

The Effects Of Shared Leadership, Self-Efficacy On Performance

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Bachelor thesis

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03-07-2025

Abstract

Shared leadership, characterised by distributed decision making among team members, has emerged as an alternative to traditional leadership models, fostering job satisfaction, creativity and performance. While the impact of shared leadership on team dynamics is well documented, its role in leader-employee dyadic relationships and the mediating influence of self efficacy remain under explored. This study investigates how shared leadership affects employee performance in dyadic contexts, with self efficacy, defined as an individuals belief in their task execution capabilities, as a mediator. We hypothesise that shared leadership enhances performance and self efficacy, and that self efficacy mediates the shared leadership-performance relationship. Using quantitative, cross sectional design, data was collected from 131 leader-employee dyads in Dutch organisations via validated questionnaires measuring shared leadership, self efficacy and performance. Linear regression analysis revealed that shared leadership positively predicts performance ($b=.33, p<.001$) and self efficacy ($b=.37, p<.001$), while self efficacy positively predicts performance. Mediation analysis confirmed self efficacy partially mediates the shared leadership-performance relationship, with shared leadership's effect on performance reduced when self efficacy is included ($b=.27, p=.001$). These findings align with prior research, extending shared leadership's applicability to dyadic settings and highlighting self efficacy's crucial role in enhancing performance through increased confidence. The study underscores shared leadership's potential in modern work environments, particularly remote settings, and suggests practical implications for fostering collaborative leadership to boost employee outcomes. Future research should explore longitudinal designs and diverse cultural contexts to enhance generalisability.

Keywords: Shared leadership, self efficacy, performance, dyads

Shared Leadership, Self-Efficacy and Performance

Shared leadership (SL) has gained attention as an alternative to traditional leadership in organisations. SL refers to the leadership style where decision-making is distributed among team members rather than held by a single person (Wu & Cormican, 2021). In the conventional autocratic organisation the power to make decision lies by one leader or a small group, and even in more democratic systems, single-leader structures often dominate, as seen in the majority of modern day corporations (Wang et al., 2014). Shared leadership (SL) offers unique workplace benefits compared to autocratic structures, promoting job satisfaction, creativity, and performance (Wu & Cormican, 2021; Rahmadani et al., 2020). However, research rarely explores how the individual confidence such as self-efficacy, mediates SL's impact on performance in leader-employee dyadic relationships, a gap this study addresses (Han et al., 2021; Hans & Gupta, 2022).

While most shared leadership research focusses on team dynamics (Wang et al., 2014), less is known about its role in leader-employee dyads, where leadership is shared in two way relationships; these pairs form part of the team system (Kim et al., 2020). This gap is increasingly relevant as remote work settings emphasise independent dyadic interactions over traditional team structures. The relationship between SL and Performance is not consistent; some studies report mixed findings. For example, Wu and Cormican (2021) found positive performance outcomes between SL and PF, others, such as Wang et al. (2014), found that the effectiveness of shared leadership can vary depending on dynamics of a team and individual contributions. These differences imply that there could be mediating factors that explain how SL influences performance. Self-efficacy, defined as an individuals belief in their ability to execute tasks (Bandura, 1997), serves as a important mediator in this context. By enhancing confidence in the individuals capabilities, self efficacy enhances their engagement in shared decision making, and thereby strengthening the link between shared leadership and performance outcomes in dyadic relationships (Han et al., 2021).

Another overlooked factor is self-efficacy. The classic book by Albert Bandura describes self-efficacy as a belief in one's own capabilities, which directly influences performance outcomes. SE affects the effort put in and the persistence and resilience one has. Studies show that self-efficacy strongly predicts individual performance (Rahbi et al., 2022), yet its connection to SL is under explored. Given that SL involves team members taking on more responsibility, it could boost their confidence and in turn their performance. This study aims to address this gap by examining whether self-efficacy acts as a mediator between SL and performance, with a focus on dyadic interactions rather than team dynamics. By doing so, it aims to add new insights to the field of leadership. This study specifically focusses on dyadic relationships, where employees assess the extent to which they share leadership responsibilities with their leader, rather than the distribution of leadership among team members. This approach can empower employees through shared decision-making and mutual support, enabling more hands-on experience. For example, team members may contribute ideas during collaborative discussions, and build practical skills through active involvement, which can boost their confidence and deepen their commitment to their roles.

The first hypothesis predicts that SL enhances performance. Extensive research established a positive relationship between shared leadership and various indicators of team success such as team effectiveness and performance. When a team has SL, they share information, increase their commitment, and take responsibility for decision-making processes. This collective engagement enhances team functioning and effectiveness. Social identity theory (SIT) explains best how shared leadership boosts team outcomes through increasing commitment, taking responsibility, factors like hope and optimism, and better collaboration (Hogg et al., 2012). This theory ties SL to team cohesion, fostering a group identity where members feel more connected. When teams share their leadership, they build commitment by working toward common goals. Responsibility grows as everyone takes ownership of decisions. Hope and optimism arise from a shared positive vision, while collaboration strengthens through trust and teamwork. Wang et al. (2014) show SL enhances

team effectiveness driven by cohesion, Wu & Corminacan (2021) found that SL positively impacts team outcomes. This study hypothesises that SL scores are positively associated with performance scores. These studies implicate that SL is consistently increases team success and are worth the attention of more studies and organisations alike. The link between shared leadership and team performance was also found in a study performed in South Korea: The study found that SL is positively associated with team performance through what they call psychological capital; factors like hope and optimism (Han, et al. 2021). This also shows up in a longitudinal study about exploring the antecedents and outcomes of shared leadership in a science team (Serban & Roberts, 2016). In this study scientists track a multidisciplinary science team over 18 months, and they found that teams with higher SL show better collaboration, leading to stronger outcomes over time. The first hypothesis of this paper is that shared leadership enhances team performance.

The second hypothesis examines the under-explored relationship between shared leadership (SL) and self-efficacy. Although there are no direct, specific papers written on the relationship between shared leadership (SL) and self efficacy, there are related studies that touch on aspects of SL and self-efficacy in broader contexts. Using a mixed methods approach, a study from 2022 examined how training affects employee performance. Results show how training improves knowledge, skills and abilities and enhances performance. Self-efficacy theory, developed by Bandura in 1977, states that people's belief in their own ability to perform tasks drives their motivation, effort and performance. Strong self efficacy leads to better task outcomes because individuals feel confident, persist through challenges and approach goals with optimism. Sharing leadership tasks will make employers more knowledgeable about the field they work in through considering various perspectives, which in turn can make them more productive and effective. Recent studies that focus on SE find that it is a good predictor for performance: researches found that SE moderates SL's relationship with job characteristics, strengthening performance outcomes when employees feel capable. SL fosters collaboration, but SE is critical for individuals

to engage in shared roles (Hans & Gupta, 2022). Another study from UAE found that SE mediates leaderships effect on performance, as participative leadership increases confidence, enhancing task outcomes. The second hypothesis of this study is that SL is positively associated with self efficacy.

The third hypothesis investigates the relationship between self efficacy (SE) and performance. Within the self efficacy literature there are differences between general self efficacy, academic self efficacy and task specific self efficacy (TSE is situational and bound to specific tasks, GSE is a stable, overarching personality trait) where GSE is the broadest, and TSE is the more narrow and specific, and ASE focuses on academic contexts (Cassidy, 2019; Yokoyama, 2019). Most research on self efficacy and therefore the biggest sample sizes are done on students and measure academic performance. It is clear that academic self efficacy influences academic achievement and satisfaction. GSE, the broad underlying personality trait is measured with questionnaires that generally ask about managing difficult problems in life in a broad sense. Its reliability is stable across cultures (Scholz et al 2002). TSE is the measurement of self efficacy of specific job related tasks. TSE is measured by asking the participant to rate his or hers belief in their own job related capabilities or to cope with job related obstacles, for example: "I can remain calm when facing difficulties in my job because I can rely on my abilities" (Rigotti 2008). A meta analysis found that TSE for specific job tasks was a significant predictor of task performance (Christian, Garza, & Slaughter, 2011). The same goes for TSE in sports (Moritz et al., 2000). As Bandura showed in his paper from 1977; Successful task completion increases SE, which reinforces the behaviour, creating a positive feedback loop (Bandura 1977). His Social Cognitive Theory is the core of self efficacy and it can explain how someones belief in their capabilities mediates effort and performance. The hypothesis of this paper is that SE is positively associated with performance.

The fourth hypothesis in this study investigates how SL enhances performance in leader-employee dyads, asking whether SE mediates this relationship. Although SL consistently improves performance (Wang et al., 2015; Wu & Cormincan, 2021), the mediating mechanisms in dyadic

context remain under-explored. Self efficacy theory suggests that individuals will perform better when their confident in their abilities (Bandura 1977). Sharing leadership within dyads fosters learning about decision-making and responsibility, boosting SE. Role theory compliments this: Individuals behaviours are shaped by the roles they occupy within social systems, like scripts guiding actions (Biddle, 1986). In dyads, SL could create collaborative roles, enhancing confidence through clear expectations. Hans and Gupta (2022) found SE strengthens SL's effects in teams, hinting at its mediating potential, yet no studies directly test SE's role in SL-performance dyadic relationships.

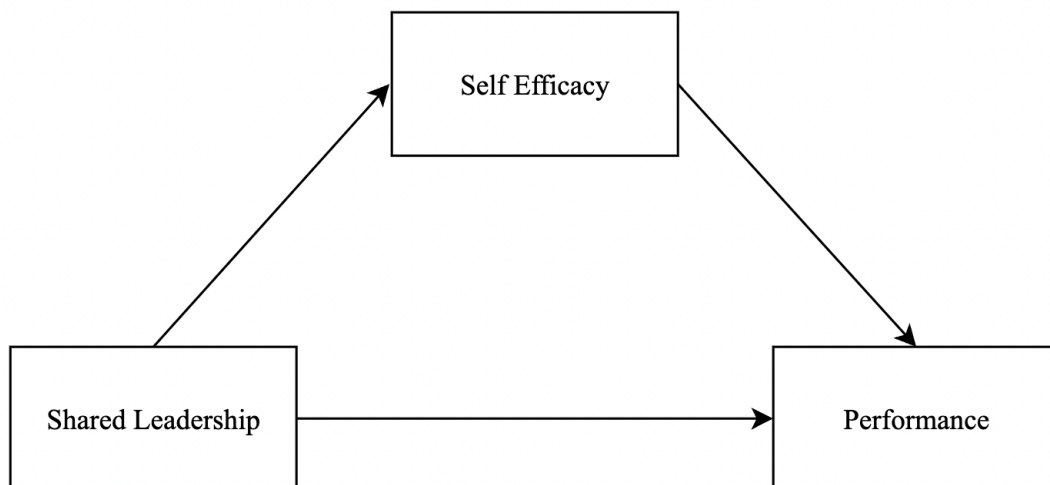


Figure 1: *A conceptual model of self-efficacy as a mediating variable between shared leadership and performance.*

By introducing SE as a mediator, this study fills this gap, arguing that SL enhances performance by increasing dyadic members' confidence in leadership processes. The fourth hypothesis states that SE mediates the relationship between SL and performance in leader-worker dyads.

Method

Participants

This study uses a quantitative, cross sectional research design to examine the relationship among shared leadership, performance and self efficacy in leader-employee dyads. To measure Shared

Leadership (SL), Performance and Self Efficacy (SE) a composition of three different questionnaires is used. The leader filled in the questionnaire about the employee, and the employee filled in the questionnaire about the leader. We define leaders as people in the organisation with supervisory roles; employees as people that report directly to the leader. A leader is defined as those with formal titles and tasks that requires making decisions for the employees.

Design

To measure shared leadership, we adapted the Shared Leadership Questionnaire (SLQ) - Short Scale, developed by Hoch et al. (2010a) to fit to the dyadic level. In line with the original study, which relied on team member ratings, we collected data from employees to rate the shared leadership within their teams. The scale has 18 items assessing leadership dimensions: 6 items, for example: ("Mijn leidinggevende geeft een duidelijk beeld van waar ons team voor staat" *en* "Mijn leidinggevende laat waardering zien voor mijn inspanningen") for transformational leadership and 12 items for empowering leadership. Responses are recorded on a 7-point scale (1 = Strongly Disagree to 7 = Strongly Agree). The original scale by Hoch et al. (2010a), as reported in Hoch (2013), showed high reliability ($\alpha = .91$), and can be found in appendix B.

To measure performance, we adapted the Team Performance Scale, developed by Van der Vegt and Bunderson (2005) to fit to the dyadic level. The leader filled in this part of the broader questionnaire exclusively, rating productivity of the employee with 27 items (Mijn medewerker: 1). Voert de opgedragen taken naar behoren uit; 2) Voldoet aan de verantwoordelijkheden vermeld in de functiebeschrijving; 3) Voert de taken uit die van hem/haar verwacht worden etc.), This scale measures overall team effectiveness at the team level, capturing perceptions of performance across five key criteria: efficiency, quality, overall achievement, productivity, and mission fulfilment. Respondents were instructed to rate one team member's performance. Responses are recorded on a 7-point scale (1 = *far below average* to 7 = *far above average*). The original scale by Van der Vegt and Bunderson (2005) showed high reliability ($\alpha = .87$), and can be found in appendix B.

To measure Self Efficacy we adapted the short Self Efficacy scale developed by Rigotti (2008) to fit to the dyadic level. The scale measures task occupational self-efficacy, a construct reflecting a person's perceived competence in successfully fulfilling job-related tasks with 6 items (1. Ik kan kalm blijven wanneer ik geconfronteerd word met moeilijkheden in mijn werk, omdat ik kan terugvallen op mijn vaardigheden; 2) Wanneer ik geconfronteerd word met een probleem in mijn werk, dan vind ik meestal meerdere oplossingen; 3. Wat er ook gebeurt in mijn werk, ik kan het meestal wel aan). Responses are recorded on a 7-point scale (1 = *far below average* to 7 = *far above average*). It is self-rated, capturing employees' confidence in their abilities to handle their job demands, such as problem-solving, meeting goals, and coping with difficulties. It is filled in by the employee exclusively since we are interested in his/her SE, not the leader's. The questionnaire can be found in appendix B.

Procedure

Bachelor students from the University of Groningen recruited participants by approaching local businesses and organisations in Groningen the Netherlands. The questionnaires were conducted in Dutch. Both leader and employee provided informed consent, and all data is anonymised to protect privacy. To create a bigger sample the collected data from the previous year is added. The complete data contains 135 leader-employee pairs (270 participants in total) from different businesses and organisations.

Incomplete responses were excluded from the dataset. Therefore, the final sample contains 131 leader-employee pairs . To ensure data quality, checks for outliers were conducted.

To prepare the data for the analysis the variables Performance, Shared Leadership and Self Efficacy needed to be aggregated. The variable Performance is created by calculating the average score of the 27 items in the questionnaire. The items 6, 7, 17, 18 and 19 were reversed. Before the variable Shared Leadership was aggregated, the items of the questionnaire were recoded to have the same scale as the other items. Afterwards, Shared Leadership was calculated with the 18 items of

the questionnaire. The variable Self Efficacy is created by calculating the average score of the 6 items in the questionnaire. All variables have a score between 1 and 7 (1 = *far below average* to 7 = *far above average*).

Data Analysis

Multiple regression analyses will be conducted using SPSS to examine the relationship between SL, SE, and PE. The assumptions of normality, linearity and multicollinearity will be tested before the analysis. The regression model will examine the effect of SL on PE, SL on SE, SE on PE and the mediating effect of SE between SL and PE. Statistical significance will be evaluated at the $p < .05$ level.

Results

Descriptives

The final sample for the mediation analysis comprised $N = 131$ leader-employee dyads. The original sample included $N = 135$ dyads; however, exclusions were made due to incomplete responses. The study examined shared leadership as the independent variable, performance as the dependent variable, and self efficacy as the mediating variable. Each of these variables was assessed on a 7-point likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

The descriptive statistics for the variables are presented in Table 1. The means of Performance, Shared Leadership and Self-efficacy are all between 5.45 and 5.90 (SD 's are between 0.72 and 0.81). This shows that all respondents score relatively high on the 7-point likert scale. All variables have a significant positive correlation between 0.308 and 0.360 ($p < .01$).

Table 1*Mean (M), Standard Deviation (SD), and Correlation*

Variables	<i>M</i>	<i>SD</i>	Performance	Shared Leadership	Self-efficacy
1. Performance	5.89	.72	-	.36*	.31*
2. Shared leadership	5.45	.78	.36*	-	.36*
3. Self-efficacy	5.76	.82	.31*	.36*	-

Note. N Performance = 131, * The correlation is significant at p values $< .01$ (2-tailed)

Assumption checks

Before the analysis, linear regression assumptions were tested. First of all, the data is checked for outliers. The maximum score on the Cook's distance is 0.308, indicating that there are no influential outliers. Secondly, Linearity was then evaluated. A scatterplot of self-efficacy versus performance (Figure 1, Appendix C) showed a positive trend ($R^2 = 0.095$), meeting the linearity assumption. Similarly, shared leadership versus performance (Figure 2, Appendix C) displayed a weak positive trend ($R^2 = 0.023$), supporting linearity. Third, Normality of residuals was assessed via a histogram (figure 3, Appendix C), showing a bell-shaped distribution. A P-P plot (figure 4, Appendix C) confirmed normality. Fourth, Homoscedasticiteit was verified using a scatterplot of residuals against predicted values (figure 5, Appendix C). Independence of residuals of residuals was tested with the Durbin Watson statistic .928, being > 1.5 , this could indicate a positive autocorrelation in the residuals, suggesting that the assumption of independent errors may be violated. Lastly, multicollinearity was checked, $VIF = 1.00$, confirming no multicollinearity among the independent variables. Therefore, there are no strong indications that any of the assumptions are violated. The assumption checks can be found in appendix A.

Hypothesis testing

Shared leadership and Performance

A linear regression analysis was conducted to test the first hypothesis, the relationship between Shared leadership and Performance (table 2). The first model shows a positive significant

effect of Shared Leadership on Performance ($b=.33$, $SE=.08$, $t=9.78$, $p<.001$). This means that a higher score on Shared Leadership increases Performance. The model is significant ($F(1,129)=19.2$, $p<.001$). Furthermore, Shared Leadership can explain 13% of the variance in Performance ($R^2=.13$).

Shared leadership and Self-efficacy

To test the second hypothesis a linear regression analysis was conducted with Shared Leaders as the predictor and Self Efficacy as the outcome variable. The model was significant ($F(1,129)=18.64$, $p<.001$, $R^2=.126$). Shared Leadership has a positive significant effect on Self Efficacy ($b=.37$, $SE=.09$, $t=4.31$, $p<.001$).

Self-efficacy and performance

To test the third hypothesis, Self-efficacy is added to Model 1. A linear regression analysis was conducted with Shared Leadership and Self-efficacy as the predictor and Performance as the outcome variable. Self-efficacy has a positive significant effect on Performance ($b=.18$, $SE=.08$, $t=2.39$, $p=.018$). The effect of Shared Leadership on Performance is also still significant ($b=.27$, $SE=.08$, $t=3.32$, $p=.001$). Self-efficacy and Shared Leadership can explain 16.7% of the variance of Performance ($R^2=.167$). The model is significant ($F(2,128)=12.81$, $p=.001$).

Mediation analysis

To test the fourth hypothesis, we use the regression analysis of Model 1, Model 2 and Model 3. Model 2 shows that Shared Leadership has a positive significant effect on Self-efficacy ($b=.37$, $SE=.09$, $t=4.31$, $p<.001$). Model 3 shows that Self-efficacy has a positive significant effect on Performance ($b=.18$, $SE=.08$, $t=2.39$, $p=.018$). The slope of Shared Leadership on Performance decreases when Self-efficacy is added to the model (Model 1: $b=.33$, $SE=.08$, $t=9.78$, $p<.001$, Model 3: $b=.27$, $SE=.08$, $t=3.32$, $p=.001$). Therefore, there is a mediation effect.

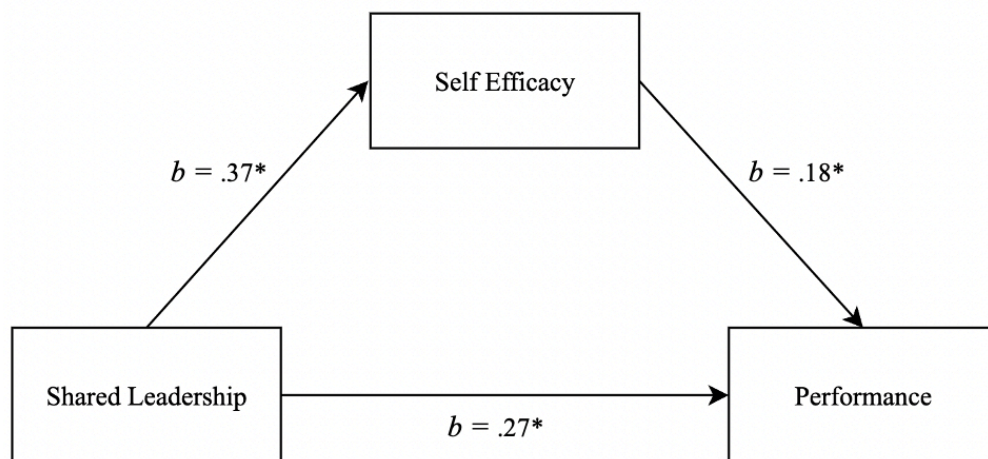
Table 2

Regression analysis of Performance, Shared Leadership and Self Efficacy

	Model 1 ^a		Model 2 ^b		Model 3 ^a	
	<i>b</i> (<i>SE</i>)	<i>p</i>	<i>b</i> (<i>SE</i>)	<i>p</i>	<i>b</i> (<i>SE</i>)	<i>p</i>
Constant	4.08 (.42)	<.001	3.74 (.47)	<.001	3.40 (.50)	<.001
Shared Leadership	.33 (.08)	<.001	.37 (.09)	<.001	.27 (.08)	.001
Self Efficacy					.18 (.08)	.018
<i>R</i> ²	.130		.126		.167	
<i>F</i>	19.2	<.001	18.64	<.001	12.8	<.001
N	131		131		131	

^a Dependent Variable: Performance,

^b Dependent Variable: Self Efficacy



* Significant at *p* values <.05

Figure

2: Conceptual model with coefficients for self-efficacy as a mediator between shared leadership and performance.

Discussion

This study aimed to examine the relationship between Shared Leadership (SL), self-efficacy (SE), and performance (PE) within Dutch leader-employer dyads, with SE as a mediator. Four hypotheses were presented: (1) Shared Leadership is positively associated with Performance, (2) Shared Leadership is positively associated with Self Efficacy, (3) Self Efficacy is positively associated with Performance, and (4) Self Efficacy mediates the relationship between Shared Leadership and Performance. The findings provided robust support for all the hypothesis. The first model shows a positive significant effect of SL on PE ($b=.33$, $SE=.08$, $t=9.78$, $p<.001$). Additionally, SE has a positive significant effect on PE ($b=.18$, $SE=.08$, $t=2.39$, $p=.018$), and when SE was included, SL's performance remained significant but reduced, indicating partial mediation by SE. These results confirm that SL is associated with PE both directly and indirectly through SE in dyadic contexts, highlighting the critical role of shared leadership in fostering both individual confidence and workplace outcomes.

Linking results to literature

These findings align with, and extend prior research on SL, SE and PE. Particularly within the context of leader-employee dyads. The positive association between SL and PE is consistent with the meta-analysis results from Wang et al. (2014), who reported a moderately strong correlation ($r=.34$) between SL and team effectiveness across 42 studies. Similarly, Wu et al. (2021) found a positive association ($r=.39$) between SL and team outcomes. The positive relationship between SL and SE supports Hans and Gupta's (2018) proposition that SL enhances individual confidence through shared responsibility and mutual influence, although direct and empirical studies exploring the SL-SE link remain limited. The significant effect of SE on PE Aligns with Bandura's (1997) self-efficacy theory, which posits that individuals' belief in their capabilities drives task performance, and if further corroborated by Christian et al. (2011), who demonstrated that task-specific SE predicts enhanced task performance. Moreover, the partial mediation of SE in

the SL performance relationship (*b* reduced from .33 to .27 when SE included) extends Han et al.'s (2021) findings, which identified psychological capital (hope, optimism) as a mediator in SL's impact on performance. This study specifically highlights SE's unique mediating role in dyadic contexts, adding insights to the understanding of how SL influences performance. Unlike prior studies that primarily focused on team-level dynamics (e.g., Wang et al., 2014), this research confirms SL's association with PE in leader-employee dyadic relationships, addressing a gap that was identified by (Han et al., 2021; Hans & Gupta, 2022). The findings in this study may be amplified by the Dutch egalitarian culture (Hofstede, 1980), which emphasises low power distance and participative decision making. The cultural context aligns with SL's collaborative nature, enhancing its effectiveness in dyadic relationships within horizontal work structures, contrary to suggestions that egalitarian settings might diminish SL's impact.

Theoretical Implications

This study's findings advance theoretical frameworks by integrating and extending concepts introduced in the study's introduction. Drawing on Social Identity Theory (Hogg et al., 2012), the positive association between SL and PF supports the hypothesis that SL encourages commitment and collaboration in leader-employee dyads, promoting mutual support and performance through shared goals and responsibilities. Self-Efficacy Theory (Bandura, 1997), is reinforced by our findings that SL boosts SE by empowering employees through shared decision making. This supports the introduction's proposition that SL enhances individual confidence, which drives performance through a positive feedback loop, as Bandura described. The significant SE-PF link further validates the introduction's focus on SE as a critical predictor of performance (Bandura, 1997; Rahbi et al., 2022). Role theory (Biddle, 1986), as introduced, is extended by demonstrating that SL creates collaborative roles in dyads, shaping behaviours that enhance SE and PF. Employees taking on leadership responsibilities may develop confidence through clear role expectations, aligning with Role Theory's premise that social roles guide behaviour. The novel contribution of

this study lies in the mediation of SE in the SL-PF relationship addressing the introduction's identified gap (Hans & Gupta, 2018) regarding the under explored mediating mechanism in dyadic contexts. This finding extends theoretical models by establishing SE as a critical factor through which SL influences performance in leader-employee dyads, particularly relevant in remote work settings where dyadic interactions are more prominent.

Strengths of the study

The strengths of this study contribute to the shared leadership literature. The dyadic focus addresses a critical gap in SL research by examining leader-employee dyads rather than teams, making it particularly relevant for modern work settings like remote environments where dyadic interactions are more prevalent. The robust methodology, utilising validated scales with high reliability (SLQ, Team Performance Scale, Rigotti's SE scale; $\alpha=.85-.91$) ensures trustworthy results. A sample size of $N=131$ dyads provides sufficient statistical power to detect significant effects, giving more confidence in the findings. Additionally, the mediation analysis using linear regression models confirms SE's mediating role, adding depth to the understanding of SL's mechanisms in dyadic contexts.

Limitations

Despite the strengths and the contributions, this study has its limitations. Social desirability may have led leaders and employees to inflate the scores on SL, SE, or PF due to self reporting, potentially skewing results. The samples homogeneity, primarily consisting of Groningen-based participants with a low response rate may limit generalisability, as dutch regions like the Randstand may have subtle cultural differences that could influence findings. The correlational design prevents us from establishing causality, so longitudinal or experimental designs are needed to confirm the direction of SL-SE-PF relationships. Finally, the SL questionnaire (Hoch et al., 2010a) may not fully capture the nuances of SL in Dutch egalitarian settings, potentially underestimating its effects.

Future directions

To address the study's limitations and extend its contributions, future research should consider the following directions. First, including diverse samples from varied Dutch regions (e.g. Randstad) or international contexts would enhance generalisability and allow exploration of cultural influences on SL's effectiveness. Second, developing or adapting context sensitive questionnaires tailored to egalitarian cultures like the Netherlands could better capture the nuances of shared leadership. Third, to increase the response rate, data collectors should approach leaders, and select a random employee from there. The inverse will most likely lead to a non-response of the leader. Fourth, longitudinal designs tracking SL, SE and PF over time are needed to establish causality and examine how these relationships evolve. Fifth, incorporating multi-source data, such as co-worker or third party assessments would reduce social desirability and validate performance ratings. Sixth, investigating alternative mediators or moderators such as trust, psychological safety or team reflexivity could identify additional factors in the SL-PF relationship. Finally, comparing SL's effects in dyads versus teams would clarify context specific dynamics and mechanisms, further refining theoretical models.

Practical implications

The findings of this study offer actionable insights for organisations. First, Implementing SL methods and training can foster collaborative decision making, enhancing employees' SE and PF by encouraging shared responsibility. Second, offering task-specific skill workshops and constructive feedback can boost employees' confidence, amplifying the benefits of SL as a leadership approach. Finally, promoting SL in dyadic relationships is particularly relevant for remote work settings, where dyadic relationships are increasingly common.

Conclusion

This study shows a significant association between shared leadership and performance in Dutch leader-employee dyads, both directly and through the mediating role of self efficacy,

highlighting SE as an important variable in this relationship. Addressing the gap identified in the introduction regarding SL's impact in dyadic contexts and its mechanisms, this research contributes to leadership and organisational psychology by demonstrating SL's effectiveness in increasing performance. The findings underscore SL's potential to empower employees and boost performance in Dutch organisations. Future research should build on these findings with longitudinal designs, diverse samples and explore different mediators and moderators such as trust, psychological safety to gain a deeper understanding of the mechanisms driving the impact of shared leadership.

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Appendix A
 Figure 1

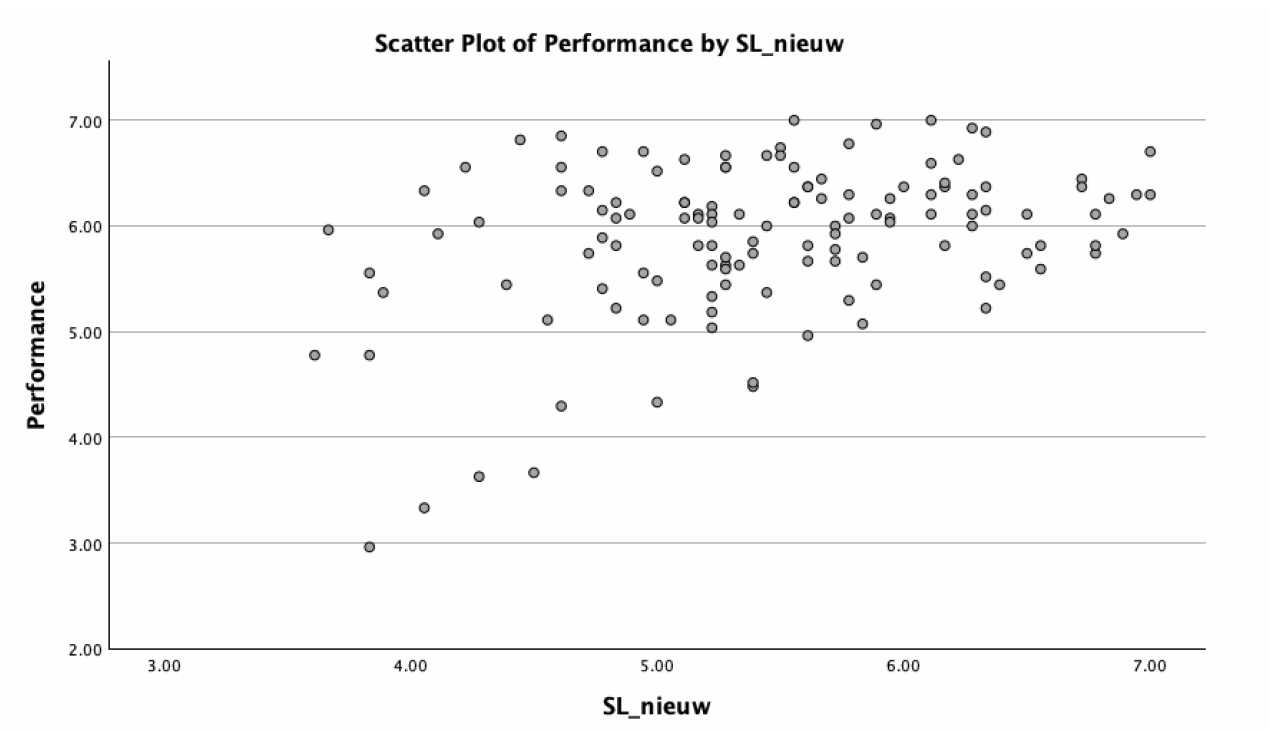


Figure 2

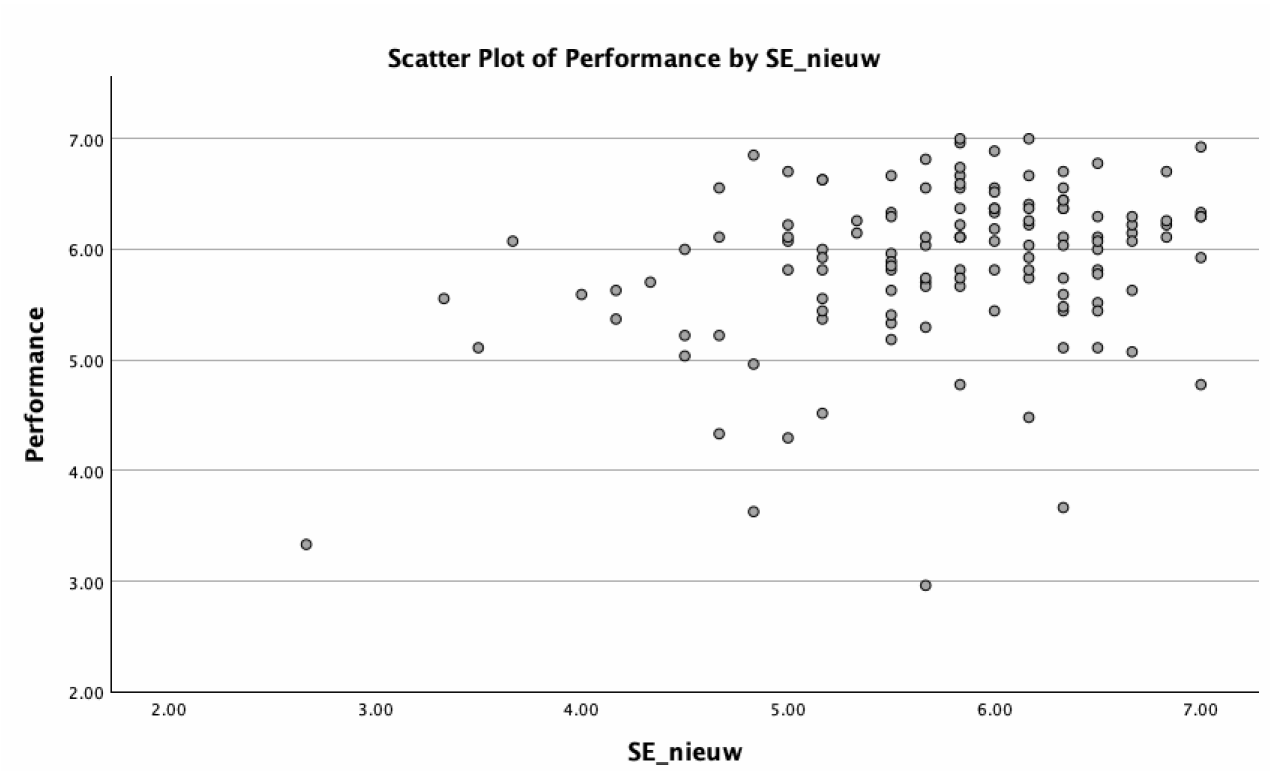


Figure 3

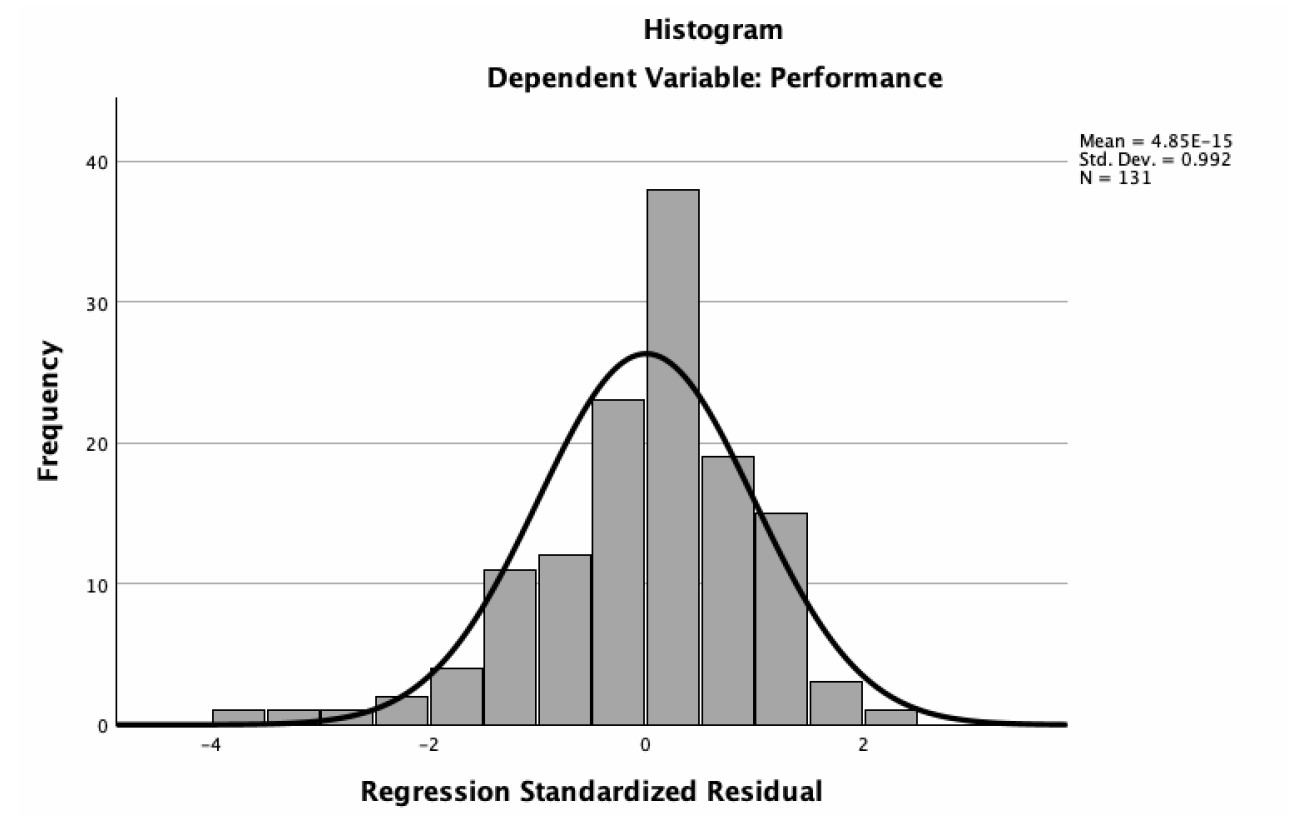


Figure 4

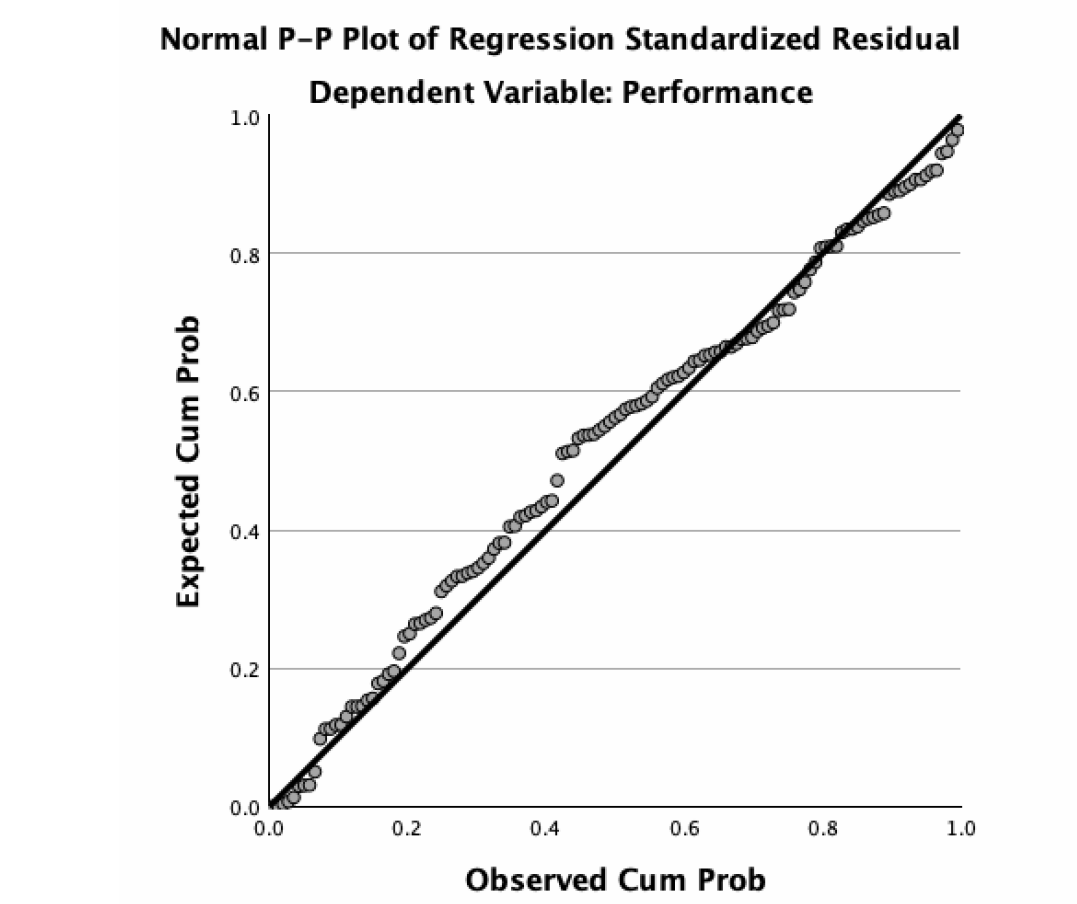
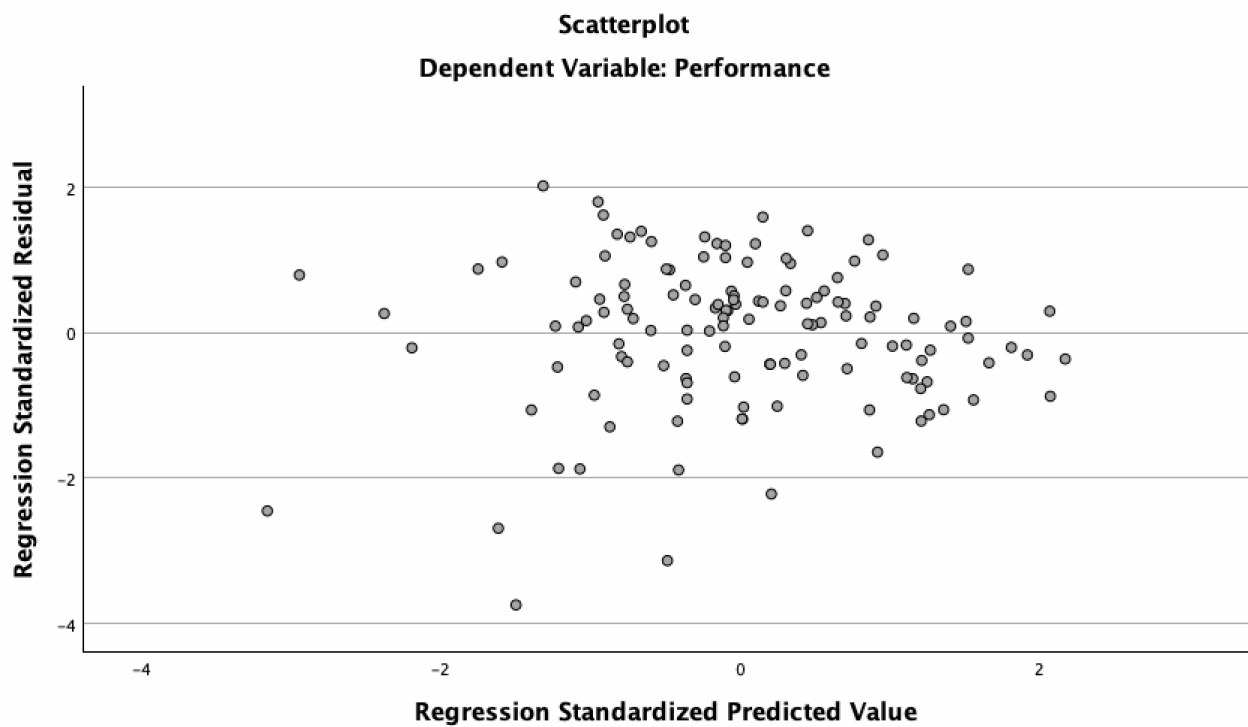


Figure 5



Appendix B

Questionnaire 1: Performance scale

De volgende vragen gaan over uw medewerker.

(1=zeer slechte prestatie, 7=zeer goede prestatie)

Hoe scoort *uw medewerker* op...:

... het bereiken van doelen?

... het behalen van deadlines?

... werksnelheid?

... de kwaliteit van het werk?

... productiviteit?

... effectiviteit?

De volgende vragen gaan over uw medewerker.

Geef alstublieft aan in hoeverre u het eens bent met de stellingen.

[1 Helemaal mee oneens; 7 Helemaal mee eens; 4 niet mee eens, niet mee oneens]

Mijn medewerker:.....

1. Voert de opgedragen taken naar behoren uit
2. Voldoet aan de verantwoordelijkheden vermeld in de functiebeschrijving
3. Voert de taken uit die van hem/haar verwacht worden
4. Voldoet aan de formele prestatie-eisen van de functie
5. Houdt zich/haar bezig met activiteiten die rechtstreeks van invloed zijn op zijn/haar prestatiebeoordeling
6. Verwaarloost aspecten van het werk dat hij/zij verplicht is uit te voeren
7. Faalt in het uitvoeren van essentiële taken
8. Helpt anderen die afwezig zijn geweest
9. Helpt anderen die een zware werklast hebben
10. Assisteert mij bij mijn werkzaamheden (wanneer niet gevraagd)
11. Neemt de tijd om te luisteren naar problemen en zorgen van collega's
12. Doet zijn/haar uiterste best om nieuwe medewerkers te helpen
13. Heeft persoonlijke belangstelling voor andere werknemers
14. Geeft informatie door aan collega's
15. Aanwezigheid op werk is boven de norm
16. Geeft van te voren aan wanneer hij/zij niet kan komen werken
17. Neemt te veel werkpauses
18. Besteed veel tijd aan persoonlijke telefoongesprekken
19. Klaagt over onbelangrijke dingen op het werk
20. Bewaart en beschermt eigendommen van de organisatie
21. Houdt zich aan informele regels die zijn opgesteld om de orde te handhaven

Questionnaire 2: Shared leadership

De volgende vragen gaan over uw leidinggevende.

Geef alstublieft aan in hoeverre u het eens bent met de stellingen.

[1 Helemaal mee oneens; 7 Helemaal mee eens; 4 niet mee eens, niet mee oneens]

1. Mijn leidinggevende geeft een duidelijk beeld van waar ons team voor staat.
2. Mijn leidinggevende is gedreven door hogere doelen of idealen.
3. Mijn leidinggevende laat waardering zien voor mijn inspanningen.
4. Mijn leidinggevende moedigt mij aan om ideeën te heroverwegen die nooit eerder in twijfel getrokken zijn.
5. Mijn leidinggevende maakt gebruik van veel verschillende perspectieven om problemen op te lossen .
6. Mijn leidinggevende moedigt mij aan om meer te doen dan alleen dat wat van mij verwacht wordt (bijv. extra inspanning).

7. Mijn leidinggevende moedigt mij aan om zelf oplossingen te zoeken voor mijn problemen in het werk.
8. Mijn leidinggevende dringt aan om zelf verantwoordelijkheid voor het werk te nemen.
9. Mijn leidinggevende moedigt mij aan om nieuwe dingen te leren.
10. Mijn leidinggevende moedigt mij aan om mezelf een schouderklopje te geven wanneer ik een nieuwe uitdaging heb behaald.
11. Mijn leidinggevende moedigt mij aan om samen te werken met andere teamleden.
12. Mijn leidinggevende adviseert mij om mijn werk af te stemmen met anderen, die onderdeel uitmaken van het team.
13. Mijn leidinggevende dringt erop aan om als een team samen te werken met anderen, die deel uitmaken van het team.
14. Mijn leidinggevende verwacht dat de samenwerking met de andere teamleden goed verloopt.
15. Mijn leidinggevende besluit samen met mij wat mijn prestatiedoelen zijn.
16. Mijn leidinggevende en ik werken samen om te kiezen wat mijn prestatiedoelen moeten zijn.
17. Mijn leidinggevende en ik gaan samen om de tafel om overeenstemming te krijgen over mijn prestatiedoelen.
18. Mijn leidinggevende werkt met mij samen om mijn prestatiedoelen te ontwikkelen.

Questionnaire 3: Self- efficacy

De volgende vragen gaan over uw werk.

Geef alstublieft aan in hoeverre u het eens bent met de stellingen.

[1 Helemaal mee oneens; 7 Helemaal mee eens; 4 niet mee eens, niet mee oneens]

1. Ik kan kalm blijven wanneer ik geconfronteerd word met moeilijkheden in mijn werk, omdat ik kan terugvallen op mijn vaardigheden
 2. Wanneer ik geconfronteerd word met een probleem in mijn werk, dan vind ik meestal meerdere oplossingen
 3. Wat er ook gebeurt in mijn werk, ik kan het meestal wel aan
 4. De ervaringen die ik in het verleden in mijn werk heb opgedaan, hebben me goed voorbereid op mijn werk in de toekomst
 5. Ik haal de doelstellingen die ik aan mezelf stel in mijn werk
 6. Ik voel me in staat om de eisen van mijn werk het hoofd te bieden
-