ISSN: 2586-6036
JWMAP website: http://accesson./jwmap
doi: http://dx.doi.org/10.13106/jwmap.2025.Vol8.no3.93

Coaching Leadership and Organizational Commitment in SMEs: Self-Leadership Mediation Effects

Ja-Hyang KWAK[1], Yeoung-Hun KIM[2], Bum-Suk LEE[3]

1. First Author Department of Coaching Sciences MBA, Student, Kyung Hee University Graduate School of Business, Korea. Email: cs_ara@naver.com

3. Corresponding Author Department of Coaching Sciences MBA, Adjunct Professor, Kyung Hee University Graduate School of Business, Korea. Email: bibledrama@naver.com

2. Second Author Department of Coaching Sciences MBA, Adjunct Professor, Kyung Hee University Graduate School of Business, Korea. Email: younghkim9034@daum.net

Received: June 02, 2025. Revised: June 21, 2025. Accepted: June 21, 2025.

Abstract

This study investigated the relationships between coaching leadership dimensions and organizational commitment through self-leadership mediation among 300 small and medium-sized enterprise (SME) employees in Seoul and Gyeonggi metropolitan areas. Utilizing partial least squares structural equation modeling (PLS-SEM), three comparative models were analyzed: a basic path model, an instrumental support moderation model, and an organization-based self-esteem moderation model. Findings demonstrated that direction, a fundamental coaching leadership dimension, exhibited the strongest association with natural reward strategies ($\beta = 0.336$, $p < .001$), which subsequently predicted organizational commitment ($\beta = 0.228$, $p < .001$). Natural reward strategies partially mediated the relationship between direction and organizational commitment (indirect effect = 0.077, $p < .01$). Relationship-focused leadership significantly correlated with constructive thought patterns ($\beta = 0.164$, $p < .05$), which also predicted organizational commitment ($\beta = 0.202$, $p < .001$). Organization-based self-esteem demonstrated substantially stronger moderating effects ($f^2 = 0.375$) compared to instrumental support ($f^2 = 0.041$) in the self-leadership-commitment relationship. The organization-based self-esteem model explained 70.1% of organizational commitment variance, significantly surpassing alternative models. These results suggest that SME leaders should emphasize clear direction-setting and relationship-building while cultivating environments that enhance employees' organization-based self-esteem. This study advances understanding of how coaching leadership and self-leadership function complementarily within resource-constrained SME contexts, supporting Stewart et al.'s (2019) collaborative self-leadership paradox theory.

Keywords: coaching leadership, self-leadership, organizational commitment, organization-based self-esteem, small and medium-sized enterprises.

1. Introduction

Small and medium-sized enterprises (SMEs) constitute the backbone of national economies but face distinctive challenges in human resource management compared to large corporations. Nguyen and Bryant (2004) confirmed a positive relationship between the formalization level of human resource management (HRM) and performance in SMEs; however, as Cunningham and Rowley (2007) noted, research on HRM in the specific context of SMEs remains insufficient. Brand and Bax (2002) particularly emphasized that SMEs require HRM approaches contextualized according to each company's situation, strategy, and culture.

As Park and Ahn (2004) demonstrated, situationally appropriate HRM approaches are crucial for Korean

SMEs. These enterprises typically face challenges including limited resources, informal management structures, and difficulties in securing and retaining talent (Heneman et al., 2000). Within this context, coaching leadership and self-leadership have emerged as particularly relevant leadership approaches for resource-constrained organizational environments characteristic of SMEs.

Coaching leadership represents a style wherein leaders provide feedback through continuous interaction with members, supporting them in establishing their own goals and exploring solutions. This approach is particularly well-suited to the flexible organizational structures and resource-constrained environments typically found in SMEs (Chandler & McEvoy, 2000). Concurrently, Stewart et al. (2019) conceptualized self-leadership as the process of self-motivation and self-management of behavior, elucidating the complementary relationship between coaching leadership (external support) and self-leadership (self-direction) through what they term the "paradox of collaborative self-leadership."

The "paradox of collaborative self-leadership" suggests that external leadership guidance and internal self-direction, rather than being contradictory, can function synergistically in organizational settings. According to Stewart et al.'s (2019) framework, this paradoxical dynamic becomes particularly salient in SMEs where Hofstede et al.'s (2010) high power distance culture intersects with resource constraints, creating unique conditions where external direction and internal self-motivation must function synergistically through what Hobfoll (2001) terms 'resource caravans'—interconnected resource clusters that enhance organizational effectiveness.

Hobfoll's (2001) Conservation of Resources (COR) theory offers an additional theoretical lens for understanding these dynamics. COR theory posits that individuals strive to obtain, retain, and protect resources, and that stress occurs when resources are threatened or lost. In the resource-constrained environment of SMEs, leadership approaches that help preserve and enhance employees' psychological resources may be particularly valuable. The interplay between coaching leadership, self-leadership, and organizational commitment can be understood as mechanisms through which resources are conserved and enhanced within organizational settings.

Despite the theoretical relevance of these concepts to SMEs, exploratory research examining the relationship between coaching leadership and self-leadership in the SME context, and the mechanisms through which they relate to organizational commitment, remains notably underdeveloped. In particular, there exists a significant research gap regarding which specific coaching leadership sub-factors may be associated with particular self-leadership sub-factors, and which organizational contextual factors might moderate these relationships.

Therefore, this exploratory study aims to examine the structural relationships between coaching leadership sub-factors and organizational commitment through the mediation of self-leadership sub-factors, while also investigating the comparative moderating effects of instrumental support and organization-based self-esteem. This investigation addresses the research gap identified by Heneman et al. (2000) regarding context-specific leadership mechanisms in resource-constrained environments and extends Stewart et al.'s (2019) theoretical framework to the underexplored SME context. By targeting employees of SMEs in the Seoul and Gyeonggi metropolitan areas, and by establishing research questions and hypotheses based on a basic path model and subsequently analyzing instrumental support and organization-based self-esteem moderation models to identify the most explanatory model, this research contributes to understanding effective leadership approaches and organizational commitment enhancement mechanisms in the SME context.

2. Theoretical Framework and Hypothesis Development

2.1 Research Model and Hypothesis Development Approach

This study established hypotheses based on the principle of parsimony in research models emphasized by Hair et al. (2017) and the criteria of economy and clarity in theory proposed by Bacharach (1989). Rather than simultaneously testing all possible relationships, the hypotheses were constructed around theoretically relevant relationships supported by previous research. This approach aligns with the staged approach in exploratory research proposed by Stebbins (2001), which emphasizes systematic pattern identification rather than comprehensive verification of all possible relationships.

The theoretical framework for this study integrates both Stewart et al.'s (2019) "paradox of collaborative self-leadership" concept and Hobfoll's (2001) Conservation of Resources (COR) theory. This integration is particularly relevant for understanding SME dynamics, where Brand and Bax's (2002) emphasis on contextually appropriate HRM approaches intersects with the need for resource-efficient leadership strategies that maximize both individual and organizational outcomes. COR theory suggests that "stress occurs primarily in response to the threat of a net loss of resources, their actual net loss, or a lack of resource gain following resource

investment" (Hobfoll, 2001, p. 337). In the resource-constrained context of SMEs, employees may be particularly sensitive to resource loss, which can lead to increased stress and reduced organizational commitment.

Within this framework, coaching leadership elements such as direction-setting can reduce uncertainty and provide clear goals, thereby minimizing psychological resource depletion. Self-leadership elements like natural reward strategies can strengthen intrinsic motivation, contributing to the preservation and expansion of individuals' psychological resources. Additionally, organization-based self-esteem represents an important psychological resource that can enhance the process by which self-leadership translates into organizational commitment in resource-constrained environments.

By combining COR theory with Pearce and Manz's (2005) shared leadership theory, we can explain how external leadership support (coaching leadership) and internal self-direction (self-leadership) complementarily contribute to employee resource conservation and expansion in the SME context, ultimately leading to enhanced organizational commitment.

Our research applies concepts that were primarily developed in Western contexts to the Korean SME environment, necessitating consideration of cultural context. According to Hofstede et al. (2010), Korea is characterized by high power distance and collectivistic cultural tendencies. In this cultural context, coaching leadership may be interpreted differently from the Western perspective that emphasizes individual autonomy and empowerment. Particularly in Korea's hierarchical organizational culture, coaching leadership elements such as 'direction' may carry meaning beyond simple goal-setting. They may reduce uncertainty and help members clearly understand their position and role within the organization, providing psychological stability that is especially important in collectivistic cultures. From a COR theory perspective, perceptions of resource acquisition and loss may differ in collectivistic cultures like Korea compared to individualistic Western cultures, and resource exchange through organizational relationships may be perceived as more important. Park and Ahn's (2004) emphasis on situational HRM appropriateness for Korean SMEs provides additional context for understanding why psychological resources such as organization-based self-esteem may function differently in this cultural context compared to Western individualistic settings. This cultural context may provide an important background for understanding the strong association found in this study between the 'direction→natural reward strategies→organizational commitment' pathway. When considering cultural characteristics, clear direction-setting may enhance psychological stability for Korean SME members (Korean cultural context consideration), thereby facilitating the use of natural reward strategies and promoting organizational commitment.

As an exploratory study, our research aims to identify meaningful patterns in the relationships between coaching leadership, self-leadership, and organizational commitment in the SME context, rather than definitively confirming causal relationships. This approach acknowledges the complexity of organizational phenomena and seeks to generate insights that can inform both theory and practice while providing a foundation for future confirmatory research.

The conceptual framework for this study centers on mediating pathways wherein coaching leadership sub-factors (direction, development, performance evaluation, relationship) relate to self-leadership sub-factors (behavior-focused strategies, natural reward strategies, constructive thought patterns), which in turn associate with organizational commitment. Additional models were designed to explore the comparative moderating roles of instrumental support and organization-based self-esteem in the relationship between self-leadership and organizational commitment.

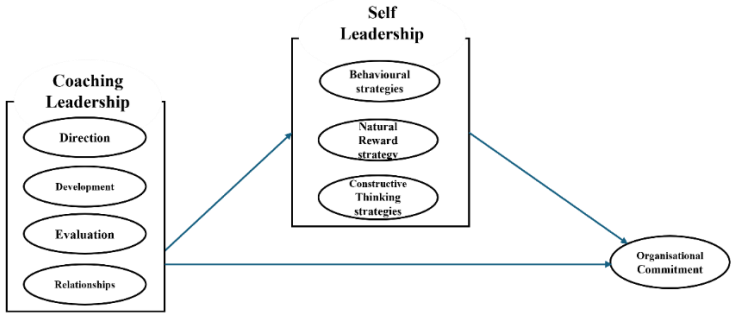

Figure 1: Model 1. Basic Path Model

2.2. Relationship Between Coaching Leadership and Self-Leadership

Coaching leadership represents a leadership approach wherein leaders engage in supportive and facilitative behaviors designed to develop members' potential and enhance performance. This study focuses on the sub-factors of coaching leadership proposed by Stowell (1986), specifically direction (communicating clear goals and expectations), development (enhancing competencies), performance evaluation (providing feedback), and relationship (building trust relationships).

Self-leadership constitutes the process by which individuals regulate their own behaviors and thoughts. Based on Prussia et al.'s (1998) conceptualization, this study examines behavior-focused strategies (self-goal setting, self-observation, self-cueing), natural reward strategies (finding enjoyment in the work itself), and constructive thought patterns (developing positive thinking patterns).

According to Stewart et al.'s (2019) "paradox of collaborative self-leadership," external leadership support (coaching leadership) and internal self-direction (self-leadership) function complementarily rather than contradictorily. In the SME context, where resources are constrained and organizational structures tend to be more flexible, this complementary relationship becomes particularly significant as explained by Pearce and Manz (2005) in their shared leadership theory.

From a COR theory perspective (Hobfoll, 2001), coaching leadership can be viewed as a mechanism that helps employees preserve and enhance their psychological resources in resource-constrained environments. Direction-setting reduces uncertainty, development builds competencies, performance evaluation provides clarity, and relationship-building establishes psychological safety—all of which serve to conserve valuable psychological resources that might otherwise be depleted in uncertain or threatening environments.

The four sub-dimensions of coaching leadership are expected to relate to the three dimensions of self-leadership in different patterns. Direction, with its focus on communicating clear goals and expectations, is particularly likely to demonstrate a strong association with natural reward strategies, as clarity of purpose can enhance employees' ability to find intrinsic value and meaning in their work (Pearce & Manz, 2005). Relationship-building, by creating an environment of trust, is expected to show stronger associations with constructive thought patterns, as trust facilitates employees' ability to positively reframe their thinking patterns (Li et al., 2022).

Development, with its emphasis on enhancing competencies, may be more strongly related to behavior-focused strategies, as skill development naturally aligns with behavioral self-regulation. Performance evaluation, which provides feedback on task execution, might demonstrate associations across multiple self-leadership dimensions depending on the nature and delivery of the feedback.

Based on this theoretical foundation, the following hypotheses were formulated:

H1: Direction will be positively associated with self-leadership sub-dimensions, particularly natural reward strategies.

H2: Development will be positively associated with self-leadership sub-dimensions, particularly behavior-focused strategies.

H3: Performance evaluation will be positively associated with self-leadership sub-dimensions.

H4: Relationship will be positively associated with self-leadership sub-dimensions, particularly constructive thought patterns.

2.3. Relationship Between Self-Leadership and Organizational Commitment

Organizational commitment is conceptualized as psychological attachment and identification with the organization (Marique et al., 2013) and is traditionally categorized into affective commitment, continuance commitment, and normative commitment. Mercurio (2015) contended that affective commitment constitutes the core essence of organizational commitment, suggesting that organizational commitment can be enhanced through fostering members' psychological safety and emotional bonds with the organization.

Regarding the relationship between self-leadership and organizational commitment, Stewart et al. (2019) demonstrated that higher levels of self-leadership significantly correlate with increased affective and normative organizational commitment. Specifically, discovering internal meaning in one's work and positively reinforcing self-behaviors can foster psychological attachment and identification with the organization.

Through the lens of COR theory (Hobfoll, 2001), self-leadership strategies can be understood as mechanisms through which employees manage and enhance their psychological resources. Natural reward strategies help employees find intrinsic value in their work, constructive thought patterns promote positive psychological states, and behavior-focused strategies enable effective self-regulation—all of which can contribute to resource conservation and expansion. According to COR theory, such resource gains can buffer against the stress of resource-constrained

environments and foster positive organizational outcomes such as organizational commitment.

Self-leadership's sub-dimensions may vary in their relationship with organizational commitment. Natural reward strategies, by enabling employees to find fulfillment in their work, may demonstrate particularly strong associations with affective commitment. Constructive thought patterns, by helping employees develop positive perceptions of the organization, may also show substantial relationships with organizational commitment. Behavior-focused strategies might relate to organizational commitment through their role in aligning individual behaviors with organizational goals.

Based on this theoretical foundation, the following hypothesis was formulated:

H5: Self-leadership sub-dimensions will be positively associated with organizational commitment.

- **H5.1**: Behavior-focused strategies will be positively associated with organizational commitment.
- **H5.2**: Natural reward strategies will be positively associated with organizational commitment.
- **H5.3**: Constructive thought patterns will be positively associated with organizational commitment.

2.4. Mediating Effect of Self-Leadership

Li et al. (2022) validated the structural pathway wherein leadership indirectly relates to organizational commitment through the mediation of self-leadership. Their research confirmed that coaching leadership strengthens self-leadership sub-components such as members' self-efficacy and behavioral strategies, which subsequently correlates with increased organizational commitment.

Similarly, Lee et al. (2019) empirically verified that leadership not only directly relates to organizational commitment but that individual members' self-regulation and self-motivation capabilities constitute a key pathway to organizational commitment.

From a COR theory perspective, this mediating relationship can be explained as a process of resource conservation and enhancement. Coaching leadership (particularly direction and relationship dimensions) provides valuable resources such as clarity, support, and psychological safety. These resources enable employees to develop and implement effective self-leadership strategies (natural reward strategies and constructive thought patterns), which further enhance psychological resources. This resource enhancement ultimately contributes to organizational commitment as employees become more psychologically attached to organizations that facilitate resource gains (Hobfoll, 2001).

Given the theoretical connections established in previous sections, certain mediating pathways may be particularly meaningful in the SME context. The pathway from direction through natural reward strategies to organizational commitment may be especially significant, as clear goal-setting can enable employees to find meaning in their work, which in turn reinforces organizational commitment. Similarly, the connection between relationship-focused leadership and organizational commitment through constructive thought patterns may represent a distinctive mediation mechanism.

Based on these theoretical considerations, the following hypothesis was formulated:

H6: Self-leadership sub-dimensions will mediate the relationship between coaching leadership sub-dimensions and organizational commitment.

- **H6.1**: Natural reward strategies will mediate the relationship between direction and organizational commitment.
- **H6.2**: Constructive thought patterns will mediate the relationship between relationship and organizational commitment.
- **H6.3**: Behavior-focused strategies will mediate the relationship between development and organizational commitment.

2.5. Moderating Effects of Instrumental Support and Organization-Based Self-Esteem

Perceived organizational support (POS) refers to members' perceptions of how much the organization values their contributions and well-being (Kurtessis et al., 2017). This study specifically focuses on instrumental support within POS, which refers to direct support such as resources, information, and tools necessary for performing tasks.

Organization-based self-esteem (OBSE) represents a psychological state wherein individuals perceive themselves as important and valuable members within the organizational context, with theoretical foundations in self-concept theory and self-expansion theory (Lee & Peccei, 2007).

According to Panaccio and Vandenberghe (2011), organization-based self-esteem functions as an "amplifier" or "buffer" in the process of converting self-leadership and its sub-factors into organizational commitment. With high OBSE, self-leadership

behaviors more strongly correspond to commitment to the organization.

In COR theory terms (Hobfoll, 2001), both instrumental support and organization-based self-esteem can be viewed as important resources that may amplify the relationship between self-leadership and organizational commitment. Instrumental support represents tangible resources provided by the organization, while organization-based self-esteem constitutes a crucial psychological resource. According to COR theory's "resource gain spirals" concept, initial resource gains (such as effective self-leadership) can be amplified by the presence of additional resources (such as instrumental support and organization-based self-esteem), leading to enhanced positive outcomes (such as organizational commitment).

In the SME context, where formal rewards and recognition systems may be less developed due to resource constraints, the psychological factor of organization-based self-esteem might play a particularly significant role in enhancing the relationship between self-leadership and organizational commitment. Similarly, instrumental support, by providing the necessary resources for effective task performance, may strengthen the ability of employees to implement self-leadership strategies and connect these to organizational commitment.

Based on this theoretical framework, the following hypotheses were formulated:

H7: Instrumental support will moderate the relationship between self-leadership sub-dimensions and organizational commitment.

- **H7.1**: Instrumental support will moderate the relationship between behavior-focused strategies and organizational commitment.
- **H7.2**: Instrumental support will moderate the relationship between natural reward strategies and organizational commitment.
- **H7.3**: Instrumental support will moderate the relationship between constructive thought patterns and organizational commitment.

H8: Organization-based self-esteem will moderate the relationship between self-leadership sub-dimensions and organizational commitment.

- **H8.1**: Organization-based self-esteem will moderate the relationship between behavior-focused strategies and organizational commitment.
- **H8.2**: Organization-based self-esteem will moderate the relationship between natural reward strategies and organizational commitment.
- **H8.3**: Organization-based self-esteem will moderate the relationship between constructive thought patterns and organizational commitment.

H9: The moderating effect of organization-based self-esteem will be stronger than that of instrumental support in the relationship between self-leadership sub-dimensions and organizational commitment.

3. Research Methodology

3.1. Common Method Bias Assessment

Since this study measured both independent and dependent variables from the same respondents simultaneously, the possibility of common method bias was examined. Harman's single-factor test, as proposed by Podsakoff et al. (2003), was conducted. The results showed that the first factor explained 34.2% of the total variance, which is below the 50% threshold, confirming that common method bias is not a serious concern in this study.

3.2. Analytical Approach

This exploratory study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) for analysis, a methodological approach particularly advantageous for exploratory research due to its fewer constraints on sample size, suitability for complex model analysis, and robustness to data non-normality (Hair et al., 2017). Specifically in research targeting SMEs, issues of sample procurement difficulties and data non-normality frequently arise, making PLS-SEM an appropriate analytical choice as it provides robust results under these methodological constraints.

The selection of PLS-SEM in this study is a decision based on the exploratory nature of the research and the contextual constraints of studying SMEs. Following Hair et al.'s (2024) updated guidelines that emphasize PLS-SEM's superiority 'in exploratory situations where the conceptual structure is uncertain,' this approach aligns with Stebbins' (2001) staged approach to exploratory research, which prioritizes systematic pattern identification over comprehensive theory testing. As Hair et al. (2024) noted, "PLS-SEM is more suitable for exploratory situations where the conceptual structure is uncertain or prior theory regarding the number and directionality of relationships is deficient." This approach aligns with our goal of identifying patterns and relationships rather than testing a well-established theoretical model.

It is important to acknowledge the inherent limitations of PLS-SEM as a methodological approach. As

Henseler et al. (2016) pointed out, "PLS-SEM traditionally lacks or has deficient overall goodness-of-fit statistics, focusing on the predictive power of paths rather than the overall validity of the model" (p. 2). Additionally, Hair et al. (2017) noted that PLS-SEM has "relative constraints in controlling measurement error and validating measurement models" (p. 442).

Another limitation of the PLS-SEM approach is its restricted ability to address endogeneity issues. As Hult et al. (2018) noted, "researchers using PLS-SEM have often failed to recognize or adequately control for endogeneity problems" (p. 1). In the context of this study, endogeneity issues are particularly relevant from a COR theory perspective. Resource acquisition and loss can have reciprocal and cyclical relationships, which can complicate the directionality of causality between variables.

For example, there might be an endogenous relationship between direction-setting leadership and natural reward strategies – does direction-setting leadership enhance natural reward strategies, or do employees who effectively utilize natural reward strategies perceive their leader's direction-setting more positively? As Chin et al. (2020) mentioned, "approaches to mitigate endogeneity (e.g., exogenous instrumental variables, Gaussian copula, etc.) have only recently been introduced, but these approaches are not yet widely established in exploratory research contexts" (p. 2161).

In this exploratory study, we focus on identifying relationship patterns rather than making causal inferences, consistent with McIntosh et al.'s (2014) distinction between predictive and explanatory modeling objectives. While Chin et al. (2020) highlighted endogeneity concerns in PLS-SEM applications, our pattern-identification approach aligns with the exploratory research framework established by Stebbins (2001), where theoretical development precedes confirmatory testing. Future research should consider approaches such as instrumental variables or longitudinal designs to more effectively address endogeneity issues.

Therefore, the results of this study should be interpreted in terms of pattern identification and exploratory model testing rather than definitive causal inference. As Mcintosh et al. (2014) stated, PLS-SEM "may have high predictive explanatory power but limitations in the rigor of theoretical structures or causal inference" (p. 210). Despite these limitations, PLS-SEM's flexibility and prediction-centered approach make it a suitable choice for exploratory research like the present study, particularly in the context of SMEs where methodological constraints often exist.

The analytical procedure followed a systematic sequence: After data preprocessing and verification of absence of missing values, reliability (Cronbach's α, composite reliability) and validity (AVE, factor loadings) were assessed in the measurement model evaluation phase. In the structural model evaluation phase, path coefficients, determination coefficients (R^2), and effect sizes (f^2) were analyzed. To examine mediating effects, the significance of indirect effects was tested through bootstrapping with 5,000 resamples, and for moderating effects, interaction term analysis was conducted. Finally, the three theoretical models were compared to identify the most explanatory model.

Python 3.8 and SmartPLS 3.0 were utilized for statistical analysis, and bootstrapping was conducted with 5,000 resamples to verify the significance of effects based on 95% confidence intervals, following best practices for PLS-SEM analysis.

4. Research Results

4.1. Descriptive Statistics and Correlation Analysis

The results of descriptive statistical analysis for key variables are presented in Table 1. The means for coaching leadership sub-factors were 4.268 (SD = 1.389) for direction, 4.265 (SD = 1.395) for development, 4.171 (SD = 1.443) for performance evaluation, and 4.358 (SD = 1.446) for relationship. The means for self-leadership sub-factors were 5.382 (SD = 0.907) for behavior-focused strategies, 4.706 (SD = 1.182) for natural reward strategies, and 5.375 (SD = 0.953) for constructive thought patterns. The mean for organizational commitment was 4.497 (SD = 0.748), for perceived organizational support was 4.583 (SD = 1.069), and for organization-based self-esteem was 4.726 (SD = 0.879).

Table 1: Descriptive Statistics and Correlation Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Direction	1											
2. Development	.897**	1										
3. Performance evaluation	.889**	.899**	1									
4. Relationship	.863**	.838**	.883**	1								
5. Behavior-focused strategies	.281**	.286**	.237**	.309**	1							
6. Natural reward strategies	.558**	.508**	.515**	.529**	.510**	1						
7. Constructive thought patterns	.252**	.246**	.185**	.281**	.767**	.533**	1					
8. Organizational commitment	.498**	.478**	.461**	.477**	.456**	.629**	.511**	1				
9. Perceived organizational support	.705**	.674**	.669**	.701**	.469**	.668**	.499**	.672**	1			
10. Emotional support	.682**	.663**	.648**	.689**	.444**	.646**	.477**	.629**	.967**	1		
11. Instrumental support	.710**	.668**	.674**	.693**	.483**	.673**	.509**	.699**	.983**	.906**	1	
12. Organization-based self-esteem	.526**	.507**	.493**	.512**	.479**	.671**	.535**	.686**	.684**	.653**	.697**	1
Mean	4.268	4.265	4.171	4.358	5.382	4.706	5.375	4.497	4.583	4.612	4.551	4.726
Standard deviation	1.389	1.395	1.443	1.446	0.907	1.182	0.953	0.748	1.069	1.124	1.085	0.879

Note: **p<.01

All variables demonstrated skewness and kurtosis values within acceptable ranges for normality assumptions. According to West et al. (1995), skewness values below |2| and kurtosis values below |7| indicate sufficient normality. In this study, skewness values ranged from -0.671 to 0.055, and kurtosis values ranged from -0.499 to 0.887, meeting normality assumptions for PLS-SEM analysis.

Correlation analysis revealed significant associations between direction and natural reward strategies ($r = .558$, $p < .01$), relationship and constructive thought patterns ($r = .281$, $p < .01$), and natural reward strategies and organizational commitment ($r = .629$, $p < .01$). Additionally, organization-based self-esteem demonstrated strong correlations with organizational commitment ($r = .686$, $p < .01$) and natural reward strategies ($r = .671$, $p < .01$), while instrumental support also exhibited a substantial correlation with organizational commitment ($r = .699$, $p < .01$).

It should be acknowledged that the coaching leadership sub-dimensions showed relatively high inter-correlations ($r = .838$ to $.899$, $p < .01$), which is theoretically consistent with Stowell's (1986) conceptualization of coaching leadership as an integrated construct with related dimensions that often manifest concurrently in leadership practice. These high correlations can also be interpreted from a COR theory perspective (Hobfoll, 2001). According to COR theory, resources tend to exist not in isolation but in "resource caravans," where one resource facilitates the acquisition of other resources.

The coaching leadership dimensions of direction, development, performance evaluation, and relationship, while conceptually distinct, are likely to manifest in a complementary manner in actual leadership behavior. For example, clear direction-

setting may clarify performance evaluation criteria, which in turn may focus development activities and ultimately strengthen leader-member relationships. From a COR theory perspective, this can be understood as a "resource gain spiral" where one leadership resource (direction) facilitates the acquisition and effective utilization of other leadership resources (performance evaluation, development, relationship).

Despite these high correlations, the discriminant validity analysis confirmed that these dimensions remain statistically distinguishable, supporting their treatment as separate constructs in the analysis. All internal Variance Inflation Factor (VIF) values for predictor variables were below the threshold of 5 as recommended by Hair et al. (2017), confirming the absence of problematic multicollinearity issues in the structural model. This indicates that the coaching leadership sub-dimensions, while conceptually related, function as distinct predictors with unique explanatory power in the model.

4.2. Measurement Model Evaluation

The evaluation results for the reliability and validity of the measurement model are presented in Table 2. Cronbach's α and composite reliability (CR) for all constructs exceeded the threshold value of 0.7, confirming internal consistency reliability. Average variance extracted (AVE) values all exceeded 0.5, meeting the established criteria for convergent validity.

Table 2: Reliability and Validity of the Measurement Model

Variable	Number of items	Cronbach's α	Composite reliability (CR)	Average variance extracted (AVE)
Direction	5	0.956	0.967	0.856
Development	5	0.948	0.961	0.830
Natural reward strategies	6	0.941	0.954	0.775
Constructive thought patterns	4	0.939	0.957	0.849
Organizational commitment	10	0.893	0.923	0.751
Perceived organizational support	19	0.921	0.947	0.782
Emotional support	10	0.914	0.937	0.748
Instrumental support	9	0.908	0.933	0.738
Organization-based self-esteem	6	0.905	0.929	0.723

Discriminant validity assessment according to the Fornell-Larcker criterion demonstrated that the square root of AVE for each construct was greater than its correlation coefficients with other constructs, confirming discriminant validity. Additionally, all internal Variance Inflation Factor (VIF) values for predictor variables were below the threshold of 5 as recommended by Hair et al. (2017), confirming the absence of problematic multicollinearity issues in the structural model. This is particularly noteworthy given the relatively high correlations among coaching leadership dimensions, as it provides statistical evidence that these dimensions, while conceptually related, function as distinct predictors in the model.

4.3. Structural Model Analysis and Hypothesis Testing

4.3.1. Model 1: Basic Path Model

The structural model path coefficient analysis results for the basic model (Model 1) are presented in Table 3.

Table 3: Path Coefficients and Hypothesis Testing Results for Model 1 (Basic Path Model)

Hypothesis	Path	Standardized coefficient (β)	t-value	p-value	95% confidence interval	Hypothesis support
H1	Direction → Natural reward strategies	0.336***	4.870	0.000	[0.201, 0.471]	Supported
H1	Direction → Constructive thought patterns	0.026	0.342	0.732	[-0.123, 0.175]	Not supported
H2	Development → Behavior-focused strategies	0.125*	2.102	0.036	[0.008, 0.242]	Supported
H4	Relationship → Natural reward strategies	0.154*	2.369	0.018	[0.026, 0.282]	Supported
H4	Relationship → Constructive thought patterns	0.164*	2.278	0.023	[0.023, 0.305]	Supported
H5.2	Natural reward strategies → Organizational commitment	0.228***	4.145	0.000	[0.120, 0.336]	Supported
H5.3	Constructive thought patterns → Organizational commitment	0.202***	3.424	0.001	[0.087, 0.317]	Supported

Note: *p<.05, ***p<.001

The path coefficient analysis results of Model 1 revealed that direction had a significant positive association with natural reward strategies ($\beta = 0.336$, $p < .001$), supporting H1 for this specific path. Development demonstrated a significant positive association with behavior-focused strategies ($\beta = 0.125$, $p < .05$), supporting H2 for this specific path. Relationship showed significant positive associations with both natural reward strategies ($\beta = 0.154$, $p < .05$) and constructive thought patterns ($\beta = 0.164$, $p < .05$), supporting H4. Both natural reward strategies ($\beta = 0.228$, $p < .001$) and constructive thought patterns ($\beta = 0.202$, $p < .001$) exhibited significant positive associations with organizational commitment, supporting H5.2 and H5.3, while H5.1 (behavior-focused strategies → organizational commitment) was not supported.

The non-significant relationship between performance evaluation and self-leadership sub-dimensions can be interpreted in light of the contextual characteristics of SMEs. Under the informal management structures typical of SMEs, immediate feedback may be more common than systematic performance evaluation (Heneman et al., 2000), potentially limiting the influence of formal performance evaluation in such environments. Additionally, the fact that 79.33% of the sample consisted of employees with less than 5 years of tenure may have contributed to limited long-term performance evaluation experience.

The lack of direct association between behavior-focused strategies and organizational commitment can be understood within the Korean collectivistic cultural context. According to Hofstede et al. (2010), in collectivistic cultures, emotional connection with the organization (natural reward strategies) or cognitive restructuring (constructive thought patterns) may be more important for organizational commitment than individual behavioral self-regulation. This reflects cultural characteristics that emphasize group harmony and meaning over individual achievement.

The results indicate that the most substantial pathway in the model is the association between direction (as a coaching leadership dimension) and natural reward strategies (as a self-leadership dimension), suggesting that clear goal setting and expectation communication by leaders is particularly relevant for fostering employees' ability to find intrinsic enjoyment in their work.

4.3.2. Model 2: Instrumental Support Moderation Model

In the instrumental support moderation model (Model 2), the analysis indicated that instrumental support significantly moderated the relationship between natural reward strategies and organizational commitment ($\beta = 0.096$, $p < .05$, $f^2 = 0.041$), supporting H7.2. However, the moderating effect on other self-leadership sub-dimensions was not

statistically significant, thus H7.1 and H7.3 were not supported.

Simple slope analysis results demonstrated that when instrumental support was at a high level (+1SD), the association of natural reward strategies with organizational commitment ($\beta = 0.339$, $p < .001$) was stronger than when instrumental support was at a low level (-1SD) ($\beta = 0.147$, $p < .05$). This finding suggests that practical support in the form of resources, information, and tools enhances the effectiveness of employees' natural reward strategies in fostering organizational commitment.

The explanatory power (R^2) of Model 2 for organizational commitment was 0.513, representing an increase of 0.037 compared to the basic model (Model 1), indicating a modest improvement in explanatory power with the inclusion of the instrumental support moderation effect.

4.3.3. Model 3: Organization-Based Self-Esteem Moderation Model

In the organization-based self-esteem moderation model (Model 3), the analysis revealed that organization-based self-esteem substantially moderated the relationship between natural reward strategies and organizational commitment ($\beta = 0.127$, $p < .001$, $f^2 = 0.375$), supporting H8.2. Organization-based self-esteem also moderated the relationship between constructive thought patterns and organizational commitment ($\beta = 0.108$, $p < .01$, $f^2 = 0.148$), supporting H8.3. However, the moderating effect on behavior-focused strategies was not statistically significant, thus H8.1 was not supported.

The strong moderating effect of organization-based self-esteem ($f^2 = 0.375$) empirically validates Lee and Peccei's (2007) theoretical proposition regarding self-concept amplification in organizational contexts, while reflecting the contextual characteristics of SMEs and Korea's cultural background. This substantial effect size supports Hofstede et al.'s (2010) framework suggesting that in collectivistic cultures, individual self-concept formation occurs primarily through group relationships, making organizational identity particularly salient for psychological well-being. In SMEs where formal reward systems and promotion opportunities are limited, the psychological resource of perceiving oneself as valued within the organization becomes even more crucial. From a COR theory perspective, this can be explained as a phenomenon where the importance of internal psychological resources increases in environments with limited external resources.

Furthermore, in collectivistic cultures, individual self-concept is formed within relationships with groups, so organization-based self-esteem may have a greater impact on individual behavior and attitudes compared to individualistic cultures. These cultural characteristics may have contributed to the large effect size observed in this study.

Table 4: Organization-Based Self-Esteem Moderation Effect Analysis Results

Hypothesis	Relationship	Interaction coefficient	t-value	p-value	ΔR^2	f^2	Moderation effect
H8.2	Natural reward strategies × Organization-based self-esteem → Organizational commitment	0.127***	3.621	0.000	0.219	0.375	Strong moderation effect
H8.3	Constructive thought patterns × Organization-based self-esteem → Organizational commitment	0.108**	3.142	0.002	0.102	0.148	Moderate moderation effect
H8.1	Behavior-focused strategies × Organization-based self-esteem → Organizational commitment	0.055	1.768	0.078	0.027	0.036	No moderation effect

Note: **p<.01, ***p<.001; f^2 value criteria: 0.02 (weak), 0.15 (moderate), 0.35 (strong)

The effect size ($f^2 = 0.375$) for the moderating effect of organization-based self-esteem on the relationship between natural reward strategies and organizational commitment indicates a strong practical significance according to Cohen's criteria, suggesting that organization-based self-esteem substantially enhances the practical relevance of natural reward strategies for organizational commitment in the SME context.

Simple slope analysis results indicated that when organization-based self-esteem was at a high level (+1SD), the association of natural reward strategies

with organizational commitment (β = 0.343, p < .001) was substantially stronger than when organization-based self-esteem was at a low level (-1SD) (β = 0.089, p > .05). This finding suggests that for employees with high organization-based self-esteem, the relationship between natural reward strategies and organizational commitment increases by approximately 3.85 times, highlighting the significant amplifying effect of organization-based self-esteem on the self-leadership and organizational commitment relationship.

The substantially stronger moderating effect of organization-based self-esteem compared to instrumental support (comparing ΔR^2 values of 0.219 vs. 0.037, and f^2 values of 0.375 vs. 0.041) supports H9, indicating that in the SME context, psychological factors may play a more critical role than instrumental factors in enhancing the relationship between self-leadership and organizational commitment.

4.4. Mediation Effect Analysis

To examine the mediating effect of self-leadership sub-dimensions between coaching leadership sub-dimensions and organizational commitment, bootstrapping was conducted with 5,000 resamples. The results of the mediation effect analysis are presented in Table 5.

Table 5: Mediation Effect Analysis Results

Hypothesis	Path	Direct effect (c')	Indirect effect (a×b)	Total effect (c)	VAF (%)	t-value	p-value	Mediation type
H6.1	Direction→Natural reward strategies→Organizational commitment	0.312***	0.077**	0.389***	19.79	3.415	0.001	Partial mediation
-	Direction→Constructive thought patterns→Organizational commitment	0.312***	0.005	0.317***	1.58	0.842	0.400	No mediation
H6.2	Relationship→Constructive thought patterns→Organizational commitment	0.183**	0.033*	0.216**	15.28	2.187	0.029	Partial mediation
-	Relationship→Natural reward strategies→Organizational commitment	0.183**	0.035*	0.218**	16.06	2.245	0.025	Partial mediation
H6.3	Development→Behavior-focused strategies→Organizational commitment	0.145*	0.024*	0.169*	14.20	2.122	0.034	Partial mediation
-	Development→Natural reward strategies→Organizational commitment	0.145*	0.012	0.157*	7.64	1.057	0.291	No mediation
-	Performance evaluation→Natural reward strategies→Organizational commitment	0.118*	0.038*	0.156*	24.36	2.264	0.024	Partial mediation
-	Performance evaluation→Constructive thought patterns→Organizational commitment	0.118*	0.006	0.124*	4.84	0.784	0.433	No mediation

Note: *p<.05, **p<.01, ***p<.001; VAF > 80%: Full mediation, 20% ≤ VAF ≤ 80%: Partial mediation, VAF < 20%: Direct effect predominant; CI = confidence interval

The mediation analysis results demonstrated that self-leadership sub-dimensions partially mediated the

relationship between coaching leadership sub-dimensions and organizational commitment. Notably, the mediating effect of natural reward strategies between direction and organizational commitment ($\beta = 0.077$, $p < .01$) was the most substantial, with a VAF (Variance Accounted For) value of 19.79%, indicating a partial mediation effect. This supports H6.1.

Additionally, the mediating effect of constructive thought patterns between relationship and organizational commitment ($\beta = 0.033$, $p < .05$) demonstrated a VAF value of 15.28%, also indicating a partial mediation effect, supporting H6.2. The mediating effect of behavior-focused strategies between development and organizational commitment ($\beta = 0.024$, $p < .05$) showed a VAF value of 14.20%, supporting H6.3.

These findings highlight the importance of specific mediating pathways through which different dimensions of coaching leadership relate to organizational commitment in the SME context. In particular, natural reward strategies appear to be a key mediating mechanism for the relationship between direction and organizational commitment, while constructive thought patterns mediate the relationship between relationship-focused leadership and organizational commitment.

From a COR theory perspective (Hobfoll, 2001), these mediating relationships can be understood as processes through which leadership contributes to resource conservation and enhancement. Direction-setting leadership provides clarity and reduces uncertainty (conserving psychological resources), which enables employees to find meaning and enjoyment in their work through natural reward strategies (enhancing resources), ultimately leading to organizational commitment as a positive outcome of this resource gain process.

4.5. Supplementary Analysis: Demographic Variables and Main Constructs

The sample of this study includes employees from various industries: manufacturing (35.0%), IT/service (28.3%), distribution/logistics (18.7%), finance/insurance (10.0%), and others (8.0%). This industry distribution reflects the characteristics of SMEs in the Seoul and Gyeonggi metropolitan areas. While detailed analysis of industry differences is beyond the scope of this study, the possibility that industry characteristics may influence the relationships between variables cannot be excluded. For example, the IT/service industry may place greater emphasis on direction leadership due to its rapidly changing environment and high uncertainty, while manufacturing might emphasize performance evaluation due to its standardized work processes. These industry-specific characteristics provide context for understanding the strong association found in this study between the 'direction→natural reward strategies→organizational commitment' pathway.

To assess the potential influence of demographic characteristics on the main variables, a supplementary analysis was conducted using t-tests to compare differences in key variables between groups based on gender and tenure.

The results indicated no significant differences in the main variables between male and female respondents. However, significant differences were observed between employees with less than 5 years of tenure and those with 5 or more years in terms of organizational commitment ($t = -3.13$, $p < .01$) and organization-based self-esteem ($t = -2.62$, $p < .01$). Employees with longer tenure demonstrated higher levels of organizational commitment and organization-based self-esteem.

From a COR perspective (Hobfoll, 2001), these tenure-related differences can be interpreted as reflecting resource accumulation over time. Employees with longer tenure have had more opportunities to accumulate psychological resources, including organization-based self-esteem, which may contribute to their higher levels of organizational commitment. As James et al. (2021) have noted, various factors including gender and tenure can play important roles in resource conservation and management within organizations.

While these tenure-related differences represent an important consideration when interpreting the relationships between the main variables, they also reflect the natural organizational socialization process wherein longer-tenured employees typically develop stronger organizational identification and self-concept within the organizational context. The predominance of shorter-tenured employees in the sample (79.33% with less than 5 years) reflects the typical employment patterns in Korean SMEs, characterized by relatively high turnover rates compared to large corporations.

4.6. Model Comparison Results

The results of comparing the fit and explanatory power of the three models are presented in Table 7.

Table 7: Model Fit and Explanatory Power Comparison

Indicator	Model 1 (Basic model)	Model 2 (Instrumental support)	Model 3 (Organization-based self-esteem)	Threshold value
SRMR	0.062	0.075	0.058	<0.08
NFI	0.856	0.837	0.871	>0.8
R^2 (Organizational commitment)	0.476	0.513	0.701	-
ΔR^2 (compared to Model 1)	-	0.037	0.225	-
Adjusted R^2	0.467	0.497	0.689	-

Note: R^2 value interpretation criteria: weak (<0.25), moderate (0.25-0.50), strong (>0.50)

Model comparison results demonstrated that Model 3 (Organization-based self-esteem moderation model) demonstrated superior explanatory power. This model exhibited the highest explanatory power for organizational commitment ($R^2 = 0.701$), and the explanatory power increase compared to Model 1 ($\Delta R^2 = 0.225$) was quite substantial. Additionally, the model fit indices of SRMR (0.058) and NFI (0.871) were also the most favorable, indicating superior model fit.

While PLS-SEM has limitations in terms of overall model fit assessment as noted by Henseler et al. (2016), the comparative approach used here provides valuable insights into the relative explanatory power of the three models. The substantially higher R^2 value for Model 3 suggests that organization-based self-esteem plays a particularly important role in explaining the relationship between self-leadership and organizational commitment in the SME context.

The 'Direction → Natural reward strategies → Organizational commitment' pathway consistently appeared significant across all models, confirming that this pathway, wherein direction in coaching leadership relates to organizational commitment through natural reward strategies, represents the most stable and theoretically significant mechanism. This finding illustrates the "paradox of collaborative self-leadership" (Stewart et al., 2019) operating in the SME context, wherein clear direction from leaders facilitates employees' natural reward strategies, demonstrating how external leadership support and internal self-direction function complementarily in resource-constrained environments.

4.7. Summary of Hypothesis Testing Results

Table 8 presents a comprehensive summary of the hypothesis testing results based on the analysis conducted across the three models.

Table 8: Summary of Hypothesis Testing Results

Hypothesis	Description	Result
H1	Direction will be positively associated with self-leadership sub-dimensions, particularly natural reward strategies.	Partially Supported
H2	Development will be positively associated with self-leadership sub-dimensions, particularly behavior-focused strategies.	Partially Supported
H3	Performance evaluation will be positively associated with self-leadership sub-dimensions.	Not Supported
H4	Relationship will be positively associated with self-leadership sub-dimensions, particularly constructive thought patterns.	Supported
H5.1	Behavior-focused strategies will be positively associated with organizational commitment.	Not Supported
H5.2	Natural reward strategies will be positively associated with organizational commitment.	Supported

Hypothesis	Description	Result
H5.3	Constructive thought patterns will be positively associated with organizational commitment.	Supported
H6.1	Natural reward strategies will mediate the relationship between direction and organizational commitment.	Supported
H6.2	Constructive thought patterns will mediate the relationship between relationship and organizational commitment.	Supported
H6.3	Behavior-focused strategies will mediate the relationship between development and organizational commitment.	Supported
H7.1	Instrumental support will moderate the relationship between behavior-focused strategies and organizational commitment.	Not Supported
H7.2	Instrumental support will moderate the relationship between natural reward strategies and organizational commitment.	Supported
H7.3	Instrumental support will moderate the relationship between constructive thought patterns and organizational commitment.	Not Supported
H8.1	Organization-based self-esteem will moderate the relationship between behavior-focused strategies and organizational commitment.	Not Supported
H8.2	Organization-based self-esteem will moderate the relationship between natural reward strategies and organizational commitment.	Supported
H8.3	Organization-based self-esteem will moderate the relationship between constructive thought patterns and organizational commitment.	Supported
H9	The moderating effect of organization-based self-esteem will be stronger than that of instrumental support in the relationship between self-leadership sub-dimensions and organizational commitment.	Supported

The hypothesis testing results reveal several important patterns in the relationships among coaching leadership, self-leadership, and organizational commitment in the SME context. Direction shows a particularly strong association with natural reward strategies, while relationship is significantly associated with both natural reward strategies and constructive thought patterns. The effect of development is primarily on behavior-focused strategies. Performance evaluation shows limited associations with self-leadership dimensions.

Both natural reward strategies and constructive thought patterns significantly relate to organizational commitment, while behavior-focused strategies do not show a significant direct association. The mediating role of self-leadership sub-dimensions is confirmed for specific pathways, with natural reward strategies mediating between direction and organizational commitment, constructive thought patterns mediating between relationship and organizational commitment, and behavior-focused strategies mediating between development and organizational commitment.

In terms of moderation effects, organization-based self-esteem demonstrates a substantially stronger moderating effect than instrumental support, highlighting the importance of psychological factors in enhancing the relationship between self-leadership and organizational commitment in the SME context.

5. Discussion and Implications

5.1. Theoretical Implications

The theoretical implications of this exploratory study are as follows:

First, this research systematically analyzed the relationships among coaching leadership, self-leadership, and organizational commitment in the SME context, identifying theoretically meaningful patterns. Specifically, it empirically demonstrated that direction, among coaching leadership sub-dimensions, demonstrates the strongest association with natural reward strategies among self-leadership dimensions, and indirectly relates to organizational commitment through this pathway. This contributes to

understanding the mechanism wherein a leader's clear direction and expectation setting relates to members' ability to find fulfillment and enjoyment in the work itself, thereby corresponding with increased organizational commitment. This finding extends Li et al.'s (2022) coaching leadership framework by identifying natural reward strategies as the specific mediating mechanism through which direction-setting influences organizational outcomes, while supporting Mercurio's (2015) emphasis on affective commitment as the core essence of organizational attachment. This finding aligns with Li et al.'s (2022) theoretical framework suggesting that coaching leadership facilitates members' organizational identification and self-regulation.

Second, through the comparison of three conceptual models, this study identified organization-based self-esteem as a more influential moderating variable than instrumental support in the relationship between self-leadership and organizational commitment. This presents a novel theoretical perspective suggesting that an individual's internal psychological state may be more significant than external support perception in enhancing the effect of self-leadership. This finding is consistent with the importance of organization-based self-esteem proposed by Lee and Peccei (2007) and demonstrates that self-concept theory retains validity in the SME context as well.

Third, through the analysis of the moderating effect of instrumental support, this study identified that in the SME environment, direct support needed for tasks plays a meaningful role in strengthening the relationship between natural reward strategies and organizational commitment. This supports context-specific theoretical perspectives suggesting that practical work support may be particularly relevant in resource-constrained SME contexts.

Fourth, this study contributes to the literature by empirically testing the 'paradoxical core' perspective of self-leadership proposed by Stewart et al. (2019) in the specific context of SMEs. By demonstrating how the 'paradox of collaborative self-leadership' manifests in the interaction between direction-centered coaching leadership and natural reward strategy-centered self-leadership, it extends the contextual applicability of self-leadership theory. In resource-constrained SME environments, clear direction from leaders (external leadership) and employees' natural reward strategies (internal self-leadership) function complementarily, illustrating how Pearce and Manz's (2005) shared leadership theory operates in practice. This finding enhances understanding of how the flexible organizational structure of SMEs facilitates the interaction between coaching leadership and self-leadership, ultimately corresponding with enhanced organizational commitment.

Fifth, this study identifies specific mediating pathways through which different coaching leadership dimensions relate to organizational commitment. The pattern of mediation results suggests a meaningful alignment between particular leadership approaches and self-leadership strategies: direction works through natural reward strategies, relationship works through constructive thought patterns, and development works through behavior-focused strategies. This pattern contributes to a more nuanced understanding of the mechanisms linking leadership and organizational outcomes in the SME context.

Sixth, this study contributes to the literature by interpreting the relationship between leadership and organizational commitment in the SME context through the lens of Conservation of Resources (COR) theory (Hobfoll, 2001). The pattern where direction-setting leadership is strongly associated with natural reward strategies, which in turn relates to organizational commitment, can be explained through COR theory. Clear direction-setting reduces uncertainty, thereby conserving psychological resources, while natural reward strategies enhance intrinsic motivation and psychological resources, ultimately leading to organizational commitment as a positive organizational outcome. The strong moderating effect of organization-based self-esteem supports COR theory's core proposition regarding the importance of psychological resources, especially in environments with limited external resources.

5.2. Practical Implications

The practical implications of this exploratory study are as follows:

First, SME managers should prioritize direction leadership. Developing the ability to establish clear goals and expectations and communicate them effectively appears particularly relevant for facilitating members' natural reward strategies and enhancing organizational commitment. Particularly in resource-constrained SME environments, rather than establishing costly reward systems, strengthening the leader's direction abilities may effectively enhance members' intrinsic motivation and organizational commitment. Given Heneman et al.'s (2000) identification of resource constraints as a defining SME characteristic, managers should operationalize direction leadership through cost-effective strategies: establishing weekly goal-setting sessions, providing clear performance expectations, and creating visual roadmaps that clarify organizational objectives. This approach aligns with Brand and Bax's (2002) emphasis on contextually appropriate HRM practices while implementing Pearce and Manz's (2005) shared leadership principles in resource-constrained environments.

Second, organizations should foster environments that promote natural reward strategies wherein employees can discover fulfillment and enjoyment in the work itself. This necessitates job redesign that emphasizes the meaning and value of work while granting appropriate levels of autonomy and responsibility. Leaders should coach members to discover intrinsic value in their work and support experiences wherein the work itself becomes inherently rewarding.

Third, programs and policies aimed at enhancing members' organization-based self-esteem should be introduced. The perception of being recognized for one's value and contribution within the organization can substantially enhance the effect of self-leadership in fostering organizational commitment. To achieve this, systems that recognize and visualize members' contributions, communication that clarifies the importance of roles, and similar measures should be strengthened. Particularly in SMEs where formal rewards or promotion opportunities may be limited, non-monetary approaches to elevate organization-based self-esteem become increasingly important.

Fourth, SMEs with limited resources should also attend to instrumental support. Providing tools, resources, and educational opportunities directly relevant for task performance can contribute to strengthening the relationship between natural reward strategies and organizational commitment. This provides important implications for establishing optimal support strategies under resource constraints.

Fifth, SME leaders should consider developing differentiated leadership approaches based on their primary objectives. If enhancing organizational commitment is a key goal, focusing on direction and relationship aspects of coaching leadership may be particularly effective, as these dimensions show the strongest associations with self-leadership strategies that relate to organizational commitment. The results suggest that a balanced leadership approach that combines clear direction with relationship-building may be most effective in the SME context.

Sixth, from a COR theory perspective (Hobfoll, 2001), organizations should focus on both resource conservation and resource enhancement strategies. By reducing uncertainty and providing clear direction, organizations can help employees conserve valuable psychological resources. Simultaneously, by promoting natural reward strategies and building organization-based self-esteem, organizations can enhance employees' psychological resources. This dual approach to resource management may be particularly effective in resource-constrained SME environments.

6. Conclusion

This exploratory study examined the structural relationships among coaching leadership, self-leadership, and organizational commitment, as well as the comparative moderating effects of instrumental support and organization-based self-esteem, targeting employees of SMEs in the Seoul and Gyeonggi metropolitan areas. Through systematic analysis via three conceptual models, the mechanism wherein direction in coaching leadership relates to organizational commitment through natural reward strategies was identified, and organization-based self-esteem was found to play a significant moderating role in this process.

These findings provide practical implications suggesting that SME managers may effectively enhance organizational commitment by strengthening direction leadership, promoting members' natural reward strategies, and creating an environment that enhances organization-based self-esteem. They also provide theoretical insights indicating that in the SME context, organization-based self-esteem, an individual's internal psychological state, may play a more significant moderating role than external support perception.

This study used PLS-SEM as its analytical approach, which has both advantages and limitations. As noted by Henseler et al. (2016), PLS-SEM traditionally lacks or has deficient overall goodness-of-fit statistics, focusing on the predictive power of paths rather than the overall validity of the model. Despite these methodological limitations, PLS-SEM was an appropriate choice for this exploratory study given its suitability for identifying patterns and relationships in complex models, particularly in the SME context where sample procurement difficulties and data non-normality often arise.

While this cross-sectional design cannot establish causal relationships, consistent with Stebbins' (2001) framework for exploratory research that prioritizes pattern identification, the identified associations provide valuable insights into potential mechanisms that may connect coaching leadership with organizational commitment in SMEs. Following Henseler et al.'s (2016) acknowledgment of PLS-SEM limitations in causal inference, our findings should be interpreted as theoretically meaningful patterns that warrant future confirmatory investigation. Future longitudinal research examining how the interplay between coaching leadership and self-leadership evolves over time would be particularly valuable for establishing causal relationships and understanding developmental patterns in the SME context.

This research has several limitations. First, as a cross-sectional study, it faces limitations in definitively establishing causal relationships among variables. Second, from a COR theory perspective, resource

acquisition and loss have reciprocal relationships that can complicate causal inference. For example, the directionality of causality between direction-setting leadership and natural reward strategies may be bidirectional—does direction-setting leadership enhance natural reward strategies, or do employees who effectively utilize natural reward strategies perceive their leader's direction-setting more positively? Third, while the predominance of shorter-tenured employees (79.33% with less than 5 years) in the sample reflects typical employment patterns in Korean SMEs, it may impact the generalizability of the findings to longer-tenured employees. Fourth, this study applied theories and measurement instruments developed in Western contexts to the Korean SME environment without fully exploring the potential cultural influences on the interpretation and application of these concepts.

To address these limitations, future research should consider several approaches. First, longitudinal research designs would help clarify causal relationships among coaching leadership, self-leadership, and organizational commitment. Second, methodological approaches that can better address endogeneity issues, such as instrumental variables or time-lagged designs, should be employed. Third, cultural dimensions should be explicitly incorporated into theoretical models to examine how Korea's hierarchical organizational culture and collectivistic values might influence the effectiveness of different coaching leadership dimensions and their relationship with self-leadership strategies. Fourth, comparative studies considering industry differences could analyze how leadership-commitment relationships vary by industry characteristics. Cross-cultural comparative studies could help identify which aspects of the relationships found in this study are culturally universal and which are culturally specific.

Despite these limitations, this exploratory study contributes to understanding mechanisms that may effectively enhance members' self-leadership and organizational commitment even in resource-constrained environments, thereby potentially supporting the sustainable growth and competitiveness of SMEs through consideration of the specificity and challenges of human resource management in this unique organizational context.

References

Bacharach, S. B. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review, 14*(4), 496–515.

Brand, M. J., & Bax, E. H. (2002). Strategic HRM for SMEs: Implications for firms and policy. *Education + Training, 44*(8/9), 451–463. doi.:10.1108/0040091020449295

Chandler, G. N., & McEvoy, G. M. (2000). Human resource management, TQM, and firm performance in small and medium-size enterprises. *Entrepreneurship Theory and Practice, 25*(1), 43–58. doi.:10.1177/104225870002500105

Chin, W. W., Cheah, J., Liu, Y., Ting, H., Lim, X., & Cham, T. (2020). Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research. *Industrial Management & Data Systems, 120*(12), 2161–2209.

Cho, E. H., & Tak, J. K. (2011). Development and validation of the coaching leadership scale. *Korean Journal of Industrial and Organizational Psychology, 24*(1), 127–155.

Cunningham, L., & Rowley, C. (2007). Human resource management in Chinese small and medium enterprises: A review and research agenda. *Personnel Review, 36*(3), 415–439. doi.:10.1108/00483480710731356

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500–507. doi.:10.1037/0021-9010.71.3.500

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.

Hair, J. F., Sarstedt, M., Ringle, C., Sharma, P., & Liengaard, B. (2024). Going beyond the untold facts in PLS-SEM and moving forward. *European Journal of Marketing, 58*(3), 698–720.

Heneman, R. L., Tansky, J. W., & Camp, S. M. (2000). Human resource management practices in small and medium-sized enterprises: Unanswered questions and future research perspectives. *Entrepreneurship Theory and Practice, 25*(1), 11–26. doi.:10.1177/104225870002500103

Henseler, J., Hubona, G. S., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems, 116*(1), 2–20.

Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology, 50*(3), 337–421.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). McGraw-Hill.

Houghton, J. D., & Neck, C. P. (2002). The revised self-leadership questionnaire: Testing a hierarchical factor structure for self-leadership. *Journal of Managerial Psychology, 17*(8), 672–691. doi.:10.1108/02683940210450484

Hult, G. T. M., Hair, J. F., Proksch, D., Sarstedt, M., Pinkwart, A., & Ringle, C. M. (2018). Addressing endogeneity in international marketing applications of partial least squares structural equation modeling. *Journal of International Marketing, 26*(3), 1–21.

Hwang, S. H. (2007). *A study on organization-based self-esteem in the hotel industry* (Doctoral dissertation, Dongguk University).

James, R., Gibbs, B., Whitford, L., Leisher, C., Konia, R., & Butt, N. (2021). Conservation and natural resource management: Where are all the women? *Oryx, 55*(6), 860–867.

Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived

organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management, 43*(6), 1854–1884. doi.:10.1177/0149206315575554

Lee, H. J. (2018). *The effect of organizational culture and team learning behavior on organizational commitment* (Doctoral dissertation, Gachon University).

Lee, J., & Peccei, R. (2007). Perceived organizational support and affective commitment: The mediating role of organization-based self-esteem in the context of job insecurity. *Journal of Organizational Behavior, 28*(6), 661–685. doi.:10.1002/job.431

Lee, J. B. (2019). *A study on the effect of self-leadership on job attitude* (Doctoral dissertation, Honam University).

Lee, W. H., Jung, K. J., & Yu, S. Y. (2019). The effect of authentic leadership on organizational effectiveness and the mediating effect of self-leadership. *Korean Journal of Business Administration, 32*(1), 143–167.

Li, L., Huang, G., & Yan, Y. (2022). Coaching leadership and employees' deviant innovation behavior: Mediation and chain mediation of interactional justice and organizational identification. *Psychology Research and Behavior Management, 15*, 3861–3874. doi.:10.2147/PRBM.S396845

Marique, G., Stinglhamber, F., Desmette, D., Caesens, G., & De Zanet, F. (2013). The relationship between perceived organizational support and affective commitment: A social identity perspective. *Group & Organization Management, 38*(1), 68–100. doi.:10.1177/1059601112457016

McIntosh, C. N., Edwards, J. R., & Antonakis, J. (2014). Reflections on partial least squares path modeling. *Organizational Research Methods, 17*(2), 210–251.

Mercurio, Z. A. (2015). Affective commitment as a core essence of organizational commitment. *Human Resource Development Review, 14*(4), 389–414. doi.:10.1177/1534484315603612

Nguyen, T. V., & Bryant, S. E. (2004). A study of the formality of human resource management practices in small and medium-size enterprises in Vietnam. *International Small Business Journal, 22*(6), 595–618. doi.:10.1177/0266242604047412

Panaccio, A., & Vandenberghe, C. (2011). The relationships of role clarity and organization-based self-esteem to commitment to supervisors and organizations and turnover intentions. *Journal of Applied Social Psychology, 41*(6), 1455–1485. doi.:10.1111/j.1559-1816.2011.00764.x

Park, D. S., & Ahn, B. G. (2004). Strategic human resource management and firm performance in small and medium enterprises. *Management Research, 19*(2), 85–114.

Pearce, C. L., & Manz, C. C. (2005). The new silver bullets of leadership: The importance of self- and shared leadership in knowledge work. *Organizational Dynamics, 34*(2), 130–140. doi.:10.1016/j.orgdyn.2005.03.003

Pierce, J. L., Gardner, D. G., Cummings, L. L., & Dunham, R. B. (1989). Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal, 32*(3), 622–648. doi.:10.2307/256437

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.

Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology, 59*(5), 603–609. doi.:10.1037/h0037335

Prussia, G. E., Anderson, J. S., & Manz, C. C. (1998). Self-leadership and performance outcomes: The mediating influence of self-efficacy. *Journal of Organizational Behavior, 19*(5), 523–538. doi.:10.1002/(SICI)1099-1379(199809)19:5<523::AID-JOB860>3.0.CO;2-I

Stebbins, R. A. (2001). *Exploratory research in the social sciences*. Sage Publications.

Stewart, G. L., Courtright, S. H., & Manz, C. C. (2019). Self-leadership: A paradoxical core of organizational behavior. *Annual Review of Organizational Psychology and Organizational Behavior, 6*, 47–67. doi.:10.1146/annurev-orgpsych-012218-015130

Stowell, S. J. (1986). *Leadership and coaching* (Doctoral dissertation, University of Utah).

Tang, X. H. (2018). *The effect of perceived organizational support on psychological ownership and organizational performance* (Doctoral dissertation, Wonkwang University).

West, S. G., Finch, J. F., & Curran, P. J. (1995). Structural equation models with nonnormal variables: Problems and remedies. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 56–75). Sage Publications.