

**Shared Leadership and Team Outcomes: The Moderating Role of Organizational
Commitment**

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Abstract

Shared Leadership entails the distribution of leadership responsibilities among the members of a team and is becoming ever so popular in the modern corporate world. Research has shown that it relieves single members of accountabilities and stress and simultaneously increases team outcomes for all members. The current study investigates which outcomes exactly are enhanced, focusing specifically on team performance and satisfaction. It is hypothesized that both will be positively and significantly related to shared leadership. Furthermore, to enhance previous research the moderating role of organizational commitment is investigated and predicted to strengthen the relationship between shared leadership and outcomes if it is higher rather than lower. The study includes a convenience sample with participants from a range of different occupational backgrounds (N=75). A linear regression study was conducted to investigate the different associations and moderation effects. Results show that shared leadership is significantly associated with team performance, however not team satisfaction. Organizational commitment on the other hand is significantly related to team satisfaction but not team performance. Furthermore, organizational commitment showed no moderation effect on team performance or satisfaction. We conclude that shared leadership is beneficial to organizations as it helps enhance outcomes, more specifically team performance. When looking at team satisfaction, however, we propose that future research should investigate third variables which may mediate the association. Strengths and limitations are discussed.

Keywords: shared leadership, team performance, team satisfaction, organizational commitment

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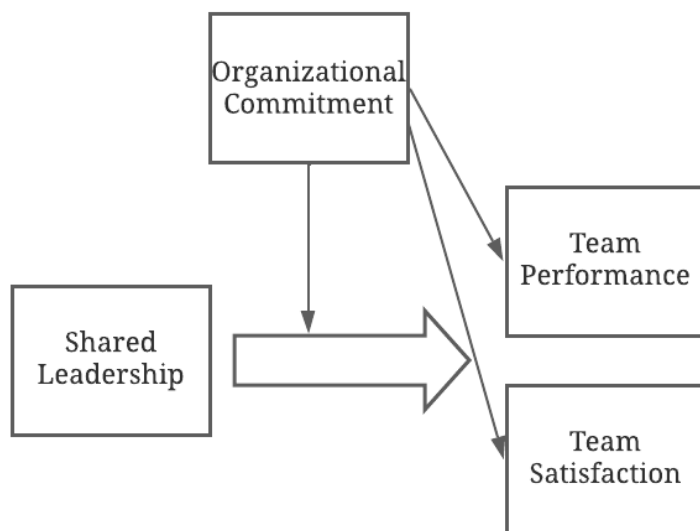
Introduction

The modern corporate world is constantly evolving and developing, leaving the structure of organizations having to undergo constant changes (Mayhew, 2017). Companies ask themselves which change is most beneficial to maximize the outcomes. Frequently, change starts at the top of the hierarchy, with leadership (Mayhew, 2017). The recently more often implemented type of leadership, namely shared leadership (SL), is considered a way of performing organizational management leading to a change in dynamics at the workplace, in teams, and for individuals (Hoch, 2012). SL entails the novel dynamic of a team that fosters the dispersal of leadership accountabilities among its members (Carson et al., 2007). This means that members share responsibilities, have enhanced communication and collaborative group work, and eventually a more augmented structure.

This new type of leadership has been steadily developing in the last decade and thus generated increasing interest in research. Emerging findings show that SL is positively associated with team outcomes such as team performance (TP), effectiveness, fulfillment, and creativity (Bergman et al., 2012). Furthermore, the effect of SL on team outcomes was found to be stronger than for vertical leadership (Pearce & Sims, 2002). Vertical leadership describes the dynamic of one team member being placed in the hierarchy above all others and being responsible for the management position (Pearce & Sims, 2002). Pearce (2004), however, questioned the usefulness of vertical leadership after stating that knowledge work is predominantly team-based, increasing the popularity and demand of research in the area of SL. Thus, in this paper the focus will be on examining the effect of SL on two main outcomes, viz., TP and team satisfaction (TS). Lastly, in relation to that, the moderating role of organizational commitment (OC) in this model will be examined as well.

Although findings provide evidence for the positive effect of SL on team outcomes, some aspects provide an opportunity for extension and more depth, such as exploring the moderating role of OC. Next to TP and TS, OC, namely, an employee's perception of how comfortable they feel staying with the organization has also been found to be positively related to SL (Bligh et al., 2006). Furthermore, OC is positively related to both satisfaction and performance, making it an important contributing variable (Loan, 2020). Research on these variables is important for being able to maximize team outcomes and satisfying employees to the greatest possible extent (Fitzsimmons, 2016). In addition, extending and adapting to previous findings enables the maximization of the most favorable outcomes of SL. Therefore, we seek to display the influencing role of OC affecting the two outcomes when being more or less pronounced. Given this information, we suggest if OC is high, this could strengthen the relationship between SL and team outcomes as employees may feel more comfortable in their organization.

Therefore, in this paper, next to direct relations between SL and TP and TS, the moderating role of OC will also be investigated. Furthermore, the direct relation between OC and TP, as well as TS will be explored also. Hence, the employment of the present research model (See Fig. 1), offers insight into novel findings exploring the moderating role of OC and focusing on a team setting rather than an individual or organizational level.

Figure 1*The Present Research Model*

Note. This figure displays the model of the current research and its underlying variables.

Theory and Hypothesis Development*The Present Research*

In the pages that follow, the relationship between SL and different team outcomes will be investigated. Given the definition of SL, the dispersal of tasks throughout the team is essential (Carson et al., 2007). Thus, the higher SL is, the more tasks and responsibilities are distributed among the members of a team, potentially leading to better performance and higher satisfaction. Furthermore, if members are strongly devoted to their team, as suggested by Meyer and Allen, (1991, p.67) when explaining organizational commitment, the positive effect of SL on team outcomes should be more evident. These predictions will now be explored in subsequent research.

Shared Leadership and Team Performance. TP is a construct built up of different components. Adding to the bigger picture are employees' joint performance within teams, and their success in achieving goals and objectives. This can be classified in terms of team effectiveness and efficiency (Day, 2004). As the meta-analysis by Wang et al. (2014)

presents, previous literature offers a range of ambivalent findings, both supporting and opposing the influence of SL on job performance. Yet, SL was found to positively influence attitudes, interactions, and the extent to which employees cooperate, leading to a more effective functioning as a team. (Bergman et al., 2012). Additionally, Bergman et al. (2012) found that SL leads to higher consensus among teams. These findings correspond to the aforementioned aspect of TP; success in achieving common goals, thus providing a foundation for the relationship between SL and performance. Furthermore, according to the definition of SL, the interaction of individuals and the sharing of knowledge and input is thought to increase opportunities (Carson et al., 2007). When connecting SL and TP one can detect the overlapping factors of effectiveness, collaboration, productivity, and increased results. Therefore, as SL is high, in other words, the underlying factors are strong, the same underlying factors for performance should be strong as well. Thus, we predict that if these factors are elevated, they consecutively lead to improved TP.

H1 Shared Leadership is positively related to Team Performance.

Shared Leadership and Team Satisfaction. TS is known to be an employee's perception of their attitudes and positive affect toward the workplace, more specifically their team (Spector, 1997). The concept takes into consideration the employees' fulfillment, whether they like certain aspects such as the work environment and atmosphere, and how comfortable they are with their tasks, particularly when collaborating with others. Successful SL has been found to augment interactions between team members and promote a social work climate, generating positive affect among employees (Ensley et al., 2006).

Nonetheless, like TP, previous literature on the relationship between SL and TS shows contradictory findings. In an environment in which SL was newly implemented, it was significantly and positively related to TS (Quek et al., 2021). On the other hand, Bergman et al. (2012) fail to find support for the direct relationship between SL and TS. This may be due to the general increase in decision-making under SL, leading to a higher number of decisions

disapproved by employees and thus, greater dissatisfaction. A positive relation was only found when mediated by trust in leadership (Silla, 2020). Trust enhances the quality of communication and therefore positive affect of employees, leading to greater job satisfaction. As found in the Job Satisfaction Survey by Spector (1985), “*Communications seem good within this team.*”, trust links to these items, explaining the mediating role. Given the ambivalence in previous findings, we seek to provide clarity and evidence for the positive relationship between SL and TS.

TS components such as comfort in the collaboration with others and positive affect towards the workplace are nonetheless also entailed in the definition of SL. Thus, if SL is strong, so should its underlying components. Based on these correspondences and the previous findings we propose that SL is positively correlated with TS.

H2 Shared Leadership is positively associated with Team Satisfaction.

Organizational Commitment. OC acts as a determinant for an employee’s dedication to the organization and the extent to which an employee chooses to stay with the organization (Meyer & Allen, 1991, p.67). OC consists of three underlying components: Affective Commitment (AC), Continuance Commitment (CC), and Normative Commitment (NC). AC describes an employee’s positive emotions connected to the job and team. It relies on equal values and ideas with co-workers, as well as creativity and novelty on tasks. CC describes the feeling of apprehension towards losing one’s job. Lastly, NC entails, the obligation felt by an employee to stay with the organization and/or team. If CC and NC are experienced healthily, this can strengthen AC, nonetheless, the three are not mutually exclusive (Meyer & Allen, 1991).

Organizational Commitment and Team Performance. The relationship between commitment and performance was found to be significant and reciprocal (Loan, 2020). When breaking OC down into its three components, one can see the connection between CC and TP. The fear of losing one’s job can motivate a team to increase performance, by working more

effectively on tasks and with one's co-workers. Moreover, experiencing NC to a small extent also increases TP (Sungu et al., 2019). The responsibility felt toward the organization may lead to higher engagement in work tasks and more collaboration with employees, in other words, higher TP. Thus, we hypothesize that OC is positively related to TP.

H3 Organizational commitment is positively associated with Team Performance.

Previous research found that OC is positively related to higher levels of SL (Bligh et al., 2006). Additionally, it strengthens engagement in team behavior and creates a positive environment, providing evidence for the significant role of organizational commitment. Furthermore, OC leads to less absenteeism, more profit, and motivation, as well as increased organizational citizenship behavior (OCB) (Meyer & Allen, 1991). OCB entails non-compulsory work behavior engaged in by employees, such as giving feedback without being asked, working overtime without being paid, or helping create a better work environment (Organ, 1988). This connects directly to the aforementioned relationship between TP and SL, entailing increased effectiveness, collaboration, and results. Additionally, team commitment strengthens the intention to stay with an organization, which in return, as mentioned above, has also been found to lead to higher TP (Neininger et al., 2010). Therefore, we predict, that if OC is high, rather than low, the relationship between SL and TP will be stronger. This is due to the enhancing effect of OC yielding more pronounced collaboration, team creativity, and goal achievement. Concludingly, we thus hypothesize that OC will have both a direct relation and moderating role with TP and SL.

H4 Organizational Commitment moderates the relationship between Shared Leadership and Team Performance. This positive relationship is more pronounced when Organizational Commitment is higher rather than lower.

Organizational Commitment and Team Satisfaction. Meyer and Allen's (1991) affective component of OC describes the affection one has for their job, as mentioned above. This links to the earlier stated definition of TS, which entails an employee's positive affect for

the job and the team (Spector, 1997). AC tends to be stronger if positive emotions are experienced. This connects to the concept of TS which is also stronger when positive affect is experienced. Nazeen and Miralam, (2017) provide evidence for this, showing that job satisfaction is most strongly positively correlated with affective commitment. Additionally, AC is furthermore reinforced if both CC and NC are high as well, showing that OC in general may lead to higher TS (Meyer & Allen, 1997). Thus, in this paper, we predict that when OC is high, this will positively influence TS.

H5 Organizational commitment is positively associated with Team Satisfaction.

Moreover, as elaborated above, we predict that OC will play a moderating role in the relationship between SL and TS. This is due to the overlapping factors of collaboration and communication with co-workers as well as positive emotions towards the team which will be stronger if OC is higher (Loan, 2020). The relationship between TS and SL relies on enhanced communication, a positive attitude towards the workplace and co-workers, and a comfortable atmosphere for employees (Edelmann et al., 2020). Given OC's outcomes of enhanced dedication, performance, and less turnover, this also directly connects to higher satisfaction among employees (Meyer & Allen, 1991). Lastly, SL increases employee engagement which in turn leads to greater job satisfaction (Quek et al., 2021). Furthermore, previous literature shows that OC and employee engagement are positively and significantly related (Khalid et al., 2015; Rani et al., 2020). Connecting both leads one to the conclusion that if OC is high, employee engagement would be high too, strengthening the effect SL has on employees and finally leading to greater satisfaction among employees.

As such, we predict high OC will lead to a more positive relationship between SL and TS than low OC would. Based on the evidence we establish these hypotheses that include the variable of OC on TS.

H6 Organizational Commitment moderates the relationship between Shared Leadership and Team Satisfaction. This positive relationship is more evident when Organizational Commitment is higher rather than lower.

Method

Participants

The analysis consists of data of 75 participants with an age ranging from 21 to 65 years ($M = 42.24$, $SD = 14.25$). Responses to the survey were collected over a period of two weeks. Team size ranged from 3 to 264 members with 30.7% of participants working in teams of more than 8 members, 13.3% with more than 14 and 12% with more than 20 members. One participant said to be in a team of 312 people which is considered a very high value. As the other answers were within the range, we excluded this specific value but kept the overall case in the analysis. Most participants have been part of their company for more than two years. Here again one value was far outside the range being 131 years at the company, thus we also deleted this answer from the data set but included the case because the other variables were reasonable. Furthermore, the distribution of gender is reflected by 40% of men, 58.7% of women and 1.3% otherwise defined. The sampled places of residence were The Netherlands (26.7%), Germany (41.3%), Poland (20%) and other (12%). Lastly, we looked at the type of contract participants have, with the majority having a permanent contract (73.3%), the level of seniority in the organization (predominantly senior with 48%) and in which business sector participants are employed (mostly education and instruction with 18.7%).

Design and Procedure

Participants for this study were selected based on proximity and accessibility, thus, relying on a convenience sample. The data was collected through an online survey. Students at the University of Groningen in the Netherlands shared the link, making access to the questionnaire possible, with friends, family, and acquaintances. Before data collection started, the Ethics Committee of the corresponding university approved the questionnaire. Data was

then collected within two weeks, starting on the 17th of May 2022, and ending on the 1st of June 2022. After the survey was finished, the data collected was assessed and analyzed with Statistical Package for the Social Sciences (SPSS).

Once participants entered the survey environment, they were informed about the research procedure and content. This was followed by the information of informed consent which had to be granted by participants to be able to take part in the study. Participants were then asked demographic questions and questions regarding their current occupational situation. Furthermore, participants had to fulfill certain criteria to continue taking part in the study. Once completed, participants continued to answer the scales for the variables. Following this, the demographic and exclusion criteria questions were to be completed again. To end the survey, participants were provided with a debriefing form stating the actual purpose of the research and presented with an opportunity to contact the main investigator to gain further insight into the research.

Exclusion Criteria

To ensure participants fulfill adequate criteria for taking part in the study, we included certain exclusion measures. These were added both at the beginning and end of the survey to furthermore, rule out any participants giving false or altered answers. First, the participants were asked for their age, as participants under the age of 18 are excluded. Moreover, participants were only included if working in a team with more than three members. Lastly participants had to work at least 20 hours a week to not be excluded automatically.

Measures

After becoming familiar with and having answered questions regarding the general topic of the survey, *leadership and teams at the workplace*, participants are presented with further questions; the answers to these questions were ranging on a Likert scale from (1) 'I do not agree at all' to (7) 'I strongly agree'. The variables are Shared Leadership, Team Performance, Team Satisfaction and Organizational Commitment.

Shared Leadership. SL is measured using the questionnaire developed by Hoch et al., (2010). The questionnaire was adapted to consist of 18 items giving it a reliability of $\alpha = 0.94$, compared to the original Cronbach Alpha of $\alpha = 0.85$. The items focus on both vertical leadership as well as SL. Moreover, the scale focuses on the dimensions of transformational, transactional, directive, and aversive leadership, as well as empowerment on a team and individual level. The scale includes items such as “*My team members decide on my performance goals together with me.*”, “*My team members show enthusiasm for my efforts.*” or “*My team members are driven by higher purposes or ideals.*” (See appendix A). All dimensions contribute to the multifaceted definition of leadership making the scale suitable for this study.

Team Performance. Performance is measured using the scale developed by Thompson et al., (2009). The scale includes 18 items with a reliability of $\alpha = 0.97$, thus being very reliable. The scale helps to measure the quality of team collaborations, some examples being “*Team members encouraged one another to express their opinions and thoughts.*”, “*Team members willingly participated in all relevant aspects of the team.*”, or “*Team members shared and received criticism without making it personal.*” (For more see appendix B). It focuses on the working together of team members, breaking it down into attitudes as well as behavior. The scale can be used for various organizations making it suitable for this study.

Team Satisfaction. The TS scale is taken from the *Job Satisfaction Survey* by Spector (1985). The original scale includes 9 subscales containing 4 items each. However, to solely measure the team and not overall job satisfaction, we adapted and only included the subscales measuring TS. These are *Co-workers* ($\alpha = 0.6$), *Supervision* ($\alpha = 0.82$) and *Communication* ($\alpha = 0.71$), examples include “*I enjoy my coworkers.*”, “*My supervisor is unfair to me.*” or “*Communications seem good within this team.*” (for further understanding see appendix C).

TS measures employees' attitudes towards their work with focus on their team and co-workers. The scale can be used for a large variety of organizations; thus, it is employed in this study.

Organizational Commitment. To measure participants' OC the *Three Component Conceptualization of Organizational Commitment* by Meyer and Allen (1997) is used. The scale is constructed of three subscales measuring, *Affective Commitment* with 8 items with a Cronbach's alpha of $\alpha=0.86$, *Continuance Commitment* with 9 items shows a reliability of $\alpha = 0.79$ and *Normative Commitment* with 6 items and a reliability of $\alpha=0.73$ (See appendix D). All the values for Cronbach's alpha provide evidence for the subscales being reasonably reliable. The scale measures an employees' emotional connection (affective commitment) an example being "*This team has a great deal of personal meaning for me.*". Furthermore, consciousness of the benefits of staying with the team is measured (continuance commitment), for example "*It wouldn't be too costly for me to leave my team in the near future.*". Lastly the feeling of obligation to stay with the team is measured (normative commitment) with questions such as "*I would feel guilty if I left my team now.*". These three factors are important in reflecting one's overall commitment towards a team and thus measure the strength of this dedication.

Results

The analysis for the study is a linear regression analysis with the SPSS (version 26) program. Furthermore, the extension named PROCESS by Hayes was used to analyze the moderation effect of OC on the relationship between SL on TP and TS (Hayes, 2022). The initial sample consisted of 118 participants; however, 43 participants were excluded as they did not fit the sample requirements. This left a sample size of 75 for the analysis. Furthermore, one participant said to be in a team of 312 people which is considered a very high value. As the other answers were within the range, we proceeded to delete the specific value of 312 but kept the overall case in the analysis. Most participants have been part of their

company for more than two years. Here again one value was far outside the range, being 131 years at the company. Thus, we also deleted this answer from the data set but included the whole case because it was a clear typing mistake as the other answers showed a normal value range distribution.

Assumptions of Linear Regression

Before analyzing the main and interaction effects of SL and OC on TP and TS, we checked the assumptions of linear regression. We started the analysis by checking the assumption of linearity of variables, which we determined to be met after evaluating the plots. Next, we checked the normality of the variables by conducting P-P Plots. All plots displayed a normal distribution, (see Appendix E). The third assumption we checked is independence. Given the independent distribution of the questionnaire, we assumed that independence of variables is met. When looking at the value of the Durbin-Watson test, however, the value was in the upper range for SL on TP (2.538). The value is yet acceptable which is why we continued with the analysis. Homoscedasticity was checked with a regression scatterplot which showed a slight funnel-shaped pattern for SL on TP, but it is generally spread (see Appendix F). Thus, we assumed that homoscedasticity is met and proceeded with the analysis without changing data or conducting non-parametric tests.

Descriptives

Upon examining the descriptives of the analysis, SL and TP are correlated strongly and positively, as expected. SL and TS on the other hand show a weak, negative correlation contradicting the predictions. Furthermore, OC and TP are very weakly, positively correlated and OC and TS show a moderate positive correlation. Both findings contrast the hypothesized association which was said to be positive and strong. Nonetheless, although the correlation between OC and TS is moderate, it displays to be significant (see Table 1).

Table 1*Means, Standard Deviations and Correlations of Study Variables*

<i>Variables</i>	M	SD	1.	2.	3.
1. Shared Leadership	4.74	1.10			
2. Team Performance	5.08	1.03	0.72**		
3. Team Satisfaction	3.81	0.46	-.02	-.19	
4. Organizational Commitment	3.77	0.59	0.18	0.19	0.46**

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

Hypothesis Analysis

The model used in this study is a moderation model. To analyze the main and moderation effects of the variables used in the study, we conducted a moderation analysis. The independent variable is SL. Its influence on the dependent variables TP and TS is examined. Further, the role of the moderating variable, OC, and its influence on the strength of the direct relationship between SL and TP and TS is investigated. Lastly, we explored the direct influence of OC on TP and TS as well. The relationship between the variables was investigated through a set of measures and scales assessing the correspondence to different statements. SL and TP have a strong positive correlation (see Table 1). Furthermore, the lower and upper bound of the confidence interval do not include 0, (CI [0.5, 0.82]), supporting the significant effect (see Table 2a). Therefore, it can be concluded that SL and TP have a positive and significant association, supporting hypothesis 1. Next SL on TS was analyzed. The results of the analysis show a very weak correlation as seen in Table 1, as well as a non-significant effect (see Table 2b). This is also reinforced by the confidence interval including 0, (CI [-.13, 0.05]). Concludingly, these results fail to support hypothesis 2. The next main effect which was analyzed is the relationship between OC and TP. Results show a weak, positive correlation (see Table 1) and a non-significant effect (see Table 2a). The non-

significant effect is here also reinforced by the confidence interval including 0, (CI [-.2, 0.39]). The results consequently show no support for hypothesis 3. The last main effect analyzed is the relationship between OC and TS. Results show a moderate correlation (see Table 1) as well as a significant effect (see Table 2b). This is further supported by the confidence interval, which does not include 0, (CI [0.22, 0.55]) thus hypothesis 5 is supported.

The total moderation model including variables SL, OC and TP explains 52.8% of the variance ($R^2 = 0.52$) with values being $F(3,71) = 26.47$, and $p < 0.01$. Table 2a below summarizes the interaction effects of the model. As the interaction effect is not significant, the effect of OC at higher and lower values will not be evaluated and hypothesis 4 is not supported.

Table 2a

Results of Regression Analysis predicting Team Performance

Predictor	B	SE	t	p
Constant	5.04	0.08	59.95	0.00
Shared Leadership	0.66	0.08	8.43	0.00**
Organizational Commitment	0.09	0.15	0.63	0.53
Interaction	-.06	0.13	-.45	0.66

Note. N=75, Variables Shared Leadership and Organizational Commitment were mean centered, ** $p < 0.05$.

The second moderation model analyzes the interaction effect of SL, OC and TS. The model summary describes values $F(3,71) = 6.91$ and $p < .01$ with 22.6% of the variance explained ($R^2 = 0.23$). Table 2b presents the values for the single interactions. The interaction, however, effect shows a value of $p = .48$ displaying that the effect is not significant, thus showing no support for hypothesis 6. Furthermore, as the interaction effect is not significant, values one standard deviation above and below the mean will not be analyzed.

Table 2b*Results of Regression Analysis predicting Team Satisfaction*

Predictor	B	SE	t	p
Constant	3.8	0.05	78.16	0.00
Shared Leadership	-.04	0.05	-.83	0.41
Organizational Commitment	0.38	0.08	4.55	0.00**
Interaction	0.06	0.08	0.73	0.48

Note. N=75, Variables Shared Leadership and Organizational Commitment were mean centered, ** $p < 0.05$.

Overall, there were only two main effects found namely, SL and TP, as well as OC and TS. There interaction effects were not found to be significant, showing no support for the hypotheses.

Discussion

Findings and Theoretical Implications

Due to constant changes in the corporate world and the everlasting goal of increased performance and outcomes, research on leadership styles and changes is relevant and sought (Mayhew, 2017). In line with this, the present study builds up and extends on previous research in this area focusing specifically on shared leadership and team outcomes. Furthermore, previous literature was extended by exploring the moderating role of organizational commitment, more specifically, whether team outcomes increase if organizational commitment is high.

When reviewing the direct effects, results show that shared leadership has a significant effect on team performance. This finding was expected and is in line with previous literature (Bergman et al., 2012; Martin et al., 2018). It links to shared leadership increasing factors such as effectiveness, productivity, and results, which thus comprise team performance (Day, 2004). On the other hand, a positive, significant relationship between shared leadership and

team satisfaction was not discovered during the analysis. In contrast, the correlation between the two indeed shows slight negativity. Although it was predicted otherwise, due to overlapping factors of the two variables, such as shared leadership promoting a social work climate, the findings are somewhat in line with previous research (Bergman et al., 2012).

Upon examining the direct effects of organizational commitment on team outcomes, results do not report a significant effect of organizational commitment on team performance. This contradicts previous findings, which suggest that especially the underlying component, continuance commitment, leads to greater performance (Loan, 2020). Continuance commitment reflects the possible alternatives for employees and the effort and dedication they have put into the current job (Meyer & Allen, 1991). If the alternatives however are high and valuable and an employee has invested little, continuance commitment may be low and lead to less job performance, as presented by the present results. On the contrary, results show that organizational commitment significantly influences team satisfaction. This strengthens previous findings and the idea that the positive affect created by organizational commitment creates greater team satisfaction (Nazeen & Miralam, 2017). As explained by Meyer and Allen (1991), affective commitment builds up on the organizational structure and comfort of the work experiences. Thus, it can be hypothesized, that if an employee is comfortable with their work and the organizational structure, they are high in affective commitment, and therefore, will be more satisfied at the workplace.

The analysis of the moderation models did not show any significant findings for the interaction effects; thus, the moderation hypotheses were not supported. This shows that the effect of shared leadership on team performance and satisfaction is not stronger when organizational commitment is higher. Although the summary of both models reports significance, there is no interaction effect found. The explained variance for team performance is slightly more than half, indicating that the variables do not sufficiently explain the model. Furthermore, only approximately one-fourth of the variance is explained for the

moderation model of team satisfaction. In other words, the results indicate that different factors may play a role in explaining the moderating role of organizational commitment in the relationship of shared leadership on team performance and satisfaction. Thus, these findings elicit new information as they are not in line with the previous literature (Khalid et al., 2015; Neiningger et al., 2010; Rani et al., 2020). Organizational commitment here was found to strengthen underlying factors of both performance and satisfaction, increasing both variables when organizational commitment is high, nonetheless, this is not reinforced by the current findings.

Strengths and Limitations

A significant strength of the present study is the generalizability of the findings. Although a sample size of 75 is rather limited, participants display a broad span of different occupations. Therefore, the study appeals to managers and leaders of various business fields as the results are adaptable.

Moreover, the questionnaires in the study are well-established scales that have been used primarily in an organizational setting. Therefore, the survey and scales come with high reliability and generate valid results, which are applicable to a real-world setting.

When reviewing the present research, one, however, must also consider the limitations the study was liable to. The questionnaire was distributed by students at the University of Groningen to friends, family, and companies in the city of Groningen. As such the sample is considered a convenience sample. Participants of the study were primarily residents of countries with individualistic cultures. Thus, the sample can be considered academically and geographically confined, resulting in restricted external validity. Adding to this it can be said that the sample includes individuals of a certain team, but not all members. This results in the vagueness and bias of the team dynamic as a whole and how all members view the team, not only one specific individual.

Additionally, a sample size of 75 is considered lesser and although adequate for the research, does not offer much statistical impact. Although 118 participants took part in the study, the sample for analysis was reduced significantly. The main cause for this was the length of the questionnaire. For many it took longer than the indicated time and thus, they stopped before finishing. Therefore, the responses were not sufficient for the analysis.

Moreover, participants were able to change the language of the questionnaire into German and Polish. This may have resulted in certain aspects being lost in translation and less specificity of items presented. Furthermore, during the analysis, it was not controlled for third variables. This resulted in a small value for the explained variance, viz., other factors which may explain the effect were not explored.

Lastly, it must be considered that organizational commitment was investigated as a complete variable, with little consideration towards its three underlying components affective, continuance, and normative commitment. As found in previous research, different components elicit different reactions in individuals. However, the underlying components were not controlled for and thus, participants were not targeted specifically. This results in a broad investigation of the variable and less chance to stimulate the sought response in participants.

Practical Implications

The study puts forward a great deal of theoretical and practical implications. The implementation of shared leadership through increasing team performance may lead to greater profit and more engagement for the organization. Moreover, the results may be helpful for organizations by structuring change in such a way that shared leadership is implemented to generate greater outcomes. Additionally, as the study's participants come from a range of different occupational backgrounds, the findings can be applied to various organizations. Hence, implementing these findings may generate greater sustainability for the organization,

which would entail work engagement and efficiency as well as less turnover (Cooper & Chen, 2014).

Future Directions

Given the ambivalence of the results presented, several aspects could be implemented in the future to increase accuracy and establish more clarity. Controlling for certain factors, such as time spent at the company or in a team, may allow for a better understanding of relations. Especially when investigating the effect of organizational commitment this would give a sharper idea of the likelihood of employees' dedication towards and connection with the organization or their team.

To achieve more accurate results and clarity in the research on organizational commitment it would be helpful to focus more specifically on the underlying components, namely, affective, continuance, and normative commitment in the future. This aims to target the variable's outcome more specifically rather than in the entirety. It would result in a better understanding of how exactly the variables are associated and which interventions and changes would be the most helpful to achieve the greatest outcomes. Affective commitment describes a person's emotional relationship with the organization as stated by Meyer and Allen (1991). Thus, to achieve the best manipulation of this component one could activate a condition targeting participants' affection through exploring their goals and values compared to those of the organization. This gives a better overview of how exactly the affective component is related to team satisfaction and brings more clarity to the relationship. Next, continuance commitment, which entails individuals' apprehension of losing their job could be targeted by manipulating a threat appraisal. Threat appraisals target an individual's perception of the risk of losing something and how vulnerable they are to it (Rogers, 1975). This may activate the fear of losing their job and provide insight into the effect of continuance commitment in the relationship of shared leadership on team performance and team satisfaction. The last component described by Meyer and Allen (1991); normative

commitment, describes employees' perceived duty to stay with an organization. To get a better understanding of how exactly and with which strength this component is related to the other variables it would be beneficial to target perceived possibilities of alternatives and examine individuals' past investments in the company. This gives a good understanding of the factors holding employees back and the impact these have on performance and satisfaction.

Lastly, as found in previous research, trust is a significant mediating factor in the relationship between shared leadership and team performance (Drescher et al., 2014). Furthermore, Silla (2020) similarly found that shared leadership only affects team satisfaction when mediated by trust. To investigate this relationship and perhaps determine some of the explained variance between the two, it would be useful to control for trust in future research. Trust encourages employee interaction, enhancing effective collaboration as well as positive affect (Silla, 2020). This will enhance understanding of the relationship between shared leadership and team performance as well as satisfaction and can help establish practical ways in which shared leadership is implemented to achieve the greatest outcomes for employees and organizations.

Conclusion

Concludingly shared leadership is not the best antecedent of ultimate employee and organizational prosperity. It leads to greater organizational success, however on the counter side does not increase employee satisfaction on its own. Organizational commitment on the other hand supports team satisfaction yet does not increase the performance of teams. Furthermore, even if organizational commitment is high, it does not strengthen the relationship between shared leadership and team performance or team satisfaction. Therefore, it is important to consider these underlying factors when implementing change in organizations to achieve the utmost improvement.

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Appendix A

Shared Leadership Scale by 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 Performance Scale by 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 C

Team Satisfaction Scale by Spector (1985)

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

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.

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 D

Organizational Commitment Scale by Meyer and Allen (1997)

Affective Commitment

1. I would be very happy to spend the rest of my career in this Team
2. I enjoy discussing my team with people outside it
3. I really feel as if this teams problems are my own
4. I think I could easily become as attached to another team as I am to this one.
5. I do not feel like 'part of the family' at my team.
6. I do not feel 'emotionally attached' to this team.
7. This team has a great deal of personal meaning for me.
8. I do not feel a strong sense of belonging to my team.

Continuance Commitment

1. I am not afraid of what might happen if I quit my job without having another one lined up
2. It would be very hard for me to leave my team right now even if I wanted to.
3. Too much of my life would be disrupted if I decided I wanted to leave my team right now.
4. It wouldn't be too costly for me to leave my team in the near future.
5. Right now, staying with my team is a matter of necessity as much as desire.
6. I believe that I have too few options to consider leaving this team.
7. One of the few negative consequences of leaving this team would be the scarcity of available alternatives.
8. One of the major reasons I continue to work for this team is that leaving would require considerable personal sacrifice; another team may not match the overall benefits I have here.
9. If I had not already put much of myself into this team, I might consider working elsewhere.

Normative Commitment

1. I do not feel any obligation to remain with my current team.
2. Even if it were to my advantage, I do not feel it would be right to leave my team now.
3. I would feel guilty if I left my team now.
4. This team deserves my loyalty.
5. I would not leave my team right now because I have a sense of obligation to the people in it.
6. I owe a great deal to my team.

Appendix E – Normality Graphs

Figure E1

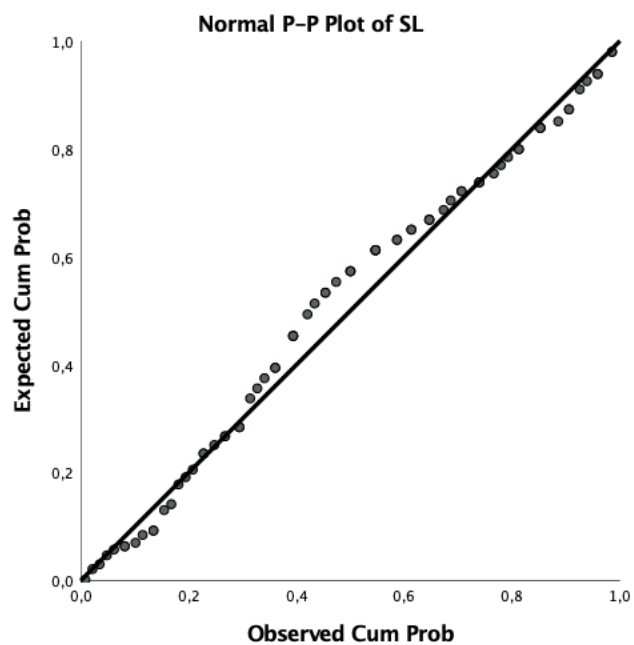
Normal P-P Plot of Shared Leadership

Figure E2

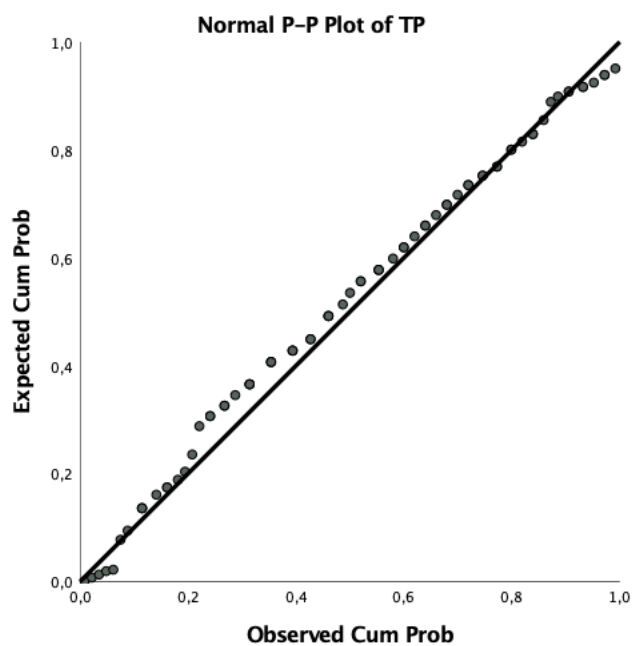
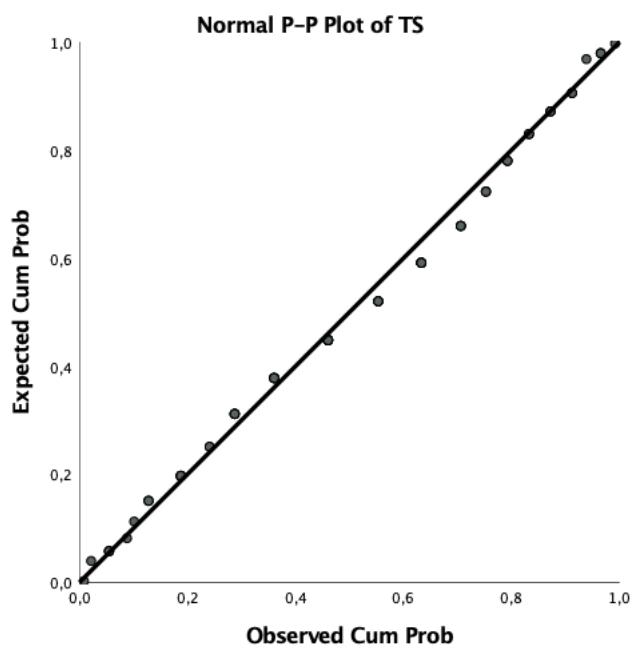
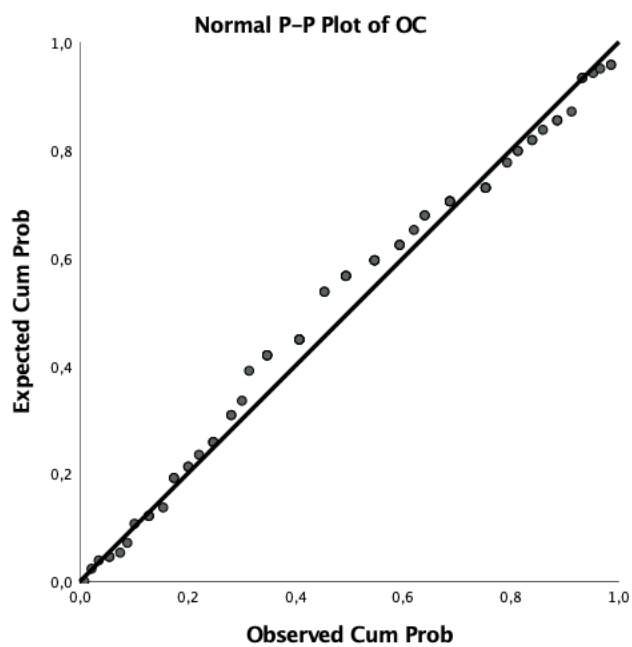
Normal P-P Plot of Team Performance

Figure E3*Normal P-P Plot of Team Satisfaction***Figure E4***Normal P-P Plot of Organizational Commitment*

Appendix F – Homoscedasticity Graph

Figure F1

Homoscedasticity Scatterplot for Team Performance

