Shared Leadership and Employee Performance: The Mediating role of Psychological Safety

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Abstract

Shared leadership, a modern leadership approach, emphasizes the distribution of leadership responsibilities among team members. It has gained attention as a response to the increasing demands of work complexity, speed, and change. On the other hand, psychological safety refers to the perception of a safe and supportive work environment that fosters open communication, risk-taking, and learning. Previous research has explored the impact of shared leadership on employee performance, yielding conflicting results. This study aimed to investigate the relationship between shared leadership and employee performance, considering psychological safety as a mediator. To accomplish this, we conducted a cross-sectional field study involving 27 dyads from various sources. However, our findings did not yield significant results when examining the association between shared leadership and employee performance. Likewise, no significant results were found regarding the relationship between psychological safety, shared leadership, and employee performance. In conclusion, we were unable to support the notion that psychological safety partially mediates the relationship between shared leadership and employee performance.

Keywords: shared leadership, employee performance, psychological safety

Shared Leadership and Employee Performance: The Mediating role of Psychological Safety

In recent years, shared leadership has gained significant popularity in organizations, as it is seen as a response to the increasing demands of work complexity, speed and change in the world of work (Pearce & Conger, 2003). The authors defined shared leadership as a "dynamic, interactive influence process among individuals for which the objective is to lead one another to the achievement of group or organizational goals or both " (Pearce & Conger, 2003). According to this definition of shared leadership, it is applicable and relevant not only in organizational contexts, but also in various settings like healthcare or education. Some experts argue that members of a team who are lower in the organizational hierarchy may actually have a better understanding of the various changes and advancements happening within the team (Pearce, Manz, and Sims Jr., 2009). Moreover, it has been suggested that if leadership is spread across the leaders and the employees/followers, this will ensure faster responses to the aforementioned environmental pressure (Pearce, Manz, and Sims Jr., 2009). The authors explain that nowadays, the leader does not have enough time and enough knowledge to make all the decisions by themselves, and should therefore take the opportunity to collaborate together with their followers and combine all knowledge. By contrast, a study shows that shared leadership was negatively associated with team performance when there was ambiguity about leadership roles and responsibilities (Carson et al. 2007). They argue that when team members are unclear about who is responsible for making certain decisions or carrying out specific tasks, it can lead to reduced performance. Similarly, other researchers have found that having multiple leaders with equal authorities can lead to inconsistent decision-making when team members do not share the same

goals, values, and priorities (Pearce & Conger, 2003). These different findings emphasize that there is a research gap on the effectiveness of shared leadership on employee performance.

The present study aims to solve this gap by examining the relationship between shared leadership and employee performance, whilst considering psychological safety as an underlying mechanism that might explain the benefits of shared leadership on employee performance. Psychological safety is defined as "a shared belief that the team is safe for interpersonal risk-taking" (Edmonson, 1999). The study by Edmonson (1999) investigated the relationship between psychological safety and learning behavior in work teams, and how this might be related to team outcomes. The findings show that psychological safety increases team members feeling secure and comfortable to address concerns and share ideas without fearing negative consequences. As a consequence, being more open to new approaches and experiences due to psychological safety within an organization led to improved team performance.

Furthermore, although there is lots of research on the relationship between shared leadership and employee performance, most of the studies have not considered the dyadic level. A dyad refers to a relationship between two individuals, and in the context of shared leadership research, the dyad typically refers to the relationship between a leader and a follower. While some studies have examined the dyadic relationship between leaders and followers in the context of shared leadership, many studies have focused on the team level or higher levels of analysis, such as the organizational level. For example, a study by Pearce and Sims (2002) reviewed the literature on shared leadership and found that most studies focused on the team or organizational level, and only a small proportion of studies examined the dyadic level. Similarly, a meta-analysis by Wang, Waldman, and Zhang (2014) found that most studies on shared leadership focused on the team level and did not consider the dyadic relationship between leaders

and followers. This research gap will also be answered with the current study by considering the dyadic level.

Considering the research gaps in the field of the effectiveness of shared leadership, this study will contribute to the existing literature by introducing a research model that will examine the relationship between shared leadership and employee performance, using psychological safety as a mediator. While research has already shown that one of the underlying mechanisms that might contribute to the benefits of shared leadership on employee performance might be the concept of building trust among team members (Bligh, Pearce, & Kohles, 2006; Wang et al., 2014), none of the studies have considered psychological safety as a concept that might contribute to a more comprehensive understanding through which shared leadership influences employee performance. Since the study of Edmonson (1999) already showed how psychological safety leads to higher employee performance in hierarchical organizations, the same variable will be identified in this study as a key mediator that explains the impact of shared leadership on employee performance. As the best way to establish the degree of psychological safety within an organization is to assess both, the leaders, as well as the employees view, this current research study will examine the role of psychological safety as an underlying mechanism on the relationship between shared leadership and employee performance on a dyadic level. Finally, the results of this study will provide practical implications for organizations seeking to implement shared leadership as a leadership approach.

Theoretical Development

Shared Leadership and Psychological Safety

A study by Wang and colleagues (2019) found that shared leadership was positively

related to psychological safety, which in turn was positively related to team innovation. This study suggested that shared leadership can promote psychological safety by empowering team members to participate in decision-making, promoting open communication and collaboration, and providing opportunities for learning and growth. Similarly, another study by De Jong and colleagues (2015) found that shared leadership was positively related to psychological safety, which in turn was positively related to employee engagement and job satisfaction. This study suggested that shared leadership can promote psychological safety by fostering a climate of trust, support, and respect among team members. These findings led us assume our first hypothesize:

H1:"Shared leadership is positively associated with Psychological safety"

Shared Leadership and Employee Performance

The positive association of shared leadership on employee performance is predominantly at the heart of our understanding of the relationship between these two concepts. Several studies provide evidence supporting this association. For example, a positive relationship between shared leadership and team performance, as well as employee creativity and innovation has been demonstrated (Pearce & Conger, 2003). Similarly, shared leadership was linked to higher levels of job satisfaction, team performance, and employee commitment (Pearce, Sims, & Cox, 2003). Additionally, a comprehensive meta-analysis across 62 studies revealed a positive relationship between shared leadership and employee performance, as well as job satisfaction and organizational commitment. The authors suggested that shared leadership facilitates effective task coordination, knowledge sharing, and employee empowerment, ultimately leading to improved performance (Wang, Chen, & Liang, 2011).These studies collectively emphasize that shared leadership positively influences employee performance and various related outcomes.

In contrast to the positive association between shared leadership and employee performance, our study will also take the negative association between shared leadership and employee performance into account. Shared leadership especially relies on adequate coordination mechanisms, such as effective communication (Carson et al. 2007). If these coordination mechanisms are not well-established, shared leadership might create even more effort and it can have a negative effect on performance then.

Since the overall body of research suggests a positive effect of shared leadership on employee performance, we assume that our research will yield the same outcome. Therefore, we concluded the second hypothesis: *H2:"Shared leadership is positively associated with employee performance".*

Psychological Safety and Employee Performance

A growing body of research has demonstrated that psychological safety is a key predictor of employee performance. For example, a study by Edmondson and Lei (2014) found that psychological safety contributes to greater learning behavior and better performance.. Similarly, a study by Frazier et al. (2017) found that psychological safety was positively related to task performance and creativity in a sample of healthcare employees. Furthermore, another study by Edmondson (2002) found that psychological safety was associated with higher levels of creativity and innovation in the workplace. Moreover, psychological safety has also been shown to have a positive impact on employee well-being. One study by Wu and colleagues (2016) found that psychological safety was negatively related to job stress and burnout, and positively related to job satisfaction and work engagement. Overall, the findings led us conclude that

psychological safety is a critical component that promotes employee performance, which led us

hypothesize that: *H3:"Psychological safety is positively related to employee performance".*

Psychological Safety as a Mediator for the Relation of Shared Leadership and Employee

Performance

Shared leadership creates a climate that is conducive to employee voice, which can lead

to increased employee engagement, motivation, and job satisfaction, resulting in better

performance (Day & Dragoni, 2015). Employee voice encompasses the act of employees

expressing their opinions, suggestions, concerns, and ideas regarding work-related matters within

the organization. We perceive employee voice as a component of psychological safety, which

represents a broader context. Therefore, we will use employee voice as a reference for

psychological safety in this context.

Moreover, a study conducted by Day and Dragoni (2015) investigated the concept of

employee voice in relation to shared leadership and its impact on employee performance. The

findings of the study indicated that shared leadership has a positive effect on employee voice.

This implies that when team members have an equal amount of power and authority in

decision-making, they tend to feel more at ease expressing their thoughts, concerns, and ideas.

Consequently, this fosters an environment of increased psychological safety within the team.

Subsequently, there was a positive correlation between employee voice and employee

performance. Furthermore, psychological safety, which is influenced positively by shared

leadership, directly affects employee performance. When employees experience a sense of

psychological safety, they are more inclined to actively participate in discussions, contribute their

ideas, and take calculated risks without the apprehension of facing punishment or

embarrassment. Consequently, this boosts their motivation, job satisfaction, and overall performance. In addition, it is crucial to highlight the role of psychological safety in the context of shared leadership and its impact on employee performance, particularly in complex and dynamic work environments that necessitate rapid adaptation to changing circumstances. The significance of psychological safety in such contexts was emphasized in a study by Edmonson (1999).

Given that shared leadership is often viewed as a response to the growing demands of an evolving work environment, we assume that the positive effect that shared leadership has on psychological safety, and the positive effect that psychological safety has in turn on employee performance, explains how shared leadership can be a response to the growing working demands. More importantly, we suggest that shared leadership influences employee performance indirectly through the mediating mechanism of psychological safety. Shared leadership enhances psychological safety, which in turn leads to improved employee performance.

Thereby, we hypothesized to find the following: *H4:"The relationship between shared leadership and employee performance is partially mediated by psychological safety"*

Method

Participants

Our initial sample size of 166 participants was narrowed down due to the fact that several cases had to be excluded from the data set according to the following criteria: one matching code (MANSOO) was included twice in the employee data set. We decided to include the completed data and cut off the incomplete one. Two other dyads did not completely fill the questionnaire out, which is why they had to be excluded as well. Therefore, we ended up with a final sample of

27 dyads, consisting of 27 leaders and 27 employees (54 participants in total). The final sample included 26 male participants (48%), and 28 female participants (52%). The mean age of the leaders' was 42.89 (*SD* = 13.34) and the mean age of the employees was 32.67 (*SD* = 10.98).

Design and procedure

Our study is a cross sectional, multi-source field study. The data was collected online via qualtrics, by giving each participant access to an online survey link. Data for this study was gathered through the administration of two separate survey questionnaires. One questionnaire was completed by the employees, while the other was completed by their respective leaders.Prior to our data collection, the Ethics committee of the behavioral and social sciences faculty at University of Groningen approved our study.

The students of the bachelor thesis group 2023 of Team Dynamics of the University of Groningen actively approached participants for this study by requesting volunteers and utilizing their family and friend network. The criteria that has been used to choose participants were the following: a minimum age of 18 years, working hours of at least 20 hours per week in a company, being fluent in Dutch, and being employed/part of a team. The volunteers were not compensated for their time and contribution to the study. Prior to participating in the survey, all participants were provided with informed consent documents that outlined the study's purpose, ensured the confidentiality of the collected data, and emphasized the voluntary and anonymous nature of their involvement. The survey itself took approximately 10-15 minutes to complete and encompassed various variables relevant to the Team Dynamics group's thesis project. However, for the purpose of this specific study, only the measures pertaining to shared leadership, psychological safety, employee performance, and socio-demographic information will be considered.

Measure

The dependent variable, individual employee performance, adopted a 7-point-Likert scale from Van der Vegt and Bunderson (2005), ranging from 1(very poor performance) to 7 (very good performance). Hence, low scores indicated low team performance whereas high scores indicated high team performance. Leaders were asked to rate their employees on the following items: "How does this team score on 1. Achieving team goals?, 2. Achieving deadlines?, 3. Working speed?, 4. The quality of the work?, 5. Productivity?, and 6. Effectiveness? The reliability for the assessment was pretty high with Cronbach's .940. This indicates that the items in the scale consistently measure the concept of shared leadership.

The independent variable, shared leadership, was assessed using Hoch's (2013) 18-item scale. It measures four leadership styles: transformational leadership, individual empowering leadership, team empowering leadership, and participative leadership. The first six items assess transformational leadership, focusing on colleagues providing a clear vision, being driven by higher purposes, showing enthusiasm for efforts, encouraging rethinking of ideas, seeking diverse perspectives, and promoting going above and beyond. Items 7 to 10 assess individual empowering leadership, including encouraging problem-solving without supervision, assuming responsibilities independently, fostering learning, and self-acknowledgement for meeting challenges. Items 11 to 14 assess team empowering leadership, emphasizing working together, coordinating efforts, fostering teamwork, and expecting effective collaboration. Lastly, items 15 to 18 measure participative leadership, addressing joint goal setting, collaborative decision-making, reaching agreements, and performance goal development. The reliability of the scale was high ($\alpha = .92$), which suggests that the items in the scale are consistently measuring the concept of shared leadership.

Psychological safety was assessed by adopting the five items from Garvin, Edmondson, and Gino (2008). The 1 to 5 Likert scale asks respondents to indicate their level of agreement or disagreement with a series of statements as follows: "In this team, it is easy to speak out and express your opinion," "If you make a mistake on this team, it will be used against you," "People on this team usually talk easily to each other about problems and disagreements," "People on this team are eager to share information about what works and what doesn't," and "Keeping your cards close' is the best way to get ahead on this team." The reliability of this assessment scale was rather low with cronbach's alpha level being .522. The low level of reliability implies that the scale may not accurately represent the true level of psychological safety within the team. Therefore, interpreting the results obtained from this scale should be done with caution.

Results

Descriptive Statistics

To obtain a single overall value for each of the main variables in the model, the average was calculated by summing up the values across all items associated with each variable. Therefore, the analysis yielded measures of shared leadership, psychological safety, and employee performance on a global scale. As shown in Table 1, Psychological safety, as assessed through employee responses, exhibited a remarkably high mean score of 4.55 *(SD = 0.75; Min=3.20; Max=6.80)*, indicating that employees perceived a strong sense of safety in expressing their thoughts and ideas. Similarly, shared leadership, also assessed by employees, exhibited a notably high mean score of 5.39 *(SD = 0.58; Min=4.61; Max=7.00)*. This suggests that employees perceived a substantial distribution of leadership responsibilities among team members. Furthermore, the mean score for employee performance, as assessed through ratings

provided by leaders, was found to be high at 5.81 *(SD = 1.02; Min=2.50; Max=7.00)*. This indicates that employees' performance was rated positively by their leaders, suggesting a high level of individual job performance. All the scores were assessed through a 7 point likert scale, ranging from 1 (totally disagree) to 7 (totally agree).

Moreover, Table 1 presents the calculated correlations among the variables. Notably, the correlation between Psychological safety and employee performance was found to be non-significant *(p =.518)*, as was the correlation between shared leadership and employee performance *(p =.518)*, and the correlation between shared leadership and psychological safety *(p =.078)*.

Table 1

Means, Standard Deviations, and Correlations Between Core Study Variables

Variable	Mean	*SD*	1.	2.	3.
1. Psychological safety[a]	4.55	.75	–	.345	.130
2. Shared Leadership[a]	5.34	.58	.345	–	.326
3. Employee Performance[b]	5.81	1.02	.130	.326	–

Note. N = 27 dyads composed of 27 leaders and 27 employees.

[a] Rated by employees and aggregated across all employees of a given team.

[b] Rated by leaders.

To test the assumption of normality, we used a residual plot (see Appendix A) , which showed no serious deviation from the assumption of normality. In addition, we inspected an assumption check for linearity and heteroscedasticity through a residual-by-predicted-values plot (see Appendix B). The plot indicated no reasons to assume serious deviations from the assumptions of linearity and heteroscedasticity. However, there was one outlier case with a very high standardized predicted value. Given the already low number of participants, we decided to accept the outlier and move on with the analysis. The variance inflation factors (VIF) were both below 4.0, indicating no serious problems of multicollinearity (see Appendix C). Overall then, most assumptions for the regression analysis were met, but yet, results should be interpreted with some care due to the present outlier.

Hypothesis Testing

Hypothesis 1 states that shared leadership is positively related to employee performance, Hypothesis 2 states that psychological safety is positively related to employee performance, Hypothesis 3 states that shared leadership is positively related to psychological safety, and Hypothesis 4 states that the relationship between shared leadership and employee performance is partially mediated by psychological safety. As shown in Table 3, to test these hypotheses, we created a mediation analysis with regression utilizing Hayes PROCESS v4.2 tool in SPSS (Hayes, 2013).

The *direct* effect of shared leadership on employee performance resulted in non-significant findings with $F_{(2,24)}=$, $p > .05$; $b = .563$; CI (-.186; 1.312). Additionally, psychological safety is not associated with employee performance, showing non-significant results with $F_{(2,24)}=1.43$, $p > .05$; $b = .027$; CI (-.554; .609). Our complete model including the

predictors and the interaction explained 3.2% of variance in employee performance and the model was not significant, $R^2 = .107$, Adjusted $R^2 = .032$, $F(2, 24) = 1.431$, $p > .05$. Thus, our hypotheses that shared leadership is positively related to employee performance (Hypothesis 1) and that psychological safety is positively related to employee performance (Hypothesis 2) were not supported. Next, we examined shared leadership as a predictor for psychological safety. Therefore, we checked whether our predictive variable did indeed predict our mediator. We got $F(1,25)=3.389$, $p > .05$; $b = .445$; CI (-.053; .943), which indicates a non-significant relationship. Therefore, our hypothesis that shared leadership is positively related to psychological safety (Hypothesis 3) was not supported either.

Lastly, we tested the indirect effect of shared leadership on employee performance via psychological safety. Thereby we found non-significant results with $B= .012$ and the Bootstrap Confidence interval contained zero (BootLLCI: -.293; BootULCI: 1.312; b=.012), suggesting that the population mean might be close to zero. Overall, given the non-significant interaction effect, our results did not support our hypothesis that the relationship between shared leadership and employee performance is partially mediated by psychological safety (Hypothesis 4).

Table 3. Results of PROCESS Mediation Analysis on Team Performance

Effect	Estimate	SE	t	p	LLCI	ULCI
Total Effect	.575	.334	1.723	.097	-.112	1.263
Direct Effect	.563	.363	1.552	.134	-.186	1.312
Indirect Effect	.012	.132	-	-	-.328	.243

Note: $N = 27$. CI $= 95\%$

Discussion

Recent research has indicated that shared leadership may exert a significant influence on employee performance (Pearce & Conger, 2003). However, the findings regarding this connection are inconsistent, with certain studies suggesting a negative correlation between

shared leadership and employee performance (Carson et al., 2007). Furthermore, there is a lack of research on the specific dyadic level of this relationship, as most studies have primarily focused on the team or organizational level (Pearce & Sims, 2002). Our study focused on the team level of organizations, with a particular emphasis on examining the interplay between variables at the dyadic level. We evaluated the concept of Shared leadership, as perceived by both leaders and followers, along with employee performance, as evaluated by leaders, and psychological safety, as perceived by employees by specifically focusing on the dyadic relationship of our variables. We assessed Shared leadership between leaders and followers, as rated by the employee, employee performance, as rated by the leader, and psychological safety, as rated by the employee. Drawing upon current understanding of the association between shared leadership and employee performance, our current investigation aimed to explore this relationship at the dyadic level while considering psychological safety as a mediator.

Our initial hypotheses proposed a positive association between shared leadership and employee performance. Additionally, drawing from the existing literature on psychological safety, we hypothesized a positive relationship between shared leadership and psychological safety, as well as a positive relationship between psychological safety and employee performance. Furthermore, we hypothesized that psychological safety would partially mediate the relationship between shared leadership and employee performance. However, our findings did not align with these hypotheses. None of the variables, including shared leadership, psychological safety, or the indirect effect of psychological safety on shared leadership and employee performance, significantly predicted employee performance. Therefore, our study did not support prior research on the relationship between shared leadership and employee performance. Our findings did not yield any significant new insights in this particular research

area. Nonetheless, it is worth noting that our study revealed a noteworthy distribution of leadership responsibilities among team members, as indicated by the high mean value for shared leadership. Furthermore, the high mean value for psychological safety within the team could potentially be attributed to the positive influence of shared leadership on psychological safety. Additionally, the elevated mean value for employee performance in our study suggests a high level of individual job performance, which may be attributed to the positive impact of shared leadership and psychological safety. However, given that our results did not reach statistical significance, we speculate that the limited size of our sample prevented us from detecting potential significant relationships among the variables.

The findings of this investigation present inconsistencies with established theory regarding the relationship between shared leadership and employee performance. Surprisingly, no clear positive or negative association was observed between the two variables. These results also challenge the assertions made by scholars, such as Edmonson (1999), who proposed a positive relationship between psychological safety and team outcomes through openness to new approaches and experiences. Employee performance is considered a part of team outcomes, yet our study failed to demonstrate the positive effect of psychological safety on employee performance.

Methodologically, it is likely that our sample size (27 dyads, 54 participants) was insufficient to detect significant effects. Although we initially had a larger sample size (112 participants), some dyads were excluded due to incomplete data caused by unmatching codes. Additionally, we faced challenges during data recruitment. Many employees hesitated to ask their leaders to complete the questionnaire due to hierarchical differences, busy schedules, or strained relationships. Furthermore, our active presence during the questionnaire completion

process played a vital role in ensuring its thorough and accurate completion.However, the lengthy nature of the 15-minute questionnaire posed difficulties for some participants, resulting in delayed or incomplete responses despite our efforts to send reminders.

From a theoretical perspective, it is plausible that our research model inadequately reflects reality. The elevated mean values observed for each variable suggest that the questionnaire may have been completed solely by participants engaged in harmonious dyadic relationships, where both individuals held a balanced position.. This suggests a potential selection bias in our results.

Strengths and Limitations

One notable strength of this study lies in the utilization of data collected from both leaders and employees, enabling us to capture diverse perspectives within the dyadic relationship. This approach was crucial for a comprehensive examination of the relationship between shared leadership and employee performance. Additionally, the questionnaires were completed independently, ensuring anonymity of responses. This methodological choice helped mitigate the potential bias of socially desirable answers, enhancing the validity of our findings.

Nevertheless, it is crucial to acknowledge the limitations of this study, particularly concerning the reliability of the variable psychological safety. The results of our study indicated a reliability level that fell below the recommended threshold of 0.70, indicating a diminished level of reliability. This suggests that we encountered challenges in accurately measuring the intended construct of psychological safety, which, in turn, may have influenced the absence of significant findings in our thesis. In essence, our inability to effectively capture the true impact of psychological safety likely played a role in the lack of conclusive results.

Second of all, we were unable to account for the presence of present moment bias, which could have influenced participants' responses based on their immediate state or circumstances. For instance, participants may have rated psychological safety lower due to a recent negative event at work on the day of questionnaire completion. This limitation raises the need for caution when interpreting the results. Furthermore, it is important to note that the study relies on correlational data, preventing the establishment of causal relationships. While we can examine associations between variables, we cannot infer causation based solely on our findings.

Future Research

In light of the non-significant results obtained in the present study, several avenues for future research can be considered to advance our understanding of the relationship between shared leadership, employee performance, and the mediating role of psychological safety. Firstly, employing a larger sample size would enhance statistical power and increase the generalizability of the findings. This would provide more robust evidence regarding the relationship under investigation. Furthermore, incorporating the perspectives of both leaders and employees on each assessed variable would offer valuable insights. Comparing and integrating two viewpoints on each variable in the analysis could provide a more comprehensive understanding of the relationship between shared leadership and employee performance and enhance data validity. Additionally, future research could consider the influence of leader personality characteristics, such as perfectionism or conscientiousness, on the assessment of individual employee performances (Song et al. 2022). This would shed light on potential factors that might affect the relationship between shared leadership and employee performance. Further, employing a longitudinal study design would be a promising direction for future research. By administering the same questionnaire multiple times over an extended period, it would be possible to minimize

the influence of present moment bias observed in our study. This approach would provide a more accurate assessment of the relationship between shared leadership and employee performance, over time. Lastly, future research might want to explore the relationship between shared leadership, employee performance, and the mediating effect of psychological safety within specific fields of organizations (Kocolowski, 2010; Sweeney, Clarke & Higgs, 2018). Our study did not narrow down to a particular field, and as a result, it is possible that the relationship we observed may vary across different industries or sectors. By focusing on a specific field, researchers can delve deeper into the nuances and contextual factors that may influence the relationship. This approach would provide a more targeted understanding of how shared leadership, employee performance, and psychological safety interplay within distinct organizational contexts. By addressing these considerations in future investigations, we can further deepen our understanding of the complex dynamics between shared leadership, employee performance, psychological safety, and other relevant factors.

Conclusion

Organizations are increasingly implementing shared leadership styles as a response to the increasing pressure of the work environment, as it enhances collaboration, and reduces work-load and stress. With the application of such structures, research is needed to examine the effects of this leadership style on work-related outcomes, such as employee performance. The intent of this investigation was to fill in the gaps of existing literature about the inconsistent findings of the benefits of shared leadership on employee performance, by considering psychological safety as a mediator between these two factors. Additionally, since team dynamics and shared leadership is a concept that includes the relationship between a leader and a follower, we sought to establish the relationship between shared leadership and employee performance on

a dyadic level. While the relationships observed in this investigation require further research and validation, it is crucial to acknowledge that even outcomes that are not statistically significant do not automatically imply the absence of a relationship in our research. Rather, they imply that the available evidence is inadequate to substantiate the hypothesized connections in our study.

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Appendix A

Figure 1

Residual Histogram with the Dependent Variable Employee Performance
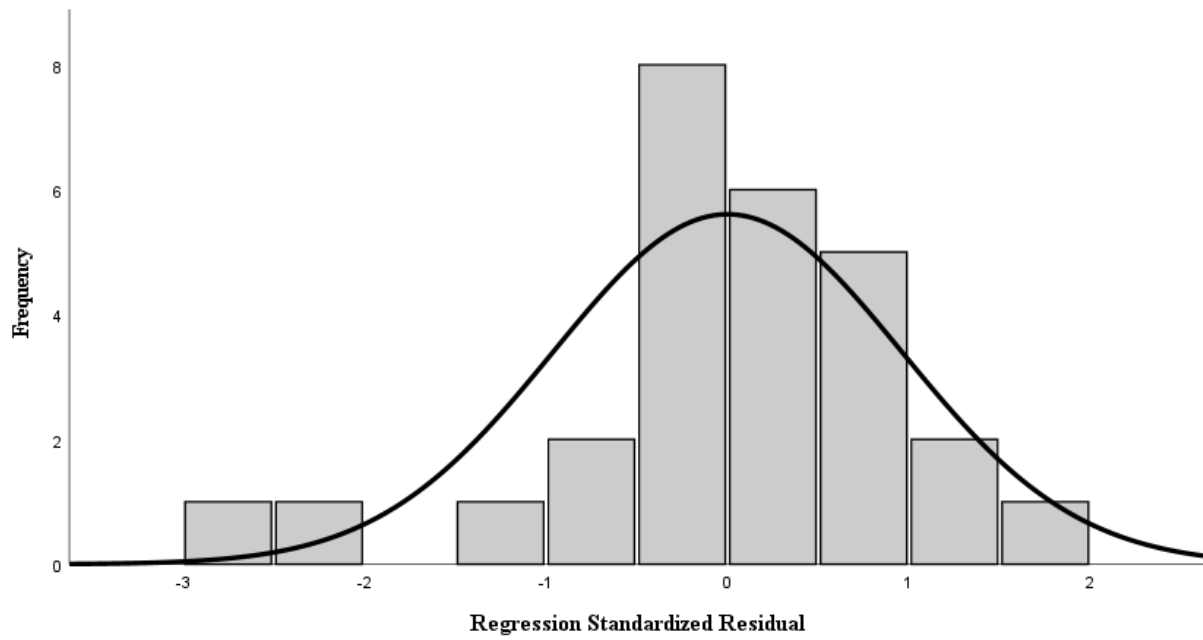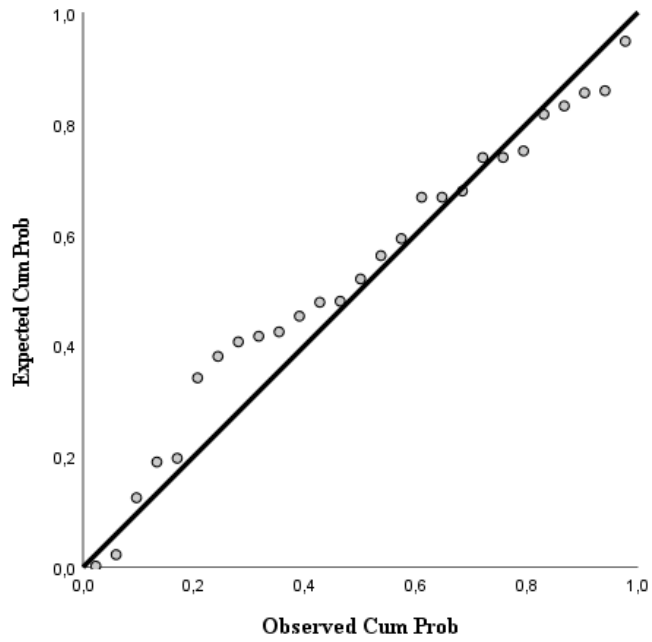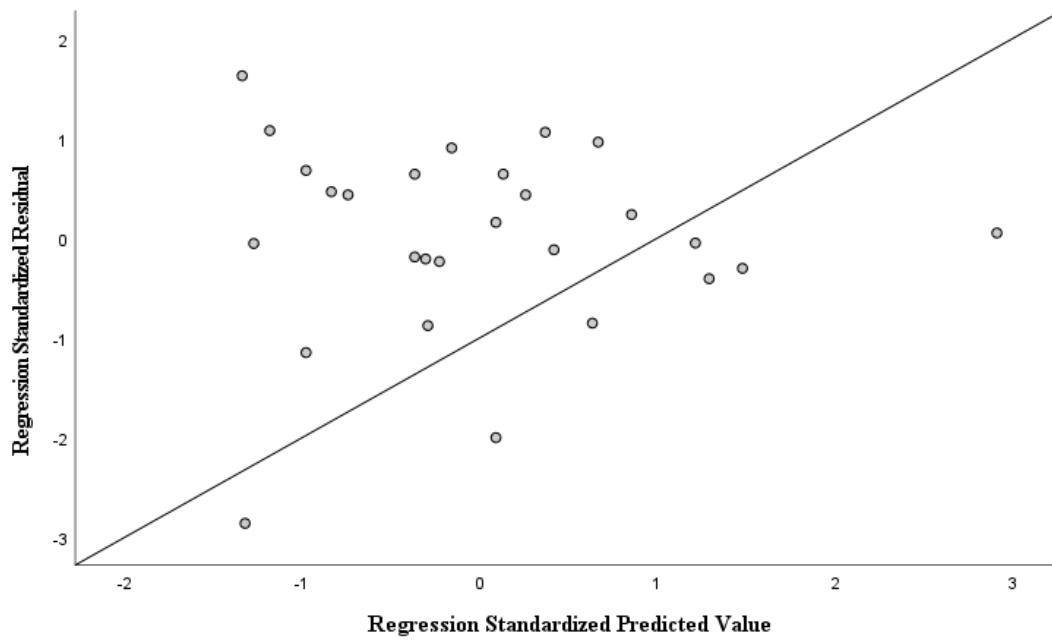
Figure 2

Normal P -P Plot of Regression Standardized Residual with the Dependent Variable Employee

Performance

Appendix B

Figure 3

Residual by Predicted Plot with the Dependent Variable Employee Performance

Appendix C

Table 2

Multicollinearity Regression with the Dependent Variable Employee Performance, the

Independent Variable Shared Leadership, and the Mediator Psychological Safety

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2,658	1,942		1,369	,184		
	SLTotal	,563	,363	,319	1,552	,134	,881	1,136
	PSTotal	,027	,282	,020	,096	,924	,881	1,136

a. Dependent Variable: EPtotal