

**Shared Leadership and Team Outcomes:
The Moderating Role of Collaborative Team Culture**

Karina Fröhner

S4022858

Department of Psychology, University of Groningen

PSB3E-BT15: Bachelor Thesis

Group number: 15

Supervisor: Roxana Bucur, MSc

Second evaluator: dr. Eric F. Rietzschel

In collaboration with: Lena Bogdańska, Nele Böwing, Hidde Meinderts, Lena Sophie Rose

July 4th, 2022

A thesis is an aptitude test for students. The approval of the thesis is proof that the student has sufficient research and reporting skills to graduate, but does not guarantee the quality of the research and the results of the research as such, and the thesis is therefore not necessarily suitable to be used as an academic source to refer to. If you would like to know more about the research discussed in this thesis and any publications based on it, to which you could refer, please contact the supervisor mentioned.

Abstract

Given a recent shift toward agility in the workplace, shared leadership (SL) has become an increasingly relevant and contemporary concept. While past research has found positive effects of SL on team satisfaction and performance, there are many potential intermediate group processes that have not yet been analyzed in relation to SL and team outcomes. The present study investigates the relationships between shared leadership and the outcomes of team satisfaction and team performance whilst taking into account the effect of collaborative team culture. We draw from Social Network Theory with the notion that SL positively affects team satisfaction and team performance, moderated by collaborative team culture. We conducted an online survey using a convenience sample ($N = 75$) of participants who worked in team settings in a variety of industries. Using moderated hierarchical regression analysis, we found that SL is positively associated with team performance, but not with team satisfaction. Furthermore, collaborative team culture has positive effects on both outcomes, while marginally moderating the relationship between SL and team satisfaction, but not team performance. We conclude that SL is related to increased team performance but it is not particularly beneficial for team satisfaction. This study adds to the current body of knowledge by informing about the complex effects of SL, as well as suggesting theoretical and practical implications to aid the optimized implementation of SL in organizational team settings.

Keywords: shared leadership, collaborative team culture, team satisfaction, team performance

Shared Leadership and Team Outcomes: The Moderating Role of Collaborative Team Culture

Since many organizations have started to employ a paradigm shift – away from the traditional vertical hierarchy and towards a more agile structure – the concept of shared leadership is becoming increasingly relevant. Shared leadership (SL) is a team dynamic whereby team members do not have a single designated leader, but rather share leadership responsibilities among each other (Hoch & Dulebohn, 2013). As such, SL pertains to agility on a team level rather than an organizational level. This type of team dynamic is associated with better team-based outcomes, such as team performance (TP) (Carson et al., 2007), team effectiveness (Wang et al., 2014) and team work engagement (Klasmeier & Rowold, 2022).

Even though increased attention to the benefits of SL has led to an influx in research on the topic, prior work focuses mainly on the investigation of task-related outcomes (i.e., team performance). Since well-being in the workplace has gained relevance as a key performance indicator (Van de Voorde et al., 2012), we examine both team satisfaction (TS) and team performance to offer an integrated and contemporary approach to the effects of SL. The present research seeks to investigate how shared leadership influences team satisfaction and team performance.

As a guiding framework, we utilize the Social Network Theory which postulates that social interaction has the potential to enhance or constrain access to valued resources (Sparrowe et al., 2001). Social Network Theory embeds the individual into their larger social context, thereby offering a more integrated and holistic approach (Perry et al., 2018). As such, it takes into account the multitude of interactions and knowledge transfers taking place with a number of different individuals and consequently reflects the dynamic of an agile organizational team.

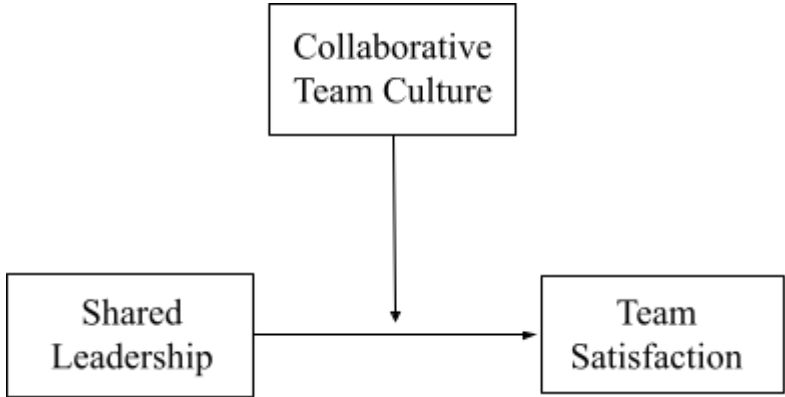
Recent research has pointed to the notion that SL can also have negative effects on team outcomes, thereby suggesting that it may not offer a fix-all solution for organisational team problems (e.g., Pearce & Sims, 2002, Wang & Peng, 2022). For example, SL is negatively related to team effectiveness when the team's leadership dynamics are aversive (Pearce & Sims, 2002). Further, SL and creativity are negatively associated through role stress (Wang & Peng, 2022). As can be seen, research concerning the effects of SL on team outcomes varies in the valence of its findings and is therefore rather ambivalent. Consequently, a critical investigation of SL and its contextual factors is necessary to find out under which conditions SL can yield the most positive outcomes. We propose that collaborative team culture (CTC) moderates the positive relationship between SL and team satisfaction, as well as the positive relationship between SL and team performance. We suggest that collaborative team culture enhances the aforementioned relationships. The conceptual models are depicted in Figures 1 and 2.

We examine this topic by employing a correlational research design using an online questionnaire administered to individuals who work in team settings. In doing so, we contribute to the current body of knowledge in several ways. First, by investigating team satisfaction as an outcome of SL, we seek to shed light on the relationship between two variables for which only few intermediate processes have been taken into account. Second, since existing literature has largely investigated culture on an organizational level rather than on a team level, the present research seeks to inform about the importance of collaborative team culture as a contextual factor. Since SL refers to agility on a team level, we suggest that the investigation of team-level variables is more tangible and immediate. Third, through the incorporation of collaborative team culture into our model, we seek to highlight the importance of formal and informal connections within the team which can navigate the effective management of SL. As such, the present research offers a model which integrates

SL, contemporary organizational outcomes, and contextual components. Through our work, we aim to inform novel interventions and strategies that maximize the beneficial outcomes of SL while buffering against its downsides.

Figure 1

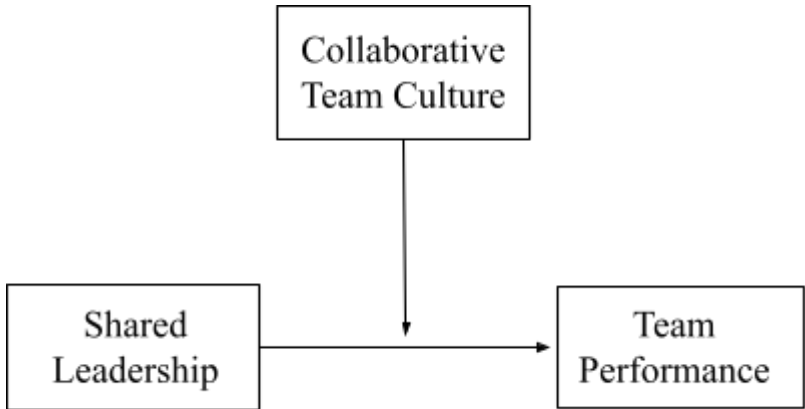
Moderation Model Predicting Team Satisfaction



Note. This figure depicts the conceptual model where the relationship between independent variable shared leadership and the dependent variable team satisfaction is moderated by collaborative team culture.

Figure 2

Moderation Model Predicting Team Performance



Note. This figure depicts the conceptual model where the relationship between independent variable shared leadership and the dependent variable team performance is moderated by collaborative team culture.

Theory and Hypothesis Development

Shared Leadership: Definition and Prior Research

Drawing upon Gibb's (1954) initial definition of leadership, it can be categorized as either focused or distributed leadership. Focused leadership is characterized by a sole designated leader, whereas distributed leadership is characterized by the distribution of responsibilities, roles, and functions among multiple team members. Gronn (2002) suggested that the two aforementioned categories should rather be viewed as opposing ends of a continuum. Consequently, leadership is now widely considered as a continuous concept instead of a categorical one, thereby allowing for more differentiated and nuanced views. For a more elaborate description of the construct, we employ the definition of SL as stated by Mehra et al. (2006), "shared, distributed phenomenon in which there can be several (formally appointed and/or emergent) leaders" (p. 233).

In a team with high SL, leadership responsibilities are divided among the team members rather than a single designated individual (Hoch & Dulebohn, 2013). As such, team members are embedded in a system of reciprocal influence. In line with Social Network Theory (Perry et al., 2018), the relationships, influence processes, and information transmission between team members flow in all directions. The aforementioned processes often fluctuate in strength, direction, and frequency due to the dynamic nature of SL.

Shared Leadership and Team Satisfaction

Agile dynamics are gaining momentum due to their positive associations with team outcomes, as well as individual satisfaction. We consider team satisfaction as an individual's subjective perception of satisfaction as it pertains to the team and its internal environment (Spector, 1997). Since SL embodies a dynamic and agile approach to organizational structure and is associated with higher levels of individual satisfaction (Nielsen & Daniels, 2011), we expect these findings to extend to team satisfaction. Social exchange is a crucial aspect of the

utility of SL by encouraging team members to continuously build, broaden, and strengthen their network relationships within the team (Jamshed and Majeed, 2019). We suggest that the agility of SL encourages team members to more readily and openly engage in conversation with fellow team members. Frequent and multidirectional discourse within the team leads to increased team cohesion, team commitment, and positive affect (Klasmeier & Rowold, 2022). Further, given the diffusion of responsibilities, SL gives team members the opportunity to influence their work tasks more freely and readily than is the case for traditional hierarchical models. Hence, team members feel less restricted and more autonomous in their task delegation and work processes (Pearce et al., 2008). Consequently, we argue that shared leadership and team satisfaction are positively associated.

We utilize Social Network Theory (Perry et al., 2018) to support the aforementioned notion. The model posits that social exchange is crucial in informing individuals' opinions and behaviours (Sparrowe et al., 2001). Furthermore, it embeds the individual into a social-contextual network rather than merely taking into account dyadic associations. Social Network Theory argues that frequent discourse strengthens social bonds and increases team cohesion, as well as an individual's identification with the team and its members (Perry et al., 2018). As such, the multidirectionality of both SL and Social Network Theory emphasizes team members' embeddedness in their team, thereby encouraging feelings of relatedness and overall positive affect (Sparrowe et al., 2001).

Hypothesis 1: Shared leadership is positively associated with team satisfaction.

Shared Leadership and Team Performance

The potential for team-internal member-to-member knowledge sharing is an essential aspect of SL and as such, each member should have access to the accumulated information within the team. Ideally, the knowledge transfer is so frequent and far-reaching that each team member has the opportunity to access any other team member's professional expertise.

According to Social Network Theory, the pattern of relationships within a given network is crucial in determining the flow of information (Perry et al., 2018). An agile team structure should facilitate more multidirectional knowledge transmission, as opposed to a traditional hierarchical structure where knowledge transmission is typically limited to a vertical top-down process. Thus, SL allows for horizontal exchange whereby every team member is granted the opportunity to share their input with other individuals in the team. This informational resource is especially useful for complex tasks which often require the integration of knowledge from different fields (Day et al., 2004) because the team members' informational diversity can offer a multitude of approaches. Consequently, SL encourages discourse among team members, thereby enabling knowledge sharing which acts as a catalyst for problem-solving. Furthermore, SL is associated with higher levels of team work engagement (Klasmeier & Rowold, 2022). Teams that display high levels of SL can create a trustful work environment (Zhu et al., 2018) which encourages team members to engage with their work in a positive and fulfilling manner. This state of mind encourages team members to engage with their work. Given the above reasoning, we anticipate that SL is positively associated with team performance because team performance is associated with knowledge transmission (Perry et al., 2018) and team work engagement (Klasmeier & Rowold, 2022).

Hypothesis 2: Shared leadership is positively associated with team performance.

The Moderating Role of Collaborative Team Culture

The mere distribution of leadership responsibilities does not inherently and necessarily imply effective work in teams, as seen by the negative relationship between SL and creativity through role stress (Wang & Peng, 2022). Concomitantly, prior research indicates that collaborative culture is a key indicator of team outcomes such as team creativity (Barczak et al., 2010). Jamshed and Majeed (2019) define team culture as the shared principles, norms, and beliefs about the team and the interactions within. Collaborative culture is defined by

Lopez et al. (2004) as valuing teamwork, communication, respect and empowerment. In the present research, we investigate the aforementioned collaborative culture on a team level, hence collaborative team culture. We suggest that collaborative team culture enhances SL's positive attributes while buffering against its negative consequences.

Collaborative Team Culture and Team Satisfaction

Because collaborative culture encourages team members to communicate with each other, respect and empower each other, members of highly collaborative teams tend to engage in frequent discourse with each other (Lopez et al., 2004). When this exchange concerns task-related topics, ideally all team members should feel that their expertise and input are valuable to the team as a whole, granted by the agile nature of both SL and collaborative team culture which seek to create a team dynamic of mutual influence and gain rather than top-down knowledge transmission. Furthermore, given the nature of collaborative team culture which inherently implies respect and empowerment, and given the aforementioned positive team-related affect, high collaborative team culture should lead to the discussion of not only task-related topics but also more anecdotal and personal matters (Bstieler & Hemmert, 2010). As postulated by Social Network Theory, frequent and meaningful interactions strengthen interpersonal bonds, thereby eliciting feelings of relatedness and overall positive affect (Sparrowe et al., 2001). Additionally, team members conceptualize their team as a joint entity that moves toward its common objective through the means of internal knowledge transfer and mutual respect, thereby resulting in increased team cohesion, goal attainment, and team work engagement (Klasmeier & Rowold, 2022). Ruan and Liu (2021) suggest a positive relationship between team cohesion and team satisfaction. Goal attainment predicts satisfaction (Wong et al., 2017) and team work engagement is conceptualized as a shared positive state of work-related satisfaction, thereby encompassing satisfaction in its definition (Costa et al., 2014). Consequently, we expect that collaborative

team culture entails more frequent and meaningful interactions at work, therefore enhancing team satisfaction.

Hypothesis 3: Collaborative team culture is positively associated with team satisfaction.

Since members of teams displaying high collaborative team culture tend to engage in more discourse about task-related and personal matters, they have strong formal and informal networks (Aydin, 2018). Informal connections are particularly relevant because they induce feelings of relatedness and affiliation which are indicators of satisfaction in group contexts (Perry et al., 2018). Further, Hodgson & Briand (2013) found that agility in teams is related to an increase of perceived autonomy and competence, which are associated with increased satisfaction. As such, we hypothesize that high collaborative team culture reinforces the positive effects of agile team hierarchies, such as increased relatedness, affiliation, and autonomy, competence, and ultimately increasing team satisfaction.

Teams who display low collaborative culture tend to avoid social exchange with fellow team members, thereby leading to a collection of isolated individuals rather than an interconnected network, as posited by Social Network Theory (Perry et al., 2018). Given the agile nature of SL, team members' roles are typically either not preassigned or dynamic. As a consequence of this, team members might experience role stress (Wang & Peng, 2022). Furthermore, teams with low collaborative team culture do not particularly value mutual respect and empowerment (Lopez et al., 2004). This might disrupt team cohesion, as well as team commitment. Overall, we expect that teams with low collaborative team culture display lower levels of team satisfaction.

Hypothesis 4: Collaborative team culture moderates the relationship between shared leadership and team satisfaction. This positive relationship is more pronounced when collaborative team culture is higher rather than lower.

Collaborative Team Culture and Team Performance

Since collaborative culture emphasizes teamwork and communication (Lopez et al., 2004), it encourages collaboration among team members, thereby accelerating and broadening multidirectional knowledge transmission which enhances problem-solving (Day et al., 2004) and goal attainment through team work engagement (Klasmeier & Rowold, 2022). We expect that collaborative team culture enhances the positive relationship between SL and team performance.

Hypothesis 5: Collaborative team culture is positively associated with team performance.

Members of teams displaying high collaborative culture tend to engage in more task-related discourse with each other (Lopez et al., 2004). Consequently, the frequent knowledge transmission and debate with team members aid problem-solving, especially concerning complex tasks. We expect that this enhances team performance. Furthermore, the effects of collaborative team culture are not limited to formal interactions. Rather, informal interactions between team members influence organizational effectiveness through team work engagement (Cross et al., 2002). Organizational effectiveness and performance are closely linked which is why we expect that high collaborative team culture enhances team performance.

Contrastingly, for teams low on collaborative culture, we expect that team performance will be hampered. Given that the potential for multidirectional, frequent, and efficient knowledge transfer is not reaped in teams low on collaborative culture, the strength of both formal and informal connections is lower, according to Social Network Theory (Perry et al., 2018). In line with this, work engagement and team problem-solving will not be facilitated due to the lack of interaction. Furthermore, since low collaborative team culture also implies a lack of mutual respect and empowerment (Lopez et al., 2004), we expect this to

be accompanied by a lack of fulfilment of autonomy, competence, and relatedness.

Consequently, we expect that teams that exhibit low collaborative team culture will tend to show lower levels of team satisfaction.

Hypothesis 6: Collaborative team culture moderates the relationship between shared leadership and team performance. This positive relationship is more pronounced when collaborative team culture is higher rather than lower.

Method

Participants

In order to ensure that our sample is relevant for our analysis, we approached participants based on predefined inclusion criteria that they (a) are 18 years or older, (b) work in a team setting and (c) work for a minimum of 20 hours per week. From the 161 individuals who had initially agreed to participate, we excluded 85 individuals from our study because they either did not meet the inclusion criteria or because they did not complete the survey. Further, we excluded an outlier that showcased a team size of 312 which we found to be an insensibly large value. Thus, the analysis comprises a sample of 75 individuals with an average age of 42.2 years ($SD = 14.25$), 58,7% of whom were female, 40% of whom were male, and 1,3% of whom identified as neither male nor female. Team size ranged from 3 to 264 with an average of 34.7 members ($SD = 50.82$), with 44% of participants working in teams of three to eight. On average, organizational tenure was 9.4 years ($SD = 9.82$), and team tenure was 5.3 years ($SD = 7.13$). Our sample consisted predominantly of individuals of Polish nationality (88,0%), German nationality (68,0%), and Dutch nationality (26,7%). The participants worked in different business sectors, such as education and instruction (18,7%), health and social welfare (12,0%), and the financial industry (10,7%). A vast majority of the respondents had obtained a university degree (58,7%).

Research Design and Procedure

We used a correlational research design to investigate the proposed model. For this, we designed an online questionnaire using the Qualtrics software which was subsequently approved by the Ethics Committee of the University of Groningen (Netherlands) before the start of the data collection on May 17th, 2022. Data collection was concluded within a two-week time frame and ended on June 1st, 2022. After the data was collected, it was transferred from the Qualtrics software to the Statistical Package for the Social Sciences (SPSS, version 26) software.

Participants were recruited through the personal and professional networks of the research team, therefore constituting a convenience sample. Furthermore, respondents were asked to forward the questionnaire to individuals within their teams or other proximal persons who might be eligible to participate, therefore resulting in the snowballing method. The questionnaire was distributed to the participants through an online link leading to the Qualtrics platform.

At the beginning of the survey, participants could choose their preferred language (English, German, or Polish). Respondents were given general information about the research topic and were reminded that participation was voluntary. The Informed Consent Form followed, where the respondents could consent to participate in the study. If consent was not given, the respondent was automatically forwarded to the end of the survey. Subsequently, two selection questions were asked (“How many hours do you work per week?”; “Are you working as part of a team?”). If, based on these questions, the participant did not meet the inclusion criteria, they were automatically directed to the end of the survey. The selection questions were followed by the items of the variables of interest, as well as demographic information. The questionnaire encompassed several variables, five of which are utilized in the main analysis of the present study. At the end of the questionnaire, participants received a debriefing which elaborated on the aim of the study.

Measures

The responses to all of the below-mentioned variables (i.e., SL, TS, TP, CTC, and organizational climate) were indicated on a 7-point Likert scale ranging from 1 = *Strongly disagree* to 7 = *Strongly agree*.

Shared Leadership

The Shared Leadership Questionnaire (SLQ-Scale) is an 18-item scale developed by Hoch et al. (2010) which assesses the degree to which leadership responsibilities are perceived to be distributed among team members. We used a reduced version of the measure which contained 18 items rather than 26 items as for the original measure, for the sake of brevity of the overall questionnaire. Items include: “My team members seek a broad range of perspectives when solving problems”; “My team members encourage me to work together with the other individuals who are part of the team” (see Appendix A). The original SLQ-Scale has previously shown high reliability ($\alpha = .85$; Hoch et al., 2010) and in our sample, the reduced measure yielded a excellent reliability ($\alpha = .94$).

Team Satisfaction

We utilized a 12-item adapted version of the Job Satisfaction Survey by Spector (1985) to assess the respondents’ degree of satisfaction regarding their team. The original scale consists of nine subscales which collectively measure job satisfaction. We adapted the measure by administering three subscales, namely Co-workers ($\alpha = .78$), Supervision ($\alpha = .83$), and Communication ($\alpha = .75$) with four items each, in order to measure satisfaction regarding the team rather than the job as a whole. Respectively, items for each of the three subscales include: “I like the people I work with”; “I like my supervisor”; “Communications seem good within this team” (see Appendix B). Spector (1985) reported moderate to high reliabilities for the Co-worker subscale ($\alpha = .65$), Supervision subscale ($\alpha = .82$), and Communication subscale ($\alpha = .71$), as well as a high reliability for the original (unadapted)

scale ($\alpha = .91$). The current sample reported similarly high reliabilities for the three subscales: Co-workers ($\alpha = .78$), Supervision ($\alpha = .83$), and Communication ($\alpha = .75$), and the adapted scale as a whole ($\alpha = .90$).

Team Performance

The Team Performance Scale is an 18-item scale that measures the perceived performance of the team as a whole (TPS-Scale; Thompson et al., 2009). For the present study, a reduced version of the original 30-item scale was used. Example items include: “My team used several techniques for problem solving with each team member presenting his or her best ideas”; “Often members helped a fellow team member to be understood by paraphrasing what the or she was saying” (see Appendix C). The TPS-Scale has previously been established to be a reliable measure of team performance ($\alpha = .97$; Thompson et al., 2009). In the present study, the reliability of the scale was excellent ($\alpha = .95$).

Collaborative Team Culture

An adapted version of the 8-item Collaborative Culture Scale by Lopez et al. (2004) was used to measure the degree to which individuals feel that their team values teamwork, communication, respect and empowerment. Because the original measure pertains to collaborative culture on an organizational level, the measure was adapted to relate to the team level, as the latter is more relevant in informing the relationship between team dynamics and team outcomes. Example items include: “The preservation of different points of view is encouraged”; “In our team, collaboration and co-operation are encouraged” (see Appendix D). Previous research has found very good reliability of the measure ($\alpha = .85$; Lopez et al., 2004) and in the current sample, the reliability of the scale was also very high ($\alpha = .90$).

Control Variable

We controlled for organizational climate (i.e., the meaning attached to and shared perceptions of organizational procedures and expected behaviours between employees;

Schneider et al., 2013) in the model predicting TP in order to be able to account for the influence of the perception of organizational culture. This allows for a distinction between (a) team-level perceptions and organizational-level perceptions, and (b) culture and the climate created by culture. Organizational climate was measured using a single item: “My company is open to having its people solve problems in creative ways”.

In order to account for the influence of factors that exceed the current model, we included a number of potential control variables in the questionnaire, based on previous literature and conceptual ideas (e.g., team size, team tenure; Klasmeier & Rowold, 2022; Wang & Peng, 2022). The correlations between each potential control variable and TS and TP, respectively, yielded a significant value only for the correlation between organizational climate and TP, but not for any of the other proposed control variables. As such, we controlled for organizational climate in the moderation analysis predicting TP.

Results

To explore our model, we conducted an analysis of the descriptive statistics of the study variables, as well as two moderated hierarchical regression analyses for team performance and team satisfaction. All analyses were conducted using the SPSS. Additionally, the PROCESS extension, version 4.1 (Hayes, 2022) was used for both moderation analyses.

Preliminary Analysis

We tested the five regression assumptions in order to ensure that the regression model can be used to predict team performance and team satisfaction. In order to test the assumption of (1) Linearity, we analyzed a scatterplot, (2) Normality, we utilized a p-p plot, (3) Homoscedasticity, we used a scatterplot, (4) Independence, we investigated the Durbin-Watson index, and (5) Absence of Multicollinearity, we analyzed the variance inflation factor (VIF). The assumptions of linearity and normality were met (Figures B1 –

B4). The assumption of homoscedasticity was sufficiently met, despite minor trends in the scatterplot (Figures B5, B6). Independence can be assumed, despite a slight negative autocorrelation for team performance at a Durbin-Watson value of 2.58 and a slight positive autocorrelation for team satisfaction at a value of 1.34 (Tables B1, B2). Lastly, we expect multicollinearity to be absent given VIF values of 1.00 for both dependent variables (Tables B3, B4). All regression assumptions are (sufficiently) met and thus, we subsequently conducted the hierarchical regression analyses.

Table 1

Means, Standard Deviations and Correlations of Study Variables

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
1. Organizational Climate	4.89	1.65				
2. Shared Leadership	4.74	1.10	.50**			
3. Collaborative Team Culture	5.14	1.10	.50**	.64**		
4. Team Performance	5.08	1.03	.53**	.72**	.77**	
5. Team Satisfaction	3.81	.46	.00	-.02	-.14	-.19

Note. N = 75. ** $p < .01$, * $p < .05$, † $p < .10$.

Descriptive Statistics

Table 1 summarizes the means, standard deviations and bivariate correlations for the five study variables. As can be seen in Table 1, team satisfaction was not significantly correlated with any of the other study variables. In contrast, shared leadership, team performance, team satisfaction, collaborative team culture and organizational climate all showcased significant correlations with each other. The three bivariate correlations between shared leadership, collaborative team culture and team performance are considerably high. It is noteworthy that previous research has yielded similarly high correlations (e.g., Jamshed & Majeed, 2019; Mehra et al., 2006), as well as that a strong positive association between the

three variables can be expected, given that they collectively constitute agile and contemporarily functional organizational teams.

Hypothesis Testing

The regression results of two moderated hierarchical regression analyses with standardized predictors on team satisfaction and team performance are presented in Tables 2a and 2b, respectively. We consider organizational climate as a control variable for the prediction of team performance, given its significant correlation with the variable.

Table 2a

Regression Results of Moderation Analysis Predicting Team Satisfaction

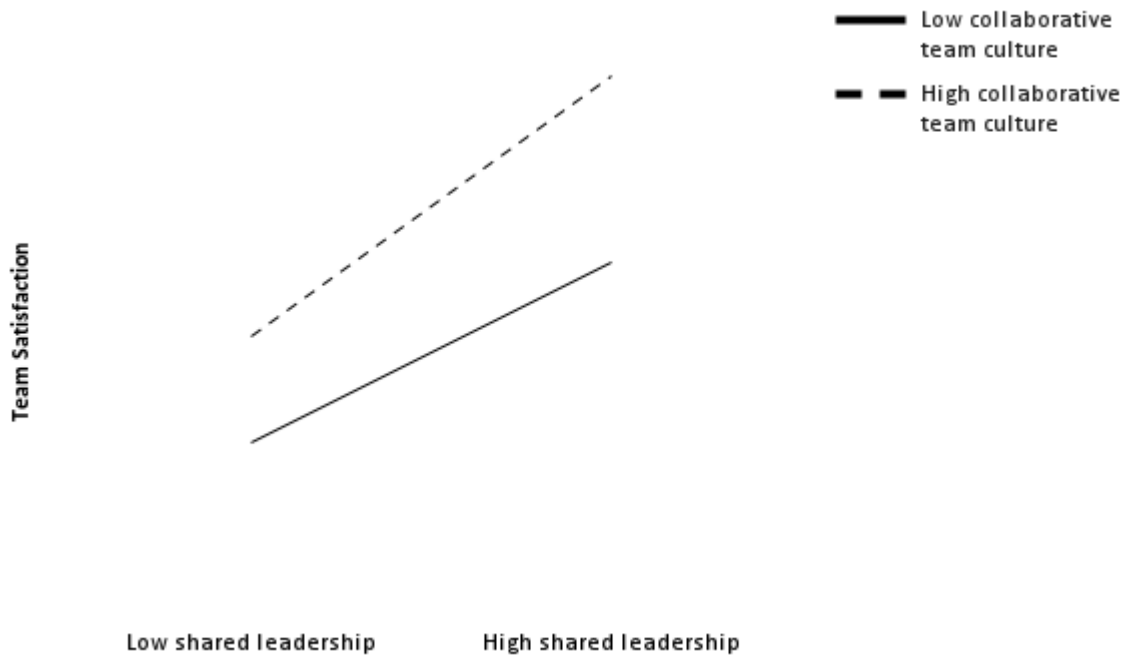
Predictor	β	SE	<i>t</i>	<i>p</i>	LLCI	ULCI
Constant	3.76	.06	62.56	.00*	3.64	3.88
Shared Leadership	.05	.06	.77	.45	-.08	.17
Collaborative Team Culture	-.06	.06	-.91	.03*	-.19	.07
Interaction	.07	.04	1.80	.08 [†]	-.01	.14

Note. N = 75. Regression coefficients are standardized. * $p < .05$, [†] $p < .10$.

In the regression model predicting team satisfaction, the complete model including the main effects of SL and collaborative team culture, as well as the interaction term, explained 7.02% of the variance in team satisfaction, $R = .2649$, $R^2 = .0702$, $F(3, 71) = 1.79$, $p > .05$. As can be seen in Table 2b, a significant main effect of collaborative team culture on team satisfaction was found while the effect of shared leadership on team satisfaction was not significant. We found marginal significance for the interaction term in predicting team satisfaction. According to Olsson-Collentine et al. (2019), marginally significant results should be reported in research papers and as such, we explored the interaction effect using a simple slope analysis (see Figure 3). The analysis showed that TS is marginally higher at high levels of SL and this relationship is more pronounced when CTC is higher rather than lower.

Figure 3

Interaction Between SL and Collaborative Team Culture in Predicting Team Satisfaction



Note. The slopes represent TS on the y-axis for low SL (at -1 SD) and high SL (at +1 SD) on the x-axis, as well as low CTC (at -1 SD) as the continuous line and high CTC (at +1 SD) as the dotted line.

Table 2b

Regression Results of Moderation Analysis Predicting Team Performance

Predictor	β	SE	t	p	LLCI	ULCI
Constant	-.16	1.12	-.14	.89	-2.38	2.07
Shared Leadership	.58	.27	2.14	.04*	.04	1.12
Collaborative Team Culture	.65	.23	2.83	.01*	.19	1.10
Interaction	-.05	.05	-.94	.35	-.14	.05
Organizational Climate	.06	.05	1.29	.20	-.04	.16

Note. N = 75. Regression coefficients are standardized. * $p < .05$, † $p < .10$.

In the regression model predicting team performance, the complete model including the main effects of SL and collaborative team culture, as well as the interaction term,

explained 68.95% of the variance in team performance, $R = .8304$, $R^2 = .6895$, $F(4, 70) = 38.86$, $p < .05$. As shown in Table 2a, the analysis revealed significant main effects of shared leadership and collaborative team culture on team performance. However, the interaction term of SL and collaborative team culture did not yield significant results.

Discussion

Findings and Theoretical Implications

The present study investigated the effect of shared leadership on team satisfaction and team performance while taking into account collaborative team culture as a moderator. Regarding the direct effect of shared leadership on team outcomes, the data was not able to find significant support for the relationship between SL and team satisfaction. This finding is not in line with past research which has found a positive relationship between SL and individual satisfaction (Nielsen & Daniels, 2011). However, it is necessary to highlight that the present study is the first to investigate the relationship between SL and team satisfaction and as such, a deviation from the effect of SL on individual satisfaction is not surprising. As such, it appears that SL is not uniformly beneficial. We speculate that SL might be associated with socio-emotional (i.e., affective) conflict, which has been consistently reported to decrease satisfaction (De Dreu & Weingart, 2003) and is more likely to surface when members' leadership styles clash, therefore resulting in a mismatch between different team members' expectations about interpersonal relations with co-workers and work-related processes (Bergman et al., 2012). Contrastingly, we found support for the direct effect of SL on team performance. This significant positive relationship is in line with prior research which suggests that SL is associated with a trusting work environment which encourages members to engage with their work in a more meaningful manner, therefore leading to increased work engagement and ultimately, performance (Klasmeier & Rowold, 2022; Perry et al., 2018, Zhu et al., 2018).

Concerning the direct effect of CTC on team outcomes, the data found support for the effect of CTC on TS. As such, when the team embraces collaboration and respect as a core values, individual members are more likely to be satisfied with their team. This finding supports previous literature which suggests a positive relationship between CTC and TS through frequent and meaningful interactions (Lopez et al., 2004), interpersonal bonds (Bstieler & Hemmert, 2010), and team cohesion (Klasmeier & Rowold, 2022; Ruan & Liu, 2021). Furthermore, we found significant support for the positive direct effect of collaborative team culture on team performance. This is in line with the general consensus that CTC encourages communication and teamwork (Lopez et a., 2004), as well as collaboration, multidirectional knowledge transmission, and problem-solving (Day et al., 2004). As such, we anticipate that the aforementioned intermediate team processes facilitate the relationship between CTC and TP.

Regarding the interaction effects of SL and CTC on team outcomes, the results marginally support the moderating effect of CTC on the relationship between SL and TS. As such, the effect of SL on TS is marginally more pronounced when CTC is higher rather than lower. In other words, teams that distribute their leadership responsibilities and actively value collaboration display marginally higher levels of satisfaction. This finding conceptually lends support to Hodgson and Briand (2013) who found that agility in teams is associated with increased individual satisfaction, as well as Perry et al. (2018) who found that the relationship between agility and individual satisfaction was moderated by discourse, which is partially encompassed under CTC. In contrast to the previous finding, the data did not support the interaction effect between shared leadership and collaborative team culture on team performance. As such, the positive relationship between SL and TP is not more pronounced when CTC is higher rather than lower. This finding is contrary to previous literature which suggest that collaborative organizational culture fosters job performance (Lopez et al., 2004).

We speculate that the insignificant interaction effect reflects the influence of a different intermediate group process such as team trust, which has previously been found to moderate the relationship between SL and TS (Drescher et al., 2014).

When connecting the above findings to Social Network Theory, it can be seen that its notions were mainly supported with regard to team performance as an outcomes, but not team satisfaction. As such, our findings lend support to the positive effect of frequency of discourse and the multidirectional flow of information which are inherent to SL, as associated with TP (Perry et al., 2018). However, with regard to TS, we speculate that the interpersonal proximity and frequent exchange of information may be associated with intergroup conflict. Further, it is fruitful to recall that, according to Social Network Theory, social exchange has the potential of adversely affecting relationships, if regulatory mechanisms are not in place (Perry et al., 2018). This might partially explain the ambivalent findings.

Practical Implications

The present research showcases that the distribution of leadership responsibilities and the importance placed on collaboration by the team play an important role in predicting team performance and team satisfaction. Shared leadership responsibilities and collaborative team culture both enhance the performance of organizational teams. However, SL does not have the same encouraging effect on the amount of satisfaction that team members feel toward their team. Team-related satisfaction is rather explained by collaborative team culture and partly by the interaction between the aforementioned and SL. Hence, SL alone does not have a positive effect on team satisfaction. Instead, teams rely on the mutual acknowledgement and implementation of collaboration as a core team characteristic. As such, defining and shaping the team's shared values with collaboration at its center has significant positive effects on both performance and satisfaction. Consequently, organizations should not merely distribute leadership responsibilities in an effort to increase team-related outcomes, but also facilitate a

team culture where members actively support each other in their tasks, communicate openly, and respect each other.

Strengths, Limitations and Future Research Directions

An important strength of the present research is that the data was collected from various organizations in different sectors in numerous countries. As such, the sample consists of members of actual organizational teams and we did not rely on a sample consisting of students or simulated teams. Further, many nationalities and age groups were included in the sample, therefore resulting in a diverse representation of organizational teams. Consequently, the ecological validity of the findings should be considerable. Additionally, all scales were established and showed moderately high to excellent reliability.

Nevertheless, our study has a number of limitations. Firstly, we were only able to survey individuals from a team, but not the team as a whole, thereby resulting in potential bias and an incomplete reflection of the team dynamics. Our lack of a holistic picture may have been particularly impactful for SL and collaborative team culture, given that these two variables are based on inherently shared perceptions of the team dynamic rather than individual perceptions of the team, as is the case for team performance and team satisfaction. Secondly, given that we used surveys for the data collection, we relied solely on team member ratings, rather than direct measures. As such, the findings are merely based on perceptions of the team members but are not verified through direct (e.g., behavioural) means. Such a verification may be particularly interesting for the investigation of collaborative team culture, as this adheres to perceptions of shared values, as well as the active endorsement of the aforementioned. Thirdly, we gathered our data at one point in time and used a correlational study design, which does not allow us to draw conclusions about causality and finally, our convenience sampling resulted in a WEIRD sample, i.e., Western, Educated, Industrialized, Rich, and Democratic, which may hamper the generalizability of our findings to other societal

and cultural contexts. Consequently, future research should replicate and extend our study using an experimental or longitudinal approach and a diverse sample that can shed light on the effect of SL on team outcomes alongside socio-cultural considerations.

Furthermore, the incorporation of informal hierarchy strength and trust may shed light on the relationship between SL and team satisfaction. Research suggests that agility does not necessarily equate to the abolition of hierarchy, but rather a shift from formal to informal hierarchical structures (Evans et al., 2021). These informal hierarchies are based on asymmetrical dyadic influence relations (Oedzes et al., 2018) where one party holds a higher status than the other party does, regardless of their formal positions within the team. As SL seems to postulate and guarantee complete agility and the absence of any traces of hierarchy, the existence of informal hierarchies may come as a surprise to team members. Since this also goes hand-in-hand with limitations on agency and independence (Oedzes et al., 2018), strong informal hierarchies may have repercussions on team satisfaction. As such, the consideration of informal hierarchy strength may yield new insights about the relationship between SL and team satisfaction. Further, past research also points to the moderating influence of trust on the relationship between SL and team satisfaction. Especially in relationships that are not defined by formal hierarchies – as is the case for teams that are high in SL – trust is positively associated with team satisfaction (Drescher et al., 2014.). With regard to Social Network Theory, influence processes and information transmission between members are not as readily pursued by members if trust is absent. Therefore, in future research, the incorporation of informal hierarchy strength and trust may help us in understanding the complex relationship between SL and team satisfaction.

Conclusion

The present study showed ambivalent findings concerning the effect of shared leadership on team outcomes. Even though the distribution of leadership responsibilities

facilitates performance, it does not appear to be beneficial for employee satisfaction. As such, organizations need to optimize the implementation and continued utilization of shared leadership, for example through the emphasis of collaborative team culture.

References

- Autin, K. L., Herdt, M. E., Garcia, R. G., & Ezema, G. N. (2022). Basic psychological need satisfaction, autonomous motivation, and meaningful work: A self-determination theory perspective. *Journal of Career Assessment, 30*(1), 78–93.
<https://doi-org.proxy-ub.rug.nl/10.1177/10690727211018647>
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management, 43*(1), 83-104.
- Barczak, G., Lassk, F., & Mulki, J. (2010). Antecedents of team creativity: An examination of team emotional intelligence, team trust and collaborative culture. *Creativity and Innovation Management, 19*(4), 332-345.
<https://doi.org/10.1111/j.1467-8691.2010.00574>
- Biggs, A., Brough, P., & Barbour, J. P. (2014). Enhancing work-related attitudes and work engagement: A quasi-experimental study of the impact of an organizational intervention. *International Journal of Stress Management, 21*(1), 43.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy Of Management Journal, 50*(5), 1217-1234. <https://doi.org/10.2307/20159921>
- Costa, P. L., Passos, A. M., & Bakker, A. B. (2014). Team work engagement: A model of emergence. *Journal of occupational and organizational psychology, 87*(2), 414-436.
- Cross, R., Borgatti, S. P., & Parker, A. (2002). Making invisible work visible: Using social network analysis to support strategic collaboration. *California management review, 44*(2), 25-46.

- De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88*(4), 741–749. <https://doi.org/10.1037/0021-9010.88.4.741>
- DeRue, D. S., & Ashford, S. J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review, 35*(4), 627-647.
- Drescher, M. A., Korsgaard, M. A., Welpe, I. M., Picot, A., & Wigand, R. T. (2014). The dynamics of shared leadership: Building trust and enhancing performance. *Journal of Applied Psychology, 99*(5), 771.
- Erkutlu, H. (2012). The impact of organizational culture on the relationship between shared leadership and team proactivity. *Team Performance Management: An International Journal, 18*(2), 102-119. <https://doi.org/10.1108/13527591211207734>
- Evans, K., Sanner, B., & Chiu, C.-Y. (Chad). (2021). Shared Leadership, Unshared Burdens: How Shared Leadership Structure Schema Lowers Individual Enjoyment Without Increasing Performance. *Group & Organization Management, 46*(6), 1027–1072. <https://doi.org/10.1177/1059601121997225>
- Gibb, C. A. (1954). Leadership. *Handbook of Social Psychology, 2*, 877-917.
- Grant, A. M., Christiansen, M. K., & Price, R. H. (2007). Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *The Academy of Management Perspectives, 21*(3), 51–63. <https://doi-org.proxy-ub.rug.nl/10.5465/amp.2007.26421238>

- Hayes, A. F. (2022). In Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *The Guilford Press*.
- Hoch, J. E., Dulebohn, J. H., & Pearce, C. L. (2010). Shared leadership questionnaire (SLQ): Developing a short scale to measure shared and vertical leadership in teams. *SIOP Conference (Visual Presentation)*, Atlanta, USA.
- Hoch, J. E., & Dulebohn, J. H. (2013). Shared leadership in enterprise resource planning and human resource management system implementation. *Human Resource Management Review*, 23(1), 114–125. <https://doi-org.proxy-ub.rug.nl/10.1016/j.hrmr.2012.06.007>
- Hoch, J. E., Pearce, C. L., & Welzel, L. (2010). Is the most effective team leadership shared? The impact of shared leadership, age diversity, and coordination on team performance. *Journal of Personnel Psychology*, 9(3), 105–116. <https://doi-org.proxy-ub.rug.nl/10.1027/1866-5888/a000020>
- Hodgson, D., & Briand, L. (2013). Controlling the uncontrollable: ‘Agile’ teams and illusions of autonomy in creative work. *Work, Employment and Society*, 27(2), 308–325. <https://doi-org.proxy-ub.rug.nl/10.1177/0950017012460315>
- Jamshed, S., & Majeed, N. (2019). Relationship between team culture and team performance through lens of knowledge sharing and team emotional intelligence. *Journal of Knowledge Management*, 23(1), 90–109. <https://doi-org.proxy-ub.rug.nl/10.1108/JKM-04-2018-0265>
- Klasmeier, K. N., & Rowold, J. (2022). A diary study on shared leadership, team work engagement, and goal attainment. *Journal of Occupational and Organizational Psychology*, 95(1), 36–59. <https://doi-org.proxy-ub.rug.nl/10.1111/joop.12371>

- López, S. P., Peón, J. M. M., & Ordás, C. J. V. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of knowledge management*.
- Marrone, J. A., Tesluk, P. E., & Carson, J. B. (2007). A multilevel investigation of antecedents and consequences of team member boundary-spanning behavior. *Academy of Management Journal*, 50(6), 1423-1439.
- Mehra, A., Smith, B. R., Dixon, A. L., & Robertson, B. (2006). Distributed leadership in teams: The network of leadership perceptions and team performance. *The Leadership Quarterly*, 17(3), 232–245.
<https://doi-org.proxy-ub.rug.nl/10.1016/j.leaqua.2006.02.003>
- Nielsen, K., & Daniels, K. (2012). Does shared and differentiated transformational leadership predict followers' working conditions and well-being? *The Leadership Quarterly*.
- Olsson-Collentine, A., Van Assen, M. A., & Hartgerink, C. H. (2019). The prevalence of marginally significant results in psychology over time. *Psychological science*, 30(4), 576-586.
- Pearce, C. L., & Sims Jr, 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.
- Perry, B. L., Pescosolido, B. A., & Borgatti, S. P. (2018). Ego-centric network analysis: Foundations, methods, and models. Cambridge, UK: Cambridge University.

- Pritschet, L., Powell, D., & Horne, Z. (2016). Marginally significant effects as evidence for hypotheses: Changing attitudes over four decades. *Psychological science*, *27*(7), 1036-1042.
- Ruan, Z., & Liu, W. (2021). Coach authentic leadership connected with performance satisfaction and psychological well-being of team: The mediating role of team cohesion and psychological capital. *Revista de Psicología Del Deporte*, *30*(1), 189–203.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual review of psychology*, *64*(1), 361-388.
- Schulte, P., & Vainio, H. (2010). Well-being at work—overview and perspective. *Scandinavian journal of work, environment & health*, *36* (5), 422-429.
- Sparrowe, R. T., Liden, R. C., Wayne, S. J., & Kraimer, M. L. (2001). Social Networks and the Performance of Individuals and Groups. *The Academy of Management Journal*, *44*(2), 316–325. <https://doi.org/10.2307/3069458>
- Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American journal of community psychology*, *13*(6), 693.
- Thompson, B. M., Levine, R. E., Kennedy, F., Naik, A. D., Foldes, C. A., Coverdale, J. H., Kelly, P. A., Parmelee, D., Richards, B. F., & Haidet, P. (2009). Evaluating the quality of learning-team processes in medical education: development and validation of a new measure. *Academic Medicine*, *84*(10), 124-127.

Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and the HRM–organizational performance relationship: a review of quantitative studies.

International Journal of Management Reviews, 14(4), 391-407.

Wang, H., & Peng, Q. (2022). Is shared leadership really as perfect as we thought? Positive and negative outcomes of shared leadership on employee creativity. *The Journal of Creative Behavior*.

<https://doi-org.proxy-ub.rug.nl/10.1002/jocb.532>

Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, 99(2), 181-198.

<https://doi.org/10.1037/a0034531>

Wassenaar, C. L., & Pearce, C. L. (2018). Shared leadership. In J. Antonakis & D. V. Day (Eds.), *The nature of leadership*, 3rd ed. (pp. 167–188). Sage Publications, Inc.

Wong, E., Tschan, F., & Semmer, N. K. (2017). Effort in emotion work and well-being: The role of goal attainment. *Emotion*, 17(1), 67–77.

<https://doi-org.proxy-ub.rug.nl/10.1037/emo0000196>

Zhu, J., Liao, Z., Yam, K. C., & Johnson, R. E. (2018). Shared leadership: A state-of-the-art review and future research agenda. *Journal of Organizational Behavior*, 39(7),

834–852. <https://doi-org.proxy-ub.rug.nl/10.1002/job.2296>

Appendix A

Shared Leadership Questionnaire Items (Hoch et al., 2010)

1. My team members provide a clear vision of whom and what our team is.
2. My team members are driven by higher purposes or ideals.
3. My team members show enthusiasm for my efforts.
4. My team members encourage me to rethink ideas which had never been questioned before.
5. My team members seek a broad range of perspectives when solving problems.
6. My team members encourage me to go above and beyond what is normally expected of one (e.g., extra effort).
7. My team members decide on my performance goals together with me.
8. My team members and I work together to decide what my performance goals should be.
9. My team members and I sit down together and reach agreement on my performance goals.
10. My team members work with me to develop performance goals.
11. My team members encourage me to search for solutions to my problems without supervision.
12. My team members urge me to assume responsibilities on my own.
13. My team members encourage me to learn new things.
14. My team members encourage me to give myself a pat on the back when I meet a new challenge.
15. My team members encourage me to work together with other individuals who are part of the team.

16. My team members advise me to coordinate my efforts with the others, who are part of the team.
17. My team members urge me to work as a team with the others, who are part of the team.
18. My team members expect that the collaboration with the other members in the team works well.

Appendix B**Team Satisfaction Items (Spector, 1985)*****Co-workers***

1. I like the people I work with.
2. I find I have to work harder at my job because of the incompetence of the people I work with.
3. I enjoy my coworkers.
4. There is too much bickering and fighting at work.

Supervision

5. My supervisor is quite competent in doing his/her work.
6. My supervisor is unfair to me.
7. My supervisor shows too little interest in the feelings of subordinates.
8. I like my supervisor.

Communication

9. Communications seem good within this team.
10. The goals of this team are not clear to me.
11. I often feel that I do not know what is going on with the team.
12. Work assignments are not fully explained.

Appendix C

Team Performance Items (Thompson et al., 2009)

1. All team members made an effort to participate in discussions.
2. When team members had different opinions, each member explained his or her point of view.
3. Team members encouraged one another to express their opinions and thoughts.
4. Team members shared and received criticism without making it personal.
5. Different points of view were respected by team members.
6. Often members helped a fellow team member to be understood by paraphrasing what he or she was saying
7. My team used several techniques for problem solving with each team member presenting his or her best ideas.
8. Team members worked to come up with solutions that satisfied all members.
9. All team members consistently paid attention during group discussions.
10. My team actively elicited multiple points of view before deciding on a final answer.
11. Team members listened to each other when someone expressed a concern about individual or team performance.
12. Team members willingly participated in all relevant aspects of the team.
13. Team members resolved differences of opinion by openly speaking their mind.
14. Team members used feedback about individual or team performance to help the team be more effective.
15. Team members seemed attentive to what other team members were saying when they spoke.
16. My team resolved many conflicts by compromising between team members, with each one giving in a little.

17. Members who had different opinions explained their point of view to the team.
18. Team members were recognized when something they said helped the team reach a good decision.

Appendix D**Collaborative Team Culture Items (Lopez et al., 2004)**

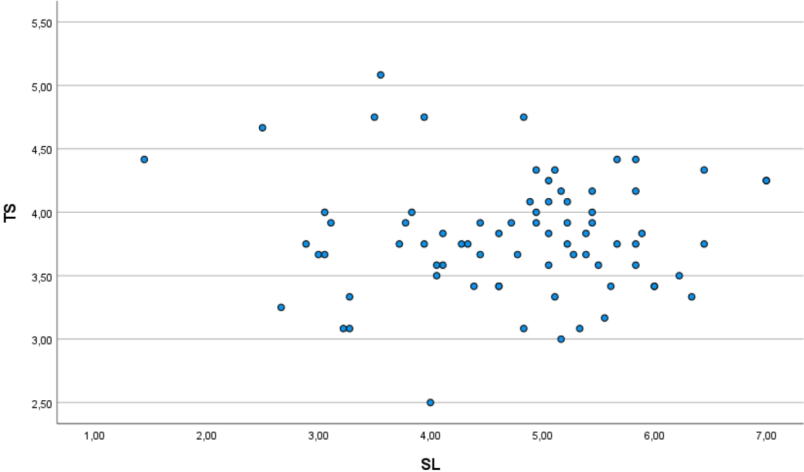
1. The team considers change to be natural and necessary.
2. The team considers individuals as an asset and tries to appreciate them continuously.
3. Team members who experiment and take reasonable risks are well-considered even if they should be mistaken.
4. The preservation of different points of view is encouraged.
5. All team members' opinions and contributions are respected.
6. Problems are discussed openly, to avoid finding culprits.
7. In our team, collaboration and co-operation are encouraged.
8. In general, all team members are aware of client satisfaction.

Appendix E

Supplementary Figures and Tables

Figure B1

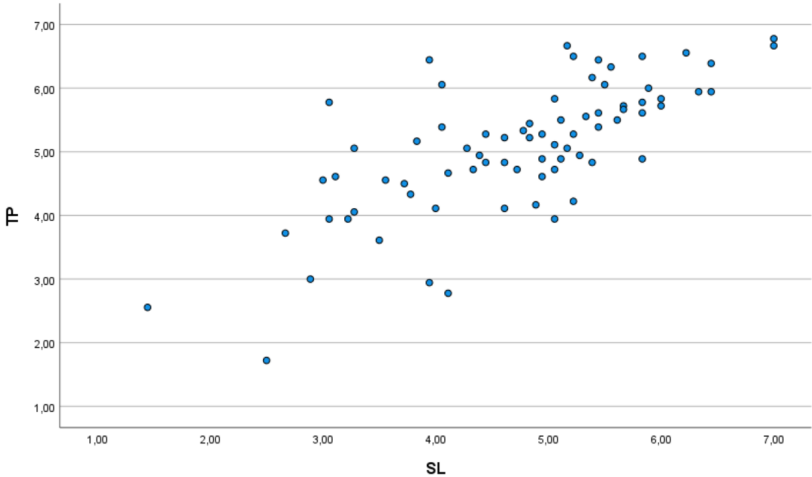
Scatterplot Visualizing Linearity for Shared Leadership and Team Satisfaction



Note. The x-axis depicts the independent variable shared leadership (SL) and the y-axis portrays the dependent variable team satisfaction (TS).

Figure B2

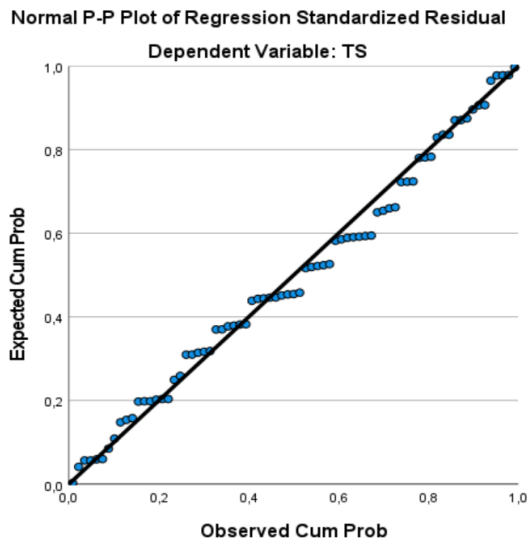
Scatterplot Visualizing Linearity for Shared Leadership and Team Performance



Note. The x-axis depicts the independent variable shared leadership (SL) and the y-axis portrays the dependent variable team performance (TP).

Figure B3

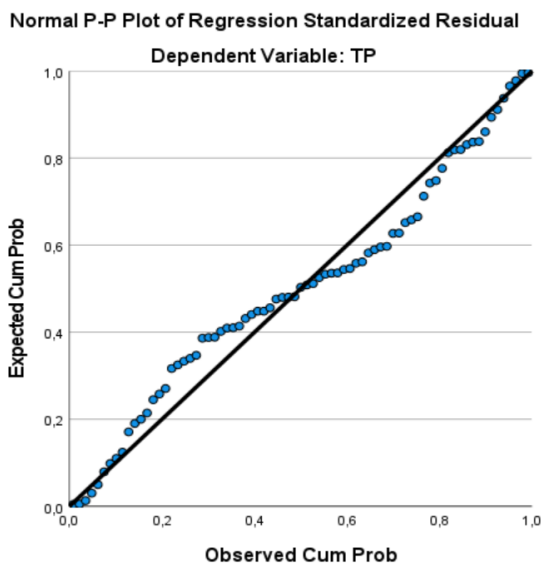
P-P Plot Visualizing Normality for Shared Leadership and Team Satisfaction



Note. The x-axis depicts the observed cumulative probability and the y-axis portrays the expected cumulative probability for the dependent variable team satisfaction (TS).

Figure B4

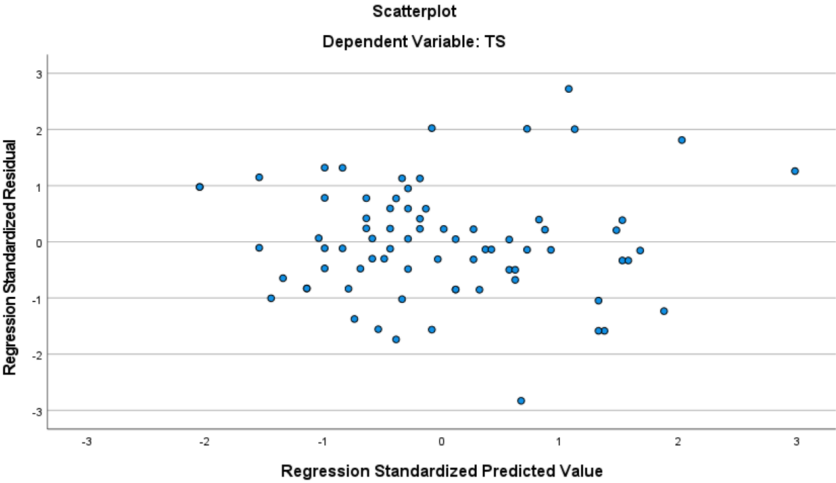
P-P Plot Visualizing Normality for Shared Leadership and Team Performance



Note. The x-axis depicts the observed cumulative probability and the y-axis portrays the expected cumulative probability for the dependent variable team performance (TP).

Figure B5

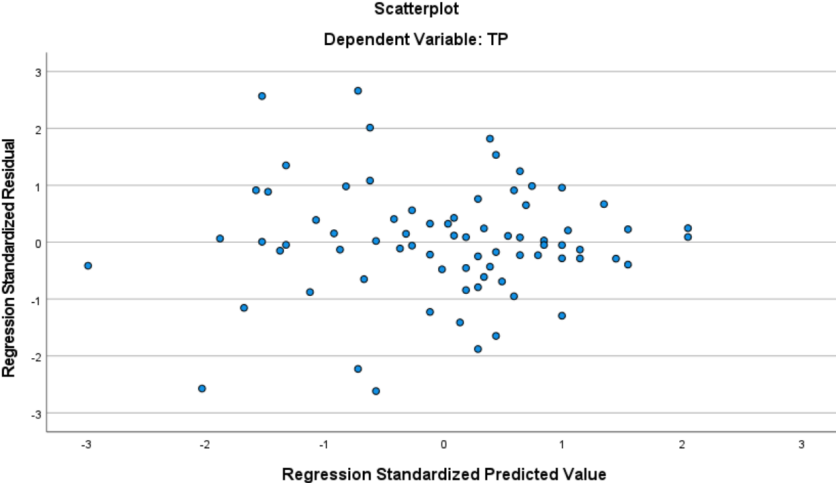
Scatterplot Visualizing Homoscedasticity for Shared Leadership and Team Satisfaction



Note. The x-axis represents the regression of the standardized predicted value and the y-axis showcases the regression of the standardized residual for the dependent variable team satisfaction (TS).

Figure B6

Scatterplot Visualizing Homoscedasticity for Shared Leadership and Team Performance



Note. The x-axis represents the regression of the standardized predicted value and the y-axis showcases the regression of the standardized residual for the dependent variable team performance (TP).

Table B1*Independence Based on Durbin-Watson Index for Shared Leadership and Team Satisfaction*

Model	<i>R</i>	<i>R</i> ²	<i>Adjusted R</i> ²	<i>SE of the Estimate</i>	<i>Durbin-Watson</i>
1	.015	.000	-.013	.46476	1.340

Table B2*Independence Based on Durbin-Watson Index for Shared Leadership and Team Performance*

Model	<i>R</i>	<i>R</i> ²	<i>Adjusted R</i> ²	<i>SE of the Estimate</i>	<i>Durbin-Watson</i>
1	.723	.523	.517	.71596	2.584

Table B3*Multicollinearity Based on Variance Inflation Factor (VIF) for Team Satisfaction*

Model		B	SE	β	<i>t</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>VIF</i>
1	Constant	3.840	.238		16.124	<.001		
	SL	-.006	.049	-.015	-.130	.897	1.000	1.000

Table B4*Multicollinearity Based on Variance Inflation Factor (VIF) for Team Performance*

Model		B	SE	β	<i>t</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>VIF</i>
1	Constant	1.876	.367		5.114	<.001		
	SL	.675	.075	.723	8.953	<.001	1.000	1.000