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The Moderating Role of Leader Member Exchange in The Effect of Role Clarity on Employee Accountability

Abstract

Research background and purpose: Emphasizing the moderating influence of Leader-Member Exchange (LMX), this study investigates the link between role clarity (RC) and employee responsibility (EA). RC is the employees' awareness of their duties; EA is the acceptance of professional obligations—both of which are essential in improving organizational performance.

Design/methodology/approach: The study specifically searches at whether high-quality LMX increases the RC–EA link within hierarchical systems including public institutions. Public sector workers in Northern Cyprus were surveyed using a convenience sampling approach. Ethical principles guided the distribution of 500 surveys; 328 valid replies were kept for analysis. RC, EA, and LMX were measured using established and validated scales. Correlations and moderating effects were investigated using AMOS, SPSS and Hayes' Process Macro.

Findings: The results reveal a significant positive relationship between RC and EA ($\beta = 0.303, p < 0.05$). Additionally, LMX significantly moderates this relationship ($\beta = 0.098, p < 0.05$), with the RC–EA link being stronger when LMX is high. Even under low-LMX conditions, a meaningful relationship persists. This study contributes to the understanding of how leadership dynamics influence employee behavior, highlighting the value of fostering strong leader-member relationships to improve accountability.

Value added and limitations: These results underline the need of developing interpersonal assets and encouraging good leader-member interaction to enhance organizational performance and employee involvement. The results of the study have relevance for managerial practices, especially the requirement for explicitly stated job descriptions, open communication policies, and flexible leadership methods suited to the caliber of LMX. In the end, these ideas could help strategic initiatives meant to promote a culture of responsibility and accountability, performance appraisal systems, and organizational training courses. The dependence on self-reported data, and regional emphasis of the study, however, limit its generalizability. Future studies are invited to investigate the functions of digital communication tools in improving role clarity and LMX by using longitudinal techniques and including various organizational settings. Such additions could increase knowledge of these notions and their long-term consequences in dynamic work contexts

Keywords: *role clarity, employee accountability, leader member exchange*

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1. Introduction

Role clarity and employee accountability are fundamental principles in management and organizational behavior. The relationship between leadership and recognition and their combined influence on employee outcomes continues to receive significant attention in scholarly and professional literature, as evidenced by Jo and Shin (2025). Their study demonstrates that recognition, fairness, and transformational leadership significantly enhance employee engagement and job satisfaction while mitigating burnout particularly in the public sector. The significance of clearly defined roles and effective leadership lies in their capacity to help employees execute their responsibilities accurately, foster efficient collaboration within the organizational structure, and ultimately improve job satisfaction. Furthermore, the interaction between role clarity and employee motivation suggests that well-defined job descriptions are critical for predicting organizational effectiveness, as they directly contribute to improved performance and satisfaction (Tan & Olaore, 2021). The Leader-Member Exchange theory provides a valuable framework for examining the dynamics of leader-employee relationships in this context. Role clarity refers to an employee's understanding of their assigned duties, responsibilities, and expected outcomes within the organizational setting (Lan et al., 2025). Emphasizing these factors reinforces the importance of role clarity in enhancing individual and organizational performance.

Additionally, the interplay between leadership and role clarity significantly impacts employee engagement, burnout, and job satisfaction (Jo & Shin, 2025), highlighting the need for effective leadership and well-structured roles. Nguyen and Haar (2024) emphasize that role clarity and strong leader-member relationships are essential for fostering a positive work environment and promoting employee accountability. Clearly defined roles and transparent communication support a culture of ownership and responsibility. Integrating these insights into organizational research enhances our understanding of how role clarity shapes employee behavior and outcomes while providing actionable recommendations for improving management practices. In contrast, employee accountability pertains to individuals taking ownership of their professional duties and obligations (Asamani et al., 2025). This obligation entails the proficient execution of tasks, sound decision-making, and assuming accountability for favorable and unfavorable consequences. The impact of employee accountability inside firms is correlated with heightened levels of employee dedication and job performance. The correlation between role clarity and employee accountability is intricate. Establishing clearly defined positions within an organization can bolster employee accountability through the provision of explicit expectations and the demarcation of activity limits. In circumstances characterized by a lack of role clarity, employees may necessitate more explicit direction, which could diminish their level of accountability due to inadequate comprehension of their responsibilities.

Establishing clear expectations and boundaries for employee actions is vital to role clarity, contributing to employee accountability. This comprehension results in heightened accountability and authorship of assignments and results. Many scholarly investigations have examined the correlation between role clarity and employee accountability, underscoring the significance of unambiguous position delineations in augmenting accountability. The LMX theory serves as a moderating factor in the association between role clarity and employee accountability. This study explores the dynamics of leader-team member interactions, focusing on the significance of trust, respect, and communication. The emergence of leadership behavior is influenced by various factors, including the followers' viewpoint, the goals being pursued, the personal traits of the leader, and the overall environmental context (Taşdemir et al., 2017).

LMX connections of superior quality have the potential to exert a beneficial influence on the level of role clarity within an organization. This is achieved by facilitating more effective and transparent communication about the specific duties and expectations associated with particular roles. Furthermore, these interpersonal connections can catalyze increased employee accountability since individuals see their superiors as supportive and equitable. The impact of LMX connections on the association between role clarity and employee accountability is significant. In the circumstances characterized by robust LMX connections, clear role expectations will likely exert a more pronounced and favorable influence on employee accountability.

On the other hand, in less strong leader-member exchange interactions, the association between job clarity and employee accountability may be less pronounced, which could result in increased levels of role ambiguity and conflict. Establishing clear roles contributes to enhancing responsibility within an organization by setting explicit expectations and boundaries. However, it is essential to note that the quality of LMX interactions can temper this association, impacting the degree of link between role clarity and employee accountability.

2. Conceptual Background and Hypotheses

2.1. In The Realm of Role Clarity

Role clarity is a fundamental concept in organizational behavior and management that refers to how employees comprehend their roles, responsibilities, and expectations. It is vital in shaping employee attitudes and behaviors and the organization's effectiveness. Over the years, academicians and practitioners have recognized the significance of role clarity research in enhancing job satisfaction and reducing turnover. Role clarity refers to the degree to which employees possess and comprehend the necessary knowledge or data to fulfill their job responsibilities

(Adil et al., 2021). Numerous studies have examined the influence of role clarity on various employee outcomes. For instance, according to the study conducted by Wu et al. (2023), performance can be conceptualized as the result of an employee's job performance about their allocated responsibilities and objectives. Research findings indicate that individuals who clearly understand their roles and responsibilities within an organization experience reduced levels of physical exhaustion and psychological pain (Cenzig et al., 2021). Katz and Kahn (1978) introduced the concept of "role set," underscoring the network of roles in which individuals interact within organizations. They emphasized the importance of understanding one's function and those of others for effective coordination and collaboration. Role clarity has also been linked to decreased role conflict and ambiguity, resulting in greater job satisfaction and general well-being (Jackson & Ruderman, 1985; Tubre & Collins, 2000). Eisenberger et al. (2002) researched the function of supervisors in defining employee roles. They identified that supervisor support and communication contributed significantly to employee perceptions of role clarity. The academic works of Perry and Rainey (1988) and Rainey and Steinbauer (1999) have delved into examining the interrelationship among organizational structure, leadership, and role clarity. The study conducted by Fuhse and Gondal (2022) demonstrates that the performance of connections is influenced by the social environment in which similar ties are formed, leading to various associations and outcomes. In the performance context, role clarity has also been positively associated with job performance and organizational commitment by Griffith et al. (2000) and Wright and Davis (2003). Waruwu et al. (2020) argue that the employee's organizational commitment plays a crucial role in their relationship with the company, providing them clarity and a sense of purpose. When employees have a clear understanding of their responsibilities, they are more likely to engage in behaviors that accord with organizational objectives and are beneficial to the success of the organization as a whole.

Research conducted by Quick (1979) found that a clear understanding of one's function is a preventative measure against the unfavorable consequences of strain and work overload. When employees know their responsibility, they can better manage their tasks and overcome obstacles (Ganster & Schaubroeck, 1991). Role clarity refers to how individuals know their responsibilities and roles at work. On the other hand, Jackson and Schuler (1985) found that a lack of role clarity or ambiguity is related to tension, depersonalization, emotional exhaustion, the desire to quit, decreased job satisfaction, decreased organizational commitment, and decreased performance. According to Bang et al. (2022), employees who experience a lack of role clarity may need help sustaining productivity and maintaining a positive outlook. Employees often experience a lack of encouragement or support from their superiors, a well-established predictor of erroneous (Orgambidez et al., 2022).

Moreover, this lack of role clarity or ambiguity also leads to decreased performance. According to Baruch and Lambert (2007), uncertainty and ambiguity are inherent characteristics of organizational existence, given the rapid changes occurring in the contemporary environment. Kahn et al. (1964) argue that role clarity is a significant factor in resolving ambiguity by providing employees with a clear grasp of the duties and skills connected with their positions. Multiple academic publications, such as the study conducted by Tubre & Collins (2000), have established significant empirical connections between role clarity and diverse organizational outcomes, including job satisfaction, employee well-being, and job performance. Based on the research conducted by Purwanto et al. (2023), it has been determined that managers can improve the quality of their interactions with employees by cultivating a pleasant work environment and promoting self-assurance.

Furthermore, professionals who utilize strategies like responsibility mapping, role analysis, and role negotiation underscore the significance of role clarity (Schaubroeck et al., 1993). Employees who receive comprehensive instructions regarding their responsibilities gain more job satisfaction. Organ and Greene's (1974) research demonstrates a substantial empirical foundation supporting the correlation between role clarity and job satisfaction, gaining a better comprehension of the significance of this term within organizational dynamics. In conclusion, role clarity influences employee attitudes and behaviors, including job satisfaction, performance, organizational commitment, and stress management.

2.2. The Concept of Employee Accountability

Employee accountability, a fundamental concept in the study of management and organizational behavior, entails taking responsibility for one's actions and outcomes (Han & Perry, 2020). The concept substantially impacts individual behavior, team dynamics, and the overall efficiency of an organization. Employee accountability has received significant academic attention due to employers' efforts to enhance employee engagement, performance, and effectiveness. According to Brown and Trevio (2006), surveys on leadership have found that leaders who actively promote transparency, establish distinct standards, and facilitate open communication cultivate a work environment where individuals take ownership of their actions and enhance employee accountability. These leadership strategies instill a sense of responsibility and commitment in employees, motivating them to go above and beyond their responsibilities and assume ownership of their efforts. It has been demonstrated that having several points of view together is particularly helpful when attempting to find solutions to tricky situations and coming up with original ideas (Roth, 2022).

Moreover, it has been demonstrated that responsibility improves individual and team performance. Furthermore, accountability operations have been critical in

safeguarding two key assets: time and effort (Nayak et al., 2022). Pulakos et al. (2000) conducted a study that provided data suggesting a favorable relationship between persons who possess a sense of personal accountability for their work and their engagement in behaviors that enhance job performance. Trevio et al. (1999) examined the significance of accountability in ethical decision-making and subsequent action processes. They highlighted the correlation between accountability and ethical behavior, proposing that individuals who confront consequences for their actions are more likely to make ethical decisions. Accountability generates a moral imperative to act according to the company's principles and norms. The relationship between accountability and organizational culture has also been the subject of academic research by Lapierre and Hackett (2007). Based on their research, it has been observed that firms with a strong culture of accountability tend to have individuals who display higher levels of commitment and engagement and a stronger inclination to take ownership of their assigned duties. According to Pearce and Sims (2002), teams with high levels of accountability typically exhibit improved coordination, communication, and performance. Mutual accountability among team members increases the likelihood of fulfilling individual obligations and contributing to the team's success. In a nutshell, employee accountability encompasses multiple dimensions and has significant implications for organizational behavior and management. Employee engagement, productivity, and ethical behavior will likely be elevated in organizations that cultivate a culture of accountability.

2.3. The Theory of Leader-Member Exchange (LMX)

The perception of leadership has traditionally emphasized the personal qualities and characteristics of the leader rather than focusing on the reciprocal and transactional nature of the interaction between the leader and their followers (Uhl-Bien et al., 2022). The theory centers on the dynamics of interpersonal connections between leaders and their followers, providing valuable insights into the characteristics of these relationships, their impact on diverse outcomes, and the broader implications for achieving organizational success. It is essential to have a solid understanding of the benefits and difficulties associated with the various implementations of leadership since this can either enhance or diminish the overall efficacy of shared leadership (Edelmann et al., 2023). The fundamental principle behind the Leader-Member Exchange idea is that leaders interact differently with their subordinates (Tasdemir et al., 2024). In contrast, leaders cultivate unique ties with various people within a group, resulting in the emergence of two distinct classifications: the in-group and the outgroup. The in-group comprises individuals with a strong and favorable association with the leader, characterized by elevated levels of trust, reciprocal respect, and cooperative behavior. The outgroup comprises people with whom the leader has a formal and transactional relationship.

Also, Purwanto et al. (2023) explain LMX as a multidimensional connection between leaders and followers. Leader behavior is identified as a significant antecedent. According to Graen and Uhl-Bien (1995), empirical evidence suggests that leaders who demonstrate supportive and empowering behaviors have the propensity to cultivate high-quality connections with their followers. These behaviors encompass activities such as offering guidance, delivering constructive criticism, and creating chances for enhancing skills. These actions contribute to establishing a collaborative and trusting relationship between leaders and their in-group members. Research in the discipline of leadership, mainly focusing on behavioral leadership approaches, posits that the effectiveness and success of a leader are contingent upon the leader's behaviors exhibited during the process of leader-member interaction (Taşdemir et al., 2017). According to Dulebohn et al. (2012), a positive correlation exists between high-quality leader-member exchange interactions and enhanced work satisfaction, motivation, and organizational commitment. Members of in-groups tend to have better job autonomy, greater access to developmental opportunities, and a clearer understanding of their roles. This can be attributed to their increased interaction and connection with their leaders. These positive results contribute to enhanced individual and collective performance. Another study conducted by Danesh and Huber (2022) aims to provide an overview of the existing research on leadership and leader-member exchange theory in dentistry.

Additionally, the study proposes a novel conceptual model of leader-member exchange explicitly tailored to new dentists. The study also emphasizes enhancing leadership development programs for this particular group. The subsequent article examines the alteration of supervisor-subordinate interactions within the framework of remote work, offering valuable insights into the consequences of this shift and the necessity for human resources development initiatives. Additionally, the study conducted by Varma et al. (2022) provides possible paths for further investigation in this field.

The LMX theory further offers insights into the broader implications for organizational success. The guidance provided by supervisors is of utmost importance in facilitating the navigation of collaborators through the process of organizational change (Arnéguy et al., 2022). Furthermore, the assistance extended by supervisors serves as a protective mechanism, mitigating the adverse impact of organizational change on the health outcomes of employees (Coupaud, 2022). Organizations with leaders who exhibit the skill of establishing high-quality leader-member exchange relationships have demonstrated heightened levels of team cohesion, decreased turnover rates, and increased overall organizational performance (Eisenbeiss et al., 2008). LMX relationships significantly impact organizational dynamics, as they facilitate the development of a favorable atmosphere characterized by trust, collaboration, and the alignment of objectives among members. Despite its strengths, LMX theory has faced criticism for potential biases and inequities associated with in-group and outgroup differentiations. Individuals contend that the establishment

of such groups could potentially result in the implementation of discriminatory policies and the promotion of bias.

Nevertheless, researchers have also emphasized the possibility of managing LMX differentiation in a just and transparent way, guaranteeing that all employees are treated fairly and provided with equal development opportunities (Liden et al., 2016). The Leader-Member Exchange hypothesis has substantially contributed to our knowledge of leadership dynamics and their influence on follower outcomes and organizational success. LMX theory offers valuable insights into the complex dynamics of workplace interactions by highlighting the distinct character of leader-follower relationships. Organizations that acknowledge the significance of cultivating high-quality leader-member exchange relationships are well-positioned to experience enhanced satisfaction among workers, engagement, and overall performance.

2.4. What is the Connection Between Role Clarity and Employee Accountability?

The relationship between clearly defined roles and the accountability of employees is intricately entangled in the organizational context. Role clarity pertains to the level of understanding individuals possess about their specific positions, duties, and anticipated organizational performance. When employees possess an in-depth understanding of their designated duties, they possess a heightened awareness of the expectations placed upon them, the specific tasks that fall within their responsibility, and how their jobs contribute to the more significant aims of the organization. Establishing role clarity within an organization facilitates the focused allocation of employee efforts toward tasks that align with their assigned responsibilities, thus decreasing uncertainty and conflict. As such, employee accountability refers to the extent to which employees own control over their assigned tasks and are held responsible for their conduct and results. Accountable employees demonstrate proactive behavior by effectively carrying out and fulfilling their responsibilities. Individuals demonstrate accountability by assuming responsibility for their assigned duties, making informed decisions, and accepting ownership of both positive and negative outcomes. The relationship between role clarity and employee accountability is characterized by the tendency of position clarity to bolster employee accountability. When employees clearly understand their specific roles and responsibilities, they are more inclined to adopt a sense of ownership over the duties given to them and demonstrate accountability for their performance. Providing clear expectations to employees enhances their ability to take initiative and assume accountability for their actions. On the other hand, in situations where roles need more clarity, employees may require more explicit guidance, resulting in diminished accountability due to an inadequate comprehension of their duties.

Role clarity has fundamental aspects that contribute to employee accountability, as it establishes unambiguous expectations and delineates boundaries about the activities and behaviors of employees. When employees thoroughly comprehend the expectations placed on them, they are more likely to truly understand their responsibilities and accept responsibility for their work and its results. In organizational research, various studies have investigated and analyzed the connection between having clear roles and employees being held accountable for their actions (e.g., Ajzen, 2005; Bandura, 1997; Fernandez et al., 2010). When employees possess a comprehensive understanding of their distinct tasks and responsibilities, it becomes easier to comprehend the expectations placed on them. As a result of this enhanced clarity, individuals can have a deeper comprehension of their obligations and the consequences for which they bear accountability.

Consequently, employees are more inclined to assume responsibility for their activities and demonstrate a sense of ownership towards their positions. Employees can effectively manage their workload and focus on the critical components of their professional responsibilities when their tasks are straightforward. When employees clearly understand their responsibilities, they can focus on attaining objectives and effectively executing their tasks. With the elimination of the possibility of vagueness, employees are also committed to increased accountability regarding their decision-making and ensuing outcomes.

When organizational roles are established, there is a possibility of individuals experiencing overlapping responsibilities or a greater sense of autonomy and control over the duties they have been given. There is a potential for employees to seek clarification about their assigned duties, which may result in a lower level of responsibility. However, if explicit and effective communication is employed to articulate and convey duties, employees can experience a heightened sense of ownership, thus fostering more accountability for their activities. Establishing clear roles is also fundamental to fostering good collaboration within a team. Enhanced productivity can be achieved when team members clearly understand their respective duties and are proficient in effectively engaging with one another. Well-defined roles within a team foster a sense of collective responsibility, mitigate conflicts, and minimize redundant efforts. Each individual within a team is responsible for doing their assigned tasks and contributing constructively to the team's overall effectiveness. Through defining roles, managers can improve the creation of performance standards and the evaluation of employee performance. Knowledge of their respective roles enables employees to evaluate their performance, recognize areas that need enhancement, and provide feedback more efficiently. This strategy promotes responsibility since employees know their implementation will be assessed based on their assigned duties and responsibilities. In general, the establishment of job clarity serves as a fundamental element in promoting employee accountability through the establishment of explicit objectives, the improvement of

concentration, the reduction of uncertainty, the cultivation of collaborative efforts, and the streamlining of performance assessment. When employees are provided with clear information regarding their duties and obligations, they are more inclined to assume ownership of their tasks, embrace responsibility for their actions, and hold themselves accountable for attaining goals. The following hypothesis is proposed to be tested in line with the existing literature.

Hypothesis 1: Role Clarity Positively Affects Employee Accountability.

2.5. LMX's Moderating Influence on the Relationship Between Role Clarity and Employee Accountability

It is essential to consider LMX's moderating impact on the relationship between employee accountability and role clarity in organizational behavior and management. Subsequent to the 1980s, scholarly investigations have broadened the conceptualization of charismatic leadership, introducing a novel perspective incorporating supplementary elements (Taşdemir et al., 2017). LMX describes the interaction between a team's members, who are frequently subordinates, and the leader, usually a manager or supervisor. It evaluates how this connection is defined by sharing resources and assistance, trust, respect, and communication (Graen & Uhl-Bien, 1995). According to LMX theory, a strong LMX, characterized by an excellent working connection between team leaders and members, boosts communication, trust, and respect. Choi et al. (2021) found that the relationship between LMX and innovative and effective behavior is enhanced when organizations actively promote creative behavior by allocating and overseeing their personnel's resources. The flow of information within organizations is, to some extent, organized by formal roles and rules that delegate particular responsibilities to individuals. According to Bastardo and Day's research (2022), some contributions to social exchange are consequently required of persons who are members or hold particular positions within that organization. The LMX Theory states that team leaders are more likely to communicate duties, expectations, and obligations clearly and consistently when there is a strong LMX between them and their team members. This implies that LMX may have an impact on how accountable employees are. High-quality LMX relationships also motivate staff members to take accountability for their actions. They might perceive their employers as supportive and fair, which would increase their accountability for their choices and outcomes (Eisenbeiss & Knippenberg, 2015). The LMX theory also suggests that the type of connection between a leader and a subordinate can affect various workplace factors, including communication, trust, and mutual understanding. According to de Sanchez et al. (2022), the level of attachment can be subject to changes as individuals' self-perception within the relationship, their role, and how other members perceive them evolve. These modifications can occur through individuals' reflections

on the interaction or knowledge of other team members' relationships with the leader. Also, Bartels et al. (2022) conducted empirical investigations that demonstrated that the quality of LMX can exhibit temporal fluctuations occurring over both short-term periods of days and longer-term periods of weeks. Employees with a positive and high-quality LMX relationship with their bosses may be more likely to feel accountable for their work. This might be due to a more positive working connection with their supervisor, leading to more explicit expectations, and higher accountability.

The degree of the LMX connection's quality can influence how closely employee accountability and role clarity are related. According to Sommovigo et al.'s research from 2022, the effectiveness of receiving social assistance may be contingent on the particular form of support received. When LMX is strong, role clarity may have a more significant positive impact on employee accountability. Because higher LMX quality also translates to higher overall corporate commitment. Conversely, for poorer-quality LMXs, the relationship between role clarity and employee accountability may need to be stronger, resulting in role ambiguity and conflict (Dulebohn et al., 2012). According to Wynen et al. (2020), perceptions of job ambiguity increased as the number of concurrently occurring types of changes increased. Support and confidence are also significant features of LMX. Leaders who build constructive and trustworthy relationships with their team members can increase their psychological safety and sense of empowerment. Employees may be inspired to assume greater job responsibility (Eisenbeiss et al., 2008). With more significant support, including High-LMX, job clarity's effects on employee accountability may be enhanced. Effective communication increases role clarity, encourages employee accountability, and supports LMX. Positive leader-member exchange interactions have been demonstrated to increase the likelihood of leaders engaging in open and honest communication. This communication promotes a culture of accountability, explains roles and expectations, and decreases confusion. A leader's leadership style can also influence the quality of LMX. Transformational leaders frequently produce high leader-member interaction (LMX) by effectively motivating and inspiring their team members. According to Eisenbeiss and Knippenberg (2015), employing this specific managerial style helps create accountability and improve role clarity. As a result, strong LMX interactions have been demonstrated to improve the benefits of role clarity. Weaker LMX connections, on the other hand, have been demonstrated to impact these outcomes negatively.

Hypothesis 2: LMX plays mediating role in the Role Clarity effect of Employee Accountability.

The research model is presented in Figure 1.

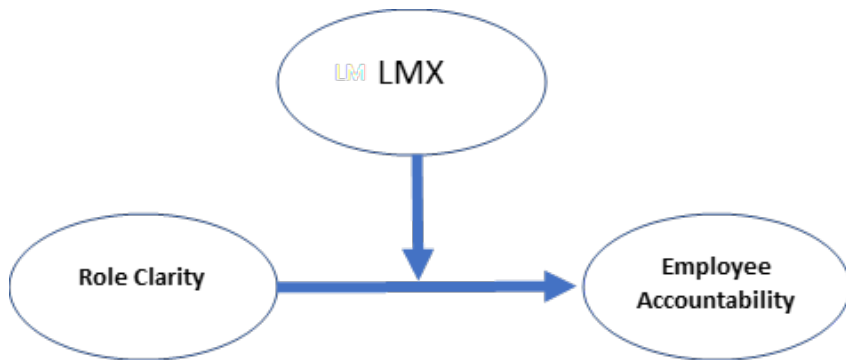


Figure 1. The theoretical research model

Source: own study

3. Methodology of the Research

3.1. Sample and Procedure

The research sample comprises public employees in the Turkish Republic of Northern Cyprus. In order to administer the questionnaire to the selected sample group, the first step was conducting interviews with the supervisors of the respective institutions. During these interviews, approval was sought to proceed with the research. Upon receiving the requisite approvals from the supervisors, a team of four individuals, comprising both officials and researchers, conducted a synchronized questionnaire administration to the institutions' personnel. The individuals selected for this study were chosen by the convenience sampling method. Before their involvement, the participants were provided with a clear explanation of the research's objectives, and a commitment was made to safeguard their anonymity. Upon gaining written authorization, the researchers distributed the surveys to the participants in securely sealed envelopes. The questionnaires that had been filled out were collected either by hand in sealed envelopes or retrieved from the closed boxes placed in the communal area.

A total of 500 questionnaires were developed for this study and, after that, distributed among the participants. A total of 350 questionnaires were received. Upon analysis of the submitted surveys, erroneous and insufficient questionnaires were removed from the study. The process of data collecting was successfully concluded, resulting in a total of 328 questionnaires deemed usable for analysis—171

participants identified as female, while 157 persons identified as male. Among the sample of individuals, it was found that 191 participants were married, whereas 137 people reported being single. Out of the total number of participants, 88 individuals possessed associate degrees or lower, 221 held bachelor's degrees, and 19 had completed postgraduate studies. Among the participants, it is seen that 55 individuals possess a job experience of one year or less. Additionally, 157 participants have accumulated work experience ranging from 2 to 5 years. Furthermore, 68 participants have acquired work experience spanning from 11 to 15 years, while 14 participants possess work experience of 16 years or more.

3.2. Measures

The scales employed in the study have been previously designed and subjected to rigorous examination to ascertain their validity and reliability. The following section provides details regarding the scales that were utilized. The researchers employed the role clarity scale, initially established by Pareek in 2002 and subsequently validated by Yadav and Rangnekar in 2013, to assess the level of role clarity among the personnel. The scale has 15 statements and is evaluated on a scale ranging from 1 to 5, with 1 representing very little clarity and five representing quite clear. The scale measures the level of clarity exhibited by the statements, with the descriptors ranging from somewhat unclear to average clarity, reasonably clear, and quite clear. The examples encompass several aspects of professional dynamics, including staff relationships, colleagues' expectations, and performance appraisal systems. Employee accountability was measured using the accountability scale created by Han and Perry (2020). The scale comprises 12 statements and is scored on a scale ranging from 1 to 5, with the options being "Strongly disagree," "Somewhat disagree," "Undecided," "Somewhat agree," and "Strongly agree." The scale includes sample items such as "The likelihood of being detected is high if I commit an error", "It would be difficult for me to successfully deceive others by providing false justifications for my performance", and "My organization stands to gain from my effective job performance". The study employed the Leader-Member Exchange (LMX-7) scale, established by Graen and Uhl-Bien in 1995, to assess the level of contact between leaders and members in the sample. The scale comprises seven statements and is scored on a scale ranging from 1 to 5, with the options being "Strongly disagree," "Somewhat disagree," "Undecided," "Somewhat agree," and "Strongly agree." The scale includes many things such as "I possess a clear understanding of my position about my supervisor", "My supervisor demonstrates an awareness of my capabilities", and "My supervisor is willing to assist, even if it incurs personal costs".

3.3. Common Method Bias

Despite being assured of anonymity, the participants may have refrained from expressing their genuine opinions to avoid creating a poor perception of their bosses or due to concerns regarding the potential disclosure of survey results. Participants were instructed to refrain from including their names on the surveys to mitigate common method bias. Additionally, the questionnaires were distributed and collected in sealed envelopes. Despite the researchers' diligent endeavors, Harman's single-factor test method was employed to assess a potential standard method bias issue in the study (Fuller et al., 2016). By this approach, all latent variables underwent explanatory factor analysis and were constrained to a singular factor. The explained variance ratios of each factor were analyzed due to the explanatory factor analysis. According to the study conducted by Podsakoff et al. (2003), it is recommended to mitigate the influence of standard method bias by ensuring that no single factor exhibits excessive dominance and that the explained variance values remain below the threshold of 50%. The analysis found that the initial component accounted for 38.127% of the variance. This outcome suggests that the study has no prevalent technique bias issue. Furthermore, it is worth noting that the VIF values of all variables in this study are below the threshold of 3, which provides additional support for this perspective (Kock, 2015; Sürücü et al., 2023).

3.4. Data Analysis

The research data was analyzed using SPSS version 27 and AMOS version 22 software tools. Initially, a descriptive statistical analysis assessed the participants' responses to the pertinent scales. Subsequently, the validity and reliability of the scales were evaluated. The kurtosis and skewness values were calculated to assess the distribution of the data. A correlation study was conducted to ascertain the variables' association. The study hypotheses were tested using the Proces Macro (Model 1) developed by Hayes (2018).

4. Results

4.1. Validity and Reliability

Before the hypothesis testing, an assessment was conducted to determine the validity and reliability of the constructs included in the study. The components' reliability was assessed using Cronbach's alpha, combined reliability (CR), and McDonald's Omega values, while the validity was evaluated through convergent and discriminant validity.

Table 1 displays the outcomes of the analyses performed to assess the validity and reliability of the constructs.

Table 1. **Validity and Reliability**

Variables	Factor Load	Cronbach's Alfa	CR	McDonald's Omega	AVE
Role Clarity	0.622-0.892	0.825	0.831	0.828	0.613
Employee Accountability	0.511-0.806	0.801	0.814	0.819	0.545
Leader-Member Exchange	0.507-0.781	0.718	0.725	0.724	0.511

Source: own study

Upon analysis of Table 1, it is evident that the factor loadings of all statements are above a threshold of 0.507. According to Fornell and Larcker (1981), it is anticipated that both factor loadings and average variance explained values should exceed 0.50 to establish convergent validity. The results obtained suggest the presence of convergent validity. Furthermore, Hair et al. (2009) assert that to establish convergent validity, it is recommended that the composite reliability (CR) value should be equal to or greater than 0.70, the average variance extracted (AVE) value should be equal to or larger than 0.50, and the CR value should exceed the AVE value ($CR > AVE$). The findings presented in Table 1 indicate that the composite reliability (CR) values for each construct are above the threshold of 0.7, and the CR value exceeds the average variance extracted (AVE) value. This study's results support the convergent validity of the constructs.

The constructs' reliability was assessed by considering the values of Cronbach's Alpha, CR, and McDonald's Omega. According to the existing literature, constructs are considered to possess reliability when their values reach or exceed 0.7 (Sürücü & Maslakçı, 2020). Based on the findings presented in Table 1, the Cronbach's Alpha coefficients for the variables are 0.825, 0.801, and 0.718, respectively. Similarly, the variables' Composite Reliability (CR) coefficients are 0.831, 0.814, and 0.725, respectively. The Omega values for McDonald's are 0.828, 0.819, and 0.724, in sequential order. Table 2 illustrates that the values above exceed the recommended lower threshold value of 0.70, as suggested in the existing literature. The results validate the reliability of the constructs.

Upon establishing the convergent validity of the constructs included in the study and obtaining adequate reliability values, it is imperative to assess the discriminant validity of such constructs (Hair et al., 2009). The Fornell-Larcker criterion served as the foundation for assessing the discriminant validity. The results collected are displayed in Table 2.

Table 2. **Correlation analysis**

Variables	Mean	Sd.	1	2	3
Role Clarity	3.14	1.104	0.782a		
Employee Accountability	3.88	0.613	0.398**	0.738a	
Leader Member Exchange	3.55	0.915	0.258**	0.321**	0.714a
Kurtosis			-0.858	1.058	0.258
Skewness			0.521	-0.945	-0.421

a: Square root values of AVE

Source: own study

Based on the Fornell-Larcker criterion, it is recommended that the square root of the average variance extracted (AVE) for the constructs included in the study should exceed the correlations between the variables. Upon analysis of Table 2, it becomes evident that the constructs included in the research exhibit discriminant validity.

Table 2 additionally presents the Kurtosis/Skewness values about the distribution of data and the correlation coefficients among the constructs employed in the study. According to Tabachnick et al. (2007), a dataset can have a normal distribution if its Kurtosis and Skewness values fall between -1.5 and +1.5. The results obtained from the analysis of the constructs presented in Table 2 indicate that the Kurtosis and Skewness values fall within the range of -1.5 to +1.5. In this particular scenario, it is postulated that the dataset follows a normal distribution. The utilization of the Pearson correlation coefficient was employed in the correlation study owing to the adherence of the data to a normal distribution.

The results shown in Table 2 indicate that there is a significant positive relationship between role clarity and both leader-member interchange ($r=0.258$, $p<0.05$) and employee accountability ($r=0.321$, $p<0.05$). Furthermore, a positive correlation exists ($r=0.398$, $p<0.05$) between leader-member exchange and employee accountability.

4.2. Hypothesis Tests

The study hypotheses were tested using the Process macro (Model 1) developed by Hayes (2018). Process macro is often favored in recent studies due to its ability to yield more dependable outcomes than Baron and Kenny's causal stages technique. The Process macro, regarded as a modern technique by sure statisticians, utilizes lower and upper confidence intervals as the foundation instead of relying on the "p" significant value

(Hayes, 2018; Sürücü et al., 2023). According to Hayes (2018), the statistical significance of the effect can be determined by examining whether the lower and higher confidence intervals exclude the value of zero (0). Table 3 displays the studies' outcomes using 5000 resamples and 95% confidence intervals.

Table 3. The Regulatory Role of LMX in the Effect of Role Clarity on Employee Accountability

	β	Std. Error	t	p	LLCI	ULCI
Role Clarity (X)	0,303	0,085	7,241	0,000	0,2189	0,3891
LMX (W)	0,191	0,051	4,128	0,000	0,1471	0,2348
X.W	0,098	0,033	3,087	0,002	0,0854	0,2049
Low	0,155	0,051	3,973	0,000	0,1123	0,3842
High	0,451	0,071	8,054	0,000	0,3596	0,5214

Model Summary: R²=0,321; F=41,241; p<0,05

Source: own study

The findings presented in Table 3 indicate that there is a statistically significant relationship between role clarity ($\beta=0.303$; $p<0.05$; 95% CI [0.2189; 0.3891]) and LMX ($\beta=0.191$; $p<0.05$; 95% CI [0.1471; 0.2348]) with employee accountability. Based on the results obtained, it can be concluded that Hypothesis 1 is supported.

The interaction term was held constant to ascertain the moderating influence of LMX on the relationship between role clarity and employee accountability. The observed outcome of the interactional term provides strong evidence supporting the notion that LMX plays a moderating function in the examined relationship ($\beta=0.098$; $p<0.05$; 95% CI [0.0854; 0.2049]). In greater detail, the findings presented in Figure 2 indicate that the observed effect is more pronounced in situations where LMX is characterized as high ($\beta=0.451$; $p<0.05$; 95% CI [0.3596; 0.5214]). Conversely, when LMX is characterized as low, the effect is less significant ($\beta=0.155$; $p<0.05$; 95% CI [0.1123; 0.3842]).

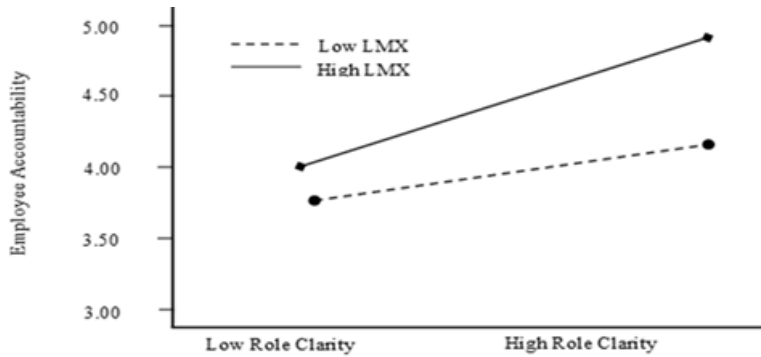


Figure 2. **Moderating Role of LMX**

Source: own study

5. Discussion

The findings of this research present persuasive evidence that supports Hypothesis 1, which posits a beneficial relationship between role clarity and employee accountability. The analysis indicates a statistically significant positive beta coefficient of 0.303 ($p < 0.05$), with a 95% confidence interval of [0.2189; 0.3891], confirming a notable and favorable relationship between the two constructs. These findings underscore the critical influence of clearly defined organizational roles in shaping accountable behavior among employees. Asamani et al. (2025) emphasize that role clarity is central in enhancing employee motivation promoting performance and accountability, primarily when resource availability supports role execution. Ajzen (2005) previously explored how structured expectations influence individual behavior, supporting the notion that role clarity shapes accountability by providing employees with well-defined behavioral guidelines. Similarly, Bandura (1997) highlighted that individuals are more likely to assume responsibility and ownership when they clearly understand what is expected of them and the consequences of their performance. These perspectives align with Fernandez et al. (2010), who argue that well-communicated duties heighten employees' awareness of organizational expectations, thus reinforcing accountability. This aligns with recent findings by Kiazad et al. (2023), who demonstrated that role clarity not only improves accountability but also fosters proactive behavior and reduces counterproductive work behaviors. Similarly, Liu and Wang (2021) found that clear expectations promote intrinsic motivation, which in turn enhances employee responsibility. These studies further support the present findings and show the practical importance of clear communication and defined expectations in organizations.

The current study also explores the moderating role of Leader-Member Exchange (LMX) in the relationship between role clarity and accountability. A significant interaction effect was found ($\beta = 0.098$, $p < 0.05$, 95% CI [0.0854; 0.2049]), suggesting that the quality of leader-member relationships moderates how role clarity impacts accountability. Specifically, when LMX is high ($\beta = 0.451$, $p < 0.05$, 95% CI [0.3596; 0.5214]), the influence of role clarity on accountability becomes more pronounced. This finding echoes the framework proposed by Graen and Uhl-Bien (1995), who emphasized the importance of quality interactions between leaders and subordinates in fostering positive work outcomes.

Interestingly, even under low LMX conditions, a significant relationship persists between role clarity and accountability ($\beta = 0.155$, $p < 0.05$, 95% CI [0.1123; 0.3842]), although the effect size is notably smaller. This suggests that while role clarity independently enhances accountability, the strength of leader-member relationships can amplify or dampen this effect. Nguyen and Haar (2024) reinforce this by demonstrating how LMX influences employee behaviors, including engagement and commitment, especially when organizational structures such as role definitions are in place.

Moreover, Dulebohn et al. (2012) found that LMX quality is an important antecedent to work attitudes and performance. This helps explain why the moderation observed in this study is statistically significant and theoretically grounded. These findings contribute to a more nuanced understanding of organizational dynamics, affirming that structural clarity and relational quality are essential in cultivating accountable employees.

Integrating role clarity with high-quality LMX relationships represents a robust pathway for enhancing employee accountability. These insights provide actionable implications for organizational leaders aiming to foster responsibility, improve job performance, and build more cohesive teams. Asamani et al. (2025), Jo and Shin (2025), and Lan et al. (2025) collectively underscore the importance of transparent communication, supportive leadership, and well-articulated role expectations in driving such outcomes.

This finding resonates with recent studies, such as that of Graen and Uhl-Bien (1995), who noted that high-quality LMX fosters a trust-based environment where employees are more likely to internalize expectations and exhibit accountable behaviors. In contrast, in low-LMX settings, employees may feel disengaged or unsupported, thus diluting the impact of clearly defined roles. The interaction observed in this study highlights the importance of relational leadership factors in enhancing or weakening structural clarity. These results open up avenues to consider the possibility of reciprocal effects. For instance, as accountability increases due to role clarity, it may in turn strengthen the quality of LMX through trust and performance feedback loops (Gabel-Shemueli & Riva Zaferson, 2021). Over time, this may create a reinforcing cycle where improved LMX further enhances role clarity and accountability. Such dynamics warrant longitudinal

research to track these relationships across time and validate the cyclical patterns suggested here.

6. Conclusion

6.1. Practical Conclusion

The findings have substantial practical implications for firms seeking to improve employee accountability. Firms must allocate resources toward implementing strategies and activities that foster a clear understanding of roles and responsibilities within their workforce. Explicit job descriptions, precise delineation of responsibilities, and efficient communication of roles can foster a heightened sense of accountability among the workforces.

Additionally, the role of managers and leaders is crucial in promoting and cultivating a high standard of LMX. Establishing solid and reliable relationships with employees has the potential to enhance the positive impacts of role clarity on employee accountability. To enhance LMX, it is imperative for leaders to proactively connect with their team members, extend support, and facilitate avenues for professional development.

6.2. Managerial Conclusion

Managers and leaders can utilize the outcomes of this study to acknowledge the significant impact of role clarity on fostering employee accountability. To facilitate the establishment of role clarity, companies must emphasize the development of explicit job descriptions and unambiguous delineation of tasks for every team member. Moreover, establishing efficient communication channels inside the organization is of utmost importance. This practice guarantees that personnel possess a comprehensive comprehension of their designated roles and are provided with the essential information and resources required to carry out their assigned duties effectively. Managers provide a solid basis for improving employee accountability and overall organizational performance by significantly emphasizing role definition.

This study highlights the significance of LMX as a mediator and moderator in the association between role clarity and employee accountability. To leverage this valuable understanding, managers should contemplate establishing constructive and trust-oriented leader-member relationships within their respective teams. Achieving this objective necessitates the establishment of regular and transparent channels of communication, the provision of support as required, and the facilitation of chances for professional growth. A robust LMX cultivates a work atmosphere in which

employees perceive themselves as esteemed and comprehended, enhancing their sense of responsibility and dedication toward the organization's objectives.

Managers must acknowledge the moderating effect of LMX on the relationship between role clarity and employee accountability. Consequently, managers should tailor their leadership strategies to the quality of their interactions with individual team members. When the LMX is characterized by a high level of trust and pleasant interactions, leaders can customize their leadership style to promote and provide practical encouragement and support to employees. This may entail allocating more duties, granting autonomy, and delivering tailored coaching. Managers can enhance the effectiveness of employee accountability by matching their leadership practices with the quality of LMX, thereby optimizing the impact of role clarity.

Organizations can design specific training programs to enhance leaders' and employees' comprehension of the importance of role clarity and LMX. These programs may prioritize improving communication skills, conflict resolution capabilities, and developing leadership qualities. By allocating resources to enhance individuals' training and development, organizations can provide their workforce with the requisite expertise and understanding to bolster role delineation and cultivate favorable associations between leaders and subordinates. As a result, this will lead to enhanced organizational efficiency.

Managers can utilize the findings of this study to develop performance evaluation procedures that consider the impact of job clarity and LMX on employee accountability. Including constructive comments within performance evaluations underscores the significance of fostering accountability. Managers must acknowledge and incentivize accountable behavior, which can significantly enhance employee motivation. Organizations have the power to cultivate a culture that places importance on responsibility throughout the workforce through the strategic alignment of performance assessments with the fundamental concepts of role clarity and constructive leader-member interactions.

6.3. Limitations and Future Research

Subsequent research should seek to expand upon the conclusions of this work by investigating various critical domains. Initially, examining the impact of variables such as gender and professional experience on the relationship between role clarity, leader-member exchange (LMX), and organizational outcomes may yield profound insights into how various demographic groups perceive and derive advantages from role clarity and LMX. Moreover, conducting research in varied cultural contexts to comprehend how cultural disparities influence the efficacy of role clarity and Leader-Member Exchange (LMX) might aid in formulating more globally applicable training programs and performance assessment methods.

Secondly, employing longitudinal research methodologies to monitor temporal changes in role clarity and leader-member exchange (LMX), together with their impacts on employee accountability and organizational efficiency, might yield a more nuanced comprehension of these interactions. Additionally, developing and evaluating targeted training programs to improve communication skills, conflict resolution abilities, and leadership attributes, while assessing the effects of these interventions on role clarity, leader-member exchange, and organizational results, would be advantageous.

Finally, investigating the influence of technology on enhancing role clarity and leader-member exchange (LMX) represents a viable avenue for future research. Examining the utilization of digital tools and platforms to enhance communication, performance assessments, and accountability inside businesses can yield significant insights for the modernization of these processes. By examining these domains, forthcoming research can yield more thorough and sophisticated understandings of the mechanisms governing role clarity and leader-member exchange (LMX), as well as their effects on organizational efficiency and employee motivation. In line with this, future research could benefit from adopting longitudinal methodologies to better understand the long-term evolution of the role clarity-LMX-accountability triad. This approach would offer deeper insights into how these constructs develop and influence each other over extended periods, particularly in rapidly changing organizational contexts.

Authors' contribution

D.T.: article conception, theoretical content of the article, research methods applied, conducting the research, draft manuscript preparation. **L.S.:** conducting the research, data collection, analysis and interpretation of results. **M.B.:** article conception, theoretical content of the article, research methods applied, draft manuscript preparation

References

- Ajzen, I. (2005). *Attitudes, Personality and Behavior*. Open University Press.
- Asamani, L., Acquah-Coleman, R., Senayah, W. K., & Oppong, S. (2025). Interactive roles of resource availability, role clarity and employee motivation in enhancing organisational effectiveness through employee performance and job satisfaction. *Discover Psychology*, 5(1), 12. <https://doi.org/10.1007/s44202-025-00333-8>
- Bandura, A. (1997). *Self-efficacy: the Exercise of Control*. W. H. Freeman.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: a Review and Future Directions. *The Leadership Quarterly*, 17(6), 595–616. <https://doi.org/10.1016/j.leaqua.2006.10.004>
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange. *Journal of Management*, 38(6), 1715–1759.

- Eisenbeiss, S. A., & van Knippenberg, D. (2014). On ethical leadership impact: The role of follower mindfulness and moral emotions. *Journal of Organizational Behavior*, 36(2), 182–195. <https://doi.org/10.1002/job.1968>
- Eisenbeiss, S. A., van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, 93(6), 1438–1446. <https://doi.org/10.1037/a0012716>
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of Applied Psychology*, 87(3), 565–573. <https://doi.org/10.1037/0021-9010.87.3.565>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.2307/3151312>
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69(8), 3192–3198. <https://doi.org/10.1016/j.jbusres.2015.12.008>
- Gabel-Shemueli, R., & Riva Zaferson, F. A. (2021). Toward an understanding of the relationship between LMX and performance over time: the role of trust in leader and appraisal satisfaction. *Academia Revista Latinoamericana de Administración*, 34(4), 578–593. <https://doi.org/10.1108/arla-12-2020-0255>
- Gilboa, S., Shirom, A., Fried, Y., & Cooper, C. (2008). A meta-analysis of work demand stressors and job performance: Examining main and moderating effects. *Personnel Psychology*, 61(2), 227–271. <https://doi.org/10.1111/j.1744-6570.2008.00113.x>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-Based Approach to Leadership: Development of Leader-Member Exchange (LMX) Theory of Leadership over 25 Years: Applying a Multi-Level Multi-Domain Perspective. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Griffeth, R. (2000). A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26(3), 463–488. [https://doi.org/10.1016/s0149-2063\(00\)00043-x](https://doi.org/10.1016/s0149-2063(00)00043-x)
- Hair, J., Anderson, R., Black, B., & Babin, B. (2016). *Multivariate Data Analysis* (8th ed.). Pearson Higher Ed.
- Han, Y., & Perry, J. L. (2019). Employee accountability: development of a multidimensional scale. *International Public Management Journal*, 23(2), 224–251. <https://doi.org/10.1080/10967494.2019.1690606>
- Han, Y., & Perry, J. L. (2020). Conceptual Bases of Employee Accountability: A Psychological Approach. *Perspectives on Public Management and Governance*, 3(4), 288–304. <https://doi.org/10.1093/ppmgov/gvz030>
- Hayes, A. F. (2017). *Introduction to mediation, moderation, and Conditional Process Analysis : a regression-based Approach* (1st ed.). The Guilford Press.
- Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior and Human Decision Processes*, 36(1), 16–78. [https://doi.org/10.1016/0749-5978\(85\)90020-2](https://doi.org/10.1016/0749-5978(85)90020-2)
- Jo, H., & Shin, D. (2025). The impact of recognition, fairness, and leadership on employee outcomes: A large-scale multi-group analysis. *PLOS ONE*, 20(1), e0312951. <https://doi.org/10.1371/journal.pone.0312951>

- Kiazad, K., Hom, P., Schwarz, G., Newman, A., & Holtom, B. (2024). High-performance work practices and job embeddedness: A comprehensive test. *Journal of Vocational Behavior*, 155, 104066. <https://doi.org/10.1016/j.jvb.2024.104066>
- Kock, N. (2015). A Note on How to Conduct a Factor-Based PLS-SEM Analysis. *International Journal of E-Collaboration*, 11(3), 1–9. <https://doi.org/10.4018/ijec.2015070101>
- la Paz Fernández, M. de, Chan, Y.-B., Yew, J. Y., Billeter, J.-C., Dreisewerd, K., Levine, J. D., & Kravitz, E. A. (2010). Correction: Pheromonal and Behavioral Cues Trigger Male-to-Female Aggression in *Drosophila*. *PLoS Biology*, 8(12). <https://doi.org/10.1371/annotation/1c19d040-9f9f-4b9f-b678-70f1fe387192>
- Lan, M., Hu, Z., & Nie, T. (2025). Unwilling or Unable? The Impact of Role Clarity and Job Competence on Frontline Employees' Taking Charge Behaviors in Hospitality Industry. *Behavioral Sciences*, 15(4), 526–526. <https://doi.org/10.3390/bs15040526>
- Lapierre, L. M., & Hackett, R. D. (2007). Trait conscientiousness, leader-member exchange, job satisfaction and organizational citizenship behaviour: A test of an integrative model. *Journal of Occupational and Organizational Psychology*, 80(3), 539–554. <https://doi.org/10.1348/096317906x154892>
- Liden, R. C., Erdogan, B., Wayne, S. J., & Sparrowe, R. T. (2006). Leader-member exchange, differentiation, and task interdependence: implications for individual and group performance. *Journal of Organizational Behavior*, 27(6), 723–746. <https://doi.org/10.1002/job.409>
- Liu, E., & Wang, J. (2021). Examining the Relationship Between Grit and Foreign Language Performance: Enjoyment and Anxiety as Mediators. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.666892>
- Nguyen, V. L., & Haar, J. (2024). When work–life balance fails to boost organizational citizenship behaviors: the moderating role of leader–member exchange. *Evidence-Based HRM a Global Forum for Empirical Scholarship*. <https://doi.org/10.1108/ebhrm-02-2024-0043>
- Örtqvist, D., & Wincent, J. (2006). Prominent consequences of role stress: A meta-analytic review. *International Journal of Stress Management*, 13(4), 399–422. <https://doi.org/10.1037/1072-5245.13.4.399>
- Pareek, U. (2002). *Training instruments in HRD and OD*. Tata: McGraw Hill Publishing Ltd.
- Pearce, C. L., & Sims, H. P. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group Dynamics: Theory, Research, and Practice*, 6(2), 172–197. <https://doi.org/10.1037/1089-2699.6.2.172>
- Perry, J. L., & Rainey, H. G. (1988). The Public-Private Distinction in Organization Theory: A Critique and Research Strategy. *The Academy of Management Review*, 13(2), 182–201. <https://doi.org/10.2307/258571>
- 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. <https://doi.org/10.1037/0021-9010.88.5.879>
- Sürücü, L., Şeşen, H., & Maslakçı, A. (2023). *Regression, Mediation/Moderation, and Structural Equation Modeling with SPSS, AMOS, and PROCESS Macro*. Livre de Lyon.
- Sürücü, L., & Maslakçı, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694–2726. <http://dx.doi.org/10.15295/bmij.v8i3.1540>

- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson Education.
- Tan, F. Z., & Olaore, G. O. (2021). Effect of organizational learning and effectiveness on the operations, employees productivity and management performance. *Vilakshan - XIMB Journal of Management*, 19(2), 110–127. <https://doi.org/10.1108/xjm-09-2020-0122>
- Tasdemir, D. D., Lutfi, S., & Bekmezci, M. (2024). Common Goals, Extraordinary Outcomes: Follower-Leader Goal Congruence's Influence on Inclusive Leadership and Extra-Role Behavior. *Pacific Business Review International*, 17(4), 15-29.
- Tasdemir, D. D., Yamen, M., & Demirkaya, H. (2017). A research about improvability of military leadership features which trained in the school of Turkish army. *Eurasian Business and Economics Journal*, 1(1), 146–157.
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral Ethics in Organizations: A Review. *Journal of Management*, 32(6), 951–990. <https://doi.org/10.1177/0149206306294258>
- Tubre, T. C., & Collins, J. M. (2000). Jackson and Schuler (1985) Revisited: A Meta-Analysis of the Relationships Between Role Ambiguity, Role Conflict, and Job Performance. *Journal of Management*, 26(1), 155–169. <https://doi.org/10.1177/014920630002600104>
- Wright, B. E., & Davis, B. S. (2003). Job Satisfaction In The Public Sector. *The American Review of Public Administration*, 33(1), 70–90. <https://doi.org/10.1177/0275074002250254>
- Yadav, M., & Rangnekar, S. (2013, December 13). *Role Clarity in India: Examining the Psychometric Properties of Role Ambiguity: Role Clarity Questionnaire*. Ssrn.com. <https://ssrn.com/abstract=2430680>