and OCB.

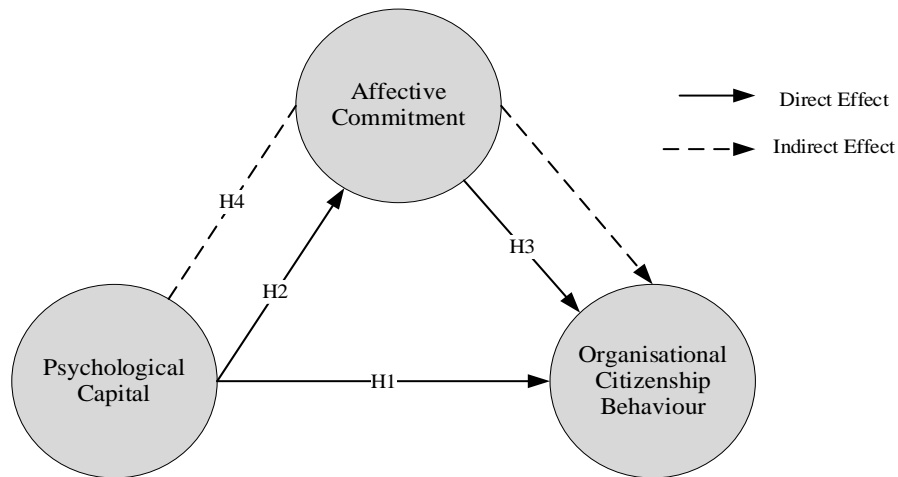


Figure 1. Theoretical Model

3. Method

3.1. Population and Sampling

This study's sample population represented full-time employees from different Small and Medium-sized Enterprises (SMEs) in Bangladesh. Due to the nature of the research, which is to investigate the relationship between Psychological Capital (PC), Affective Commitment (AC), and Organizational Citizenship Behavior (OCB), full-time employees were chosen as respondents, as they are more likely to retain steady work behaviors and attitudes in comparison to part-time employees. Data were collected using a non-probability sampling method, specifically, a purposive sampling. This approach was adopted since no complete sampling frame includes all SMEs in Bangladesh. Thus, purposive sampling enables the deliberate selection of employees with the relevant knowledge and experience in PC, AC, and OCB in SMEs. This facilitated the study to focus on those employees who meet the eligibility criteria. Besides, the sample size of this study was determined to ensure robustness and accuracy. We used the G*Power formula to calculate the minimum sample size needed for this study. Given a 0.05 effect size, 0.90 power, and a one-directional path to the endogenous construct, the minimum sample size was 150. Consequently, a sample size of 200 was considered optimal to guarantee that the results of this research would be valid and reliable.

3.2. Data Collection

To facilitate data collection, the researcher interacted with top management of numerous Small and Medium-sized Enterprises (SMEs) within Bangladesh via personal and professional networks. A letter of authorization was drafted to obtain approval, describing the aim of the study, and part of the organization giving endorsement. Once approved, administrative heads were the intermediaries collecting and distributing the questionnaire survey to full-time employees to ensure the correct data was obtained. However, to avoid miscommunication, structured survey-based questionnaires on PC, AC, and OCB were distributed in English to ensure clarity and consistency. Each survey was attached to a cover letter outlining the study's objectives, assuring confidentiality, and emphasizing

voluntary participation to promote ethical transparency. A cross-sectional research design was employed to analyze the relationships between the variables at a specific time, enabling an appraisal of employees' perceptions. This design was appropriate as it allowed us to gather up-to-date organizational behaviors, which were in perfect harmony with the aim of the study. Apart from that, a 33-item questionnaire was developed to examine the constructs of PC, AC, and OCB. The PC was evaluated through a 12-item scale (Huynh & Hua, 2020). Furthermore, AC among the SME employees was assessed using a 6-item scale (Allen & Meyer's, 1990). In addition, based on the work of research before, this study assessed OCB via a 15-item scale (Kumar & Shah, 2015).

3.3. Data Analysis

Data were analyzed using SPSS and Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart PLS 4 software. SPSS was first used to enter and code data, perform preliminary screening to check the integrity of the dataset, and identify any potential outliers or anomalies that could affect the analysis. In order to examine common method bias, the Harman single-factor test was performed, and the results supported its negligible effect on the dataset. The measurement model was developed and validated through the PLS-SEM, and the structural relationships among PC, AC, and OCB were subsequently tested. Additionally, PLS-SEM can handle complex models, enable simultaneous testing of measurement and structural relationships, and provide a robust framework for hypothesis testing within the context of SMEs in Bangladesh.

4. Results & Discussion

4.1. Respondents' Demographic Details

The demographic profile of the survey participants is illustrated in Table 1. The results show that 70% of the respondents were men and 30% were women. Most respondents (47.5 %) were between 36 and 40 years old. Furthermore, 55% of the sample had a Master's degree according to the data. Further descriptive statistics show that 49% of respondents worked in the SME sector for 5–10 years.

Table 1. Respondents' Demographic Details

Characteristics	N	%
Gender	N	%
Female	60	30
Male	140	70
Age level	N	%
Below 35 years	45	22.5
36 – 40 years	95	47.5
41 years or above	60	30
Education	N	%
Higher Secondary degree	25	12.5
Bachelor degree	65	32.5
Masters	110	55
Years of experience in the SME sector	N	%
Below 5 years	58	29
5 – 10 years	98	49
11 years or above	44	22
Total	200	100

4.2. Model Assessment

The data analysis was performed using the PLS-SEM and the SmartPLS software. Using the PLS-SEM, a two-step analytical approach was implemented that was consistent with past scholars' recommendations. Step one assesses the measurement model's validity and reliability, while step two assesses the structural model to validate the proposed relationships of this study (Budiarto et al., 2021).

Table 2. Measurement Model Assessment

Variables	Items	Loadings (>0.5)	AVE (>0.5)	CR (>0.8)	Cronbach's Alpha (>0.7)
Psychological Capital	PC1	0.572	0.661	0.825	0.891
	PC2	0.726			
	PC3	0.538			
	PC4	0.649			
	PC5	Deleted			
	PC6	0.718			
	PC7	0.594			
	PC8	0.628			
	PC9	Deleted			
	PC10	0.541			
	PC11	Deleted			
	PC12	0.627			
Affective Commitment	AC1	0.614	0.594	0.912	0.924
	AC2	0.552			
	AC3	0.717			
	AC4	0.585			
	AC5	0.663			
	AC6	0.721			
Organisational Citizenship Behaviour	OCB1	0.671	0.636	0.874	0.952
	OCB2	0.532			
	OCB3	Deleted			
	OCB4	0.629			
	OCB5	0.538			
	OCB6	0.662			
	OCB7	Deleted			
	OCB8	0.537			
	OCB9	0.751			
	OCB10	0.579			
	OCB11	Deleted			
	OCB12	0.722			
	OCB13	Deleted			
	OCB14	0.593			
	OCB15	0.691			

Note(s): AVE = Average Variance Extracted; CR = Composite Reliability

In line with the validation procedures recommended by Hair et al. (2016), the reliability of the measurement model was confirmed, given that the CR values exceed 0.8, Cronbach's alpha coefficients are greater than 0.7, and factor loadings are higher than 0.50 (see Table 2). Following the guidelines given by Henseler et al. (2016), we assessed convergent validity, using the average variance extracted (AVE) as a standard for evaluation. As shown in Table 2, the AVE values for all constructs exceeded the minimum recommended threshold of 0.50, providing evidence for convergent validity.

In addition, the heterotrait-monotrait (HTMT) ratio method was used to assess the discriminant validity. As per the guidelines of [Henseler et al. \(2016\)](#), HTMT ratios should be less than the threshold of 0.85 to confirm sufficient discriminant validity. The HTMT outcomes indicated in Table 3 confirmed the discriminant validity of the constructs, as all HTMT ratios were lower than 0.85.

Table 3. The Method of HTMT

Variables	1	2	3
1. Psychological Capital	1		
2. Affective Commitment	0.658	1	
3. Organizational Citizenship Behavior	0.572	0.536	1

4.2.1. Test of the Structural Model

After assessing the reliability and validity of the measurement model, we moved on to estimate the structural model. Following the recommendations by [Hair et al. \(2016\)](#), this study applied the PLS bootstrapping with 5,000 resamples on the whole model level to obtain the estimates of the path coefficients and their t-values. Due to the directional nature of the hypotheses, a one-tailed test was used. Accordingly, the findings in Table 4 reveal the positive and significant effects of PC ($\beta = 0.268$, $t = 8.212$, $p < 0.01$) and AC ($\beta = 0.361$, $t = 7.235$, $p < 0.01$) on OCB that validate the H1 and H3 hypotheses. The results also show that PC ($\beta = 0.384$, $t = 4.191$, $p < 0.01$) has a positive and significant effect on AC, thus providing evidence supporting hypothesis H2.

Table 4. The Results of Hypotheses Testing (Direct Relationships)

Hypotheses	Relationship	Beta	SE	t-value	Decision
H1	PC => OCB	0.268	0.062	8.212**	Supported
H2	PC => AC	0.384	0.058	4.191**	Supported
H3	AC => OCB	0.361	0.065	7.235**	Supported

** Sig < 1%

Using a bootstrapping approach with 5,000 resamples, this study tested whether AC had a significant mediating effect, following the method suggested by [Preacher & Hayes \(2008\)](#). Our bootstrapping results in Table 5 demonstrate that AC significantly mediates between PC and OCB ($\beta = 0.114$, $t = 4.162$, $p < 0.01$), showing partial mediation in the model. Additionally, the presence of both significant direct and indirect effects signifies partial mediation. In contrast, significant direct and non-significant indirect effects indicate full mediation between the independent and dependent variables ([Nitzl et al., 2016](#)). Therefore, the present research exhibits partial mediation, resulting in the acceptance of Hypothesis 4 (H4).

Table 5. The Results of Hypotheses Testing (Indirect Relationships)

Hypotheses	Relationship	Indirect effect	SE	t-value	Confidence interval	Decision
H4	PC=>AC=>OCB	0.114	0.043	4.162	0.046 0.267	Supported

As supported by past studies, a positive relationship between psychological capital (PC) and organizational citizenship behavior (OCB) has been found in this research, indicating that employees with a higher level of psychological factors are more willing to

generate extra-role behavior (Zeng et al., 2023). For instance, Yuwono et al. (2023) highlighted that employees with elevated PC are more proactive, adaptable, and willing to engage in altruistic behaviors, which enhance OCB. Such insights echo the results of Alshahrani & Iqbal (2021), who found that resilient and optimistic workers lead to higher engagement through actions that reinforce harmony and effectiveness. Social Exchange Theory (SET) argues that actors act positively due to the general reciprocity principle. The positive relationship between PC and OCB aligns with SET. It suggests that employees with high PC are more likely to engage in extra-role behavior in exchange for perceived return benefits (Qian et al., 2020). The exchange is reciprocal because employees with higher psychological resources give more back to the organization.

The PC, involving its components like hope, optimism, self-efficacy, and resilience, has been positively correlated with affective commitment (AC) in the workforce (Zhou et al., 2024). Prior researchers indicate that employees with higher levels of PC are more emotionally engaged with their organizations, as the positive psychological states also increase their sense of belongingness and alignment with values, which the organizations stand for (Geremias et al., 2024). For instance, Papacharalampous & Papadimitriou (2021) showed that individuals with high individual differences in PC cope more effectively through challenges, creating a more positive view of their roles, while producing emotional attachment. Regarding social exchange theory (SET), people are motivated to act in a manner that promises positive reinforcements. The effect of PC on AC also supports SET, as employees with higher PC are more committed to the organization and more likely to develop emotions and duality with the organization (Geremias et al., 2024). The results indicate that employees feel they can safely contribute positively to their organization, meaning the organization would want to be there as a work environment.

AC has consistently demonstrated a positive influence on OCB, reflecting the employee's emotional attachment and identification with his/her organization. This research's findings agree with previous research, which shows that individuals with a higher AC tendency are more inclined to exhibit helpful behaviors in the workplace (Erum et al., 2020). Scholars like Khaskheli et al. (2020) have argued that those who develop an emotional bond with their employer instinctively go the extra mile beyond what their job requires. Additionally, Wang et al. (2021) postulated that AC induces both a sense of responsibility and trust, motivating employees to behave in a manner benefitting both co-workers and the organization in large. According to Social Exchange Theory (SET), individuals will exhibit positive conduct only when they feel they will get a reciprocal benefit for their contributions. AC of employees is positively related to OCB, which is consistent with SET because employees who feel emotionally attached to their organization are more likely to engage in extra-role behaviors that potentially benefit the organization (Ribeiro et al., 2022). Committed people see their contributions as an investment in building that reciprocal relationship with the organization and hope for a positive return.

These study findings are supported by previous research, as the mediating role of AC in the relationship between PC and OCB is well established. Research indicates that PC

promotes AC by creating positive emotional bonds between employees and their organizations (Geremias et al., 2024). Likewise, Papacharalampous & Papadimitriou (2021) indicated that PC enables employees to possess favorable psychological resources to perceive the work environment positively, furthering their emotional commitment towards the organization. Additionally, Zhou et al. (2024) observed that this attachment increases the likelihood that employees will perform beyond formal requirements. Under social exchange theory (SET), positive behaviors are anticipated on the mutual relationship each of the parties involved paves towards achieving more than what was initially sought (Wang et al., 2021). Specifically, the OCB in this research is mediated by AC, wherein employees with high levels of PC feel emotionally attached to the organization, which motivates them to display extra-role behaviors. Thus, it supports SET because employees who feel committed to the organization tend to repay the organization by contributing more than what may be required on the job, thereby improving the connection.

5. Conclusion & Implications

This study explores the role of an important antecedent factor of OCB through understanding the importance of PC for facilitating OCB among employees working in the SME sector in Bangladesh. By revealing AC as a critical mediating mechanism, the findings illustrate how employees' psychological resources—i.e., optimism, resilience, hope, and self-efficacy—culminate in discretionary behaviors that directly serve the organization's goals. Applying structural equation modelling, this study adds to the burgeoning literature on PC and OCB while also providing practical advice to SMEs in resource-constrained environments for engendering employee commitment and organizational growth.

The present study aims to merge the Social Exchange Theory with Stakeholder Theory to analyze the relationships among Psychological Capital (PC), Affective Commitment (AC), and organizational citizenship behavior (OCB) in Bangladeshi SMEs. More importantly, the strengthened effect of PC and AC on OCB indicates that resilient, optimistic, hopeful, and efficacious employees were more engaged in OCB; AC acted as the psychological mechanism, leading PC to affect OCB. Empirical evidence also shows that a high level of PC fosters AC, resulting in employees developing strong emotional bonds with the organization, engaging in supportive behaviors, and going above and beyond to achieve organizational goals. Finally, the research has implications for management, noting that organizations should build employees' psychological resources through ongoing professional development, coaching, and feedback. AC is positively influenced by supportive organizational culture, policies, and recognition, mediating the relationship between PC and OCB. Low-cost interventions such as peer support, mentoring, and team-building can help SMEs develop commitment and enhance performance. Promoting a culture of shared values and good practices can drive a path towards loyalty and sustainability for the organization.

5.1. Limitations and Directions for Future Research

The limitations of this study provide avenues for future research. First, its concentration on Bangladeshi SMEs and full-time employees limits the generalizability of the results across industries, job roles, and cultures, as the relationships between PC, AC, and OCB may differ. Further studies should explore across sectors, types of employment, and countries to validate and broaden the findings (Zeng et al., 2023). Second, the cross-sectional design prohibits causal inferences and requires longitudinal or experimental research to investigate the temporal dynamics of these relations (Qian et al., 2020). Third, although AC was established as a mediator of the PC-OCB relationship, it remains possible that job satisfaction, trust in leadership, and perceived organizational support also explained this relationship. Exploring these would advance theoretical and practical insights. Finally, building on the dearth of research about PC and OCB in non-Western contexts, cross-cultural comparisons could show different patterns and culturally specific practices that influence PC's effect on OCB, expanding the global perspective of these dynamics (Gupta et al., 2017).

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