

**The moderating effects of legitimacy on the relationship between transformational
leadership and employee creativity.**

Patricia Friman

S4332024

Department of Psychology, University of Groningen

PSB3E-BT15: Bachelor Thesis

Group number: 12

Supervisor: (prof.) (dr(s).) Roxana Bucur

Second evaluator: (prof.) (dr(s).) Nanxi Yan

In collaboration with: Bryan Ernst, Sophia Nimsgarn, Phuong Dinh, Johannes Degner, and
Dorota Paukova.

July 5th, 2023

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

This study examines the moderation effect of perceived leader legitimacy on the relationship between transformational leadership and employee creativity. This moderation analysis included 26 leader-follower dyads, out of a total sample size 166 participants. The study entailed a cross-sectional design with Dutch speaking participants living and working in the Netherlands. The results yielded no significant effects on any of the hypothesized relationships, apart from the additional exploratory analysis which revealed a significant effect between perceived leader legitimacy and self-efficacy as the mediator. However, the additional exploratory analysis did not help to conclude any effects of transformational leadership and legitimacy on employee creativity. Given the small sample size of 26 dyads, any conclusions drawn based on the results of this study should be interpreted with caution. Future research should investigate potential other explanatory variables before drawing more detailed conclusions about associations between the variables examined in this study.

Keywords: transformational leadership, employee creativity, perceived leader legitimacy, dyadic moderation analysis

The moderating effects of legitimacy on the relationship between transformational leadership and employee creativity.

Introduction

In a fast-changing organizational environment it is vital for organizations to continue to adapt to consumer, employer, and leadership demands, but also, societal demands, such as organizational sustainability. In order for organizations to be more adaptive they also need to be more innovative (Cropley & Cropley, 2015). Innovation, in particular, requires working teams and leaders to utilize a variety of skills and abilities to continuously produce new ideas and solutions to complex work problems. At the core of this process lies creativity, i.e. the generation of useful and novel ideas (Ma et al, 2020). Hence, scholars have argued that creativity is essential to the development and success of the organization, and the ability of the organization to display originality and innovation (Cropley & Cropley, 2015). Nonetheless, research on the antecedents of creative performance is rather scarce, which leaves open questions regarding the type of factors within the organization that influence creativity. In order to understand and influence organizational creative performance, it is important to examine factors that might influence creativity.

An essential factor of this process is the dyadic relationship between the leader and the follower. This leader-follower dyadic relationship is an interdependent and reciprocal system (Hollander, 1993) with a dynamic function at each level of the organization (Haslam et al., 2011). Social identity theory states that followers and leaders are members of the same in-group and identify with each other through these common goals that define them. The elected leader of the group is seen as a prototype member of the in-group (Haslam et al., 2011), who assists and guides the group in achieving common objectives. Accordingly, effective leadership implies influencing followers' beliefs and desires with regard to work as well as influencing

the motivation of followers to keep working towards common goals (Hollander, 1993). This suggests that the leader has influence over team outcomes and team processes, such as creativity. But what kind of leadership is essential for stimulating follower creativity? Some scholars have tried to answer this question, but with contrasting results (Koh et al., 2019).

Shared social identity is especially impactful on employee creativity (Liu et al., 2021). Researchers have pointed to the relevance of social theory components, such as a shared social identity, organizational identification (Liu et al., 2021) and a shared vision to foster creativity. The type of leadership that fits well with this description is transformational leadership. Transformational leadership has come to be seen as the most efficient type of leadership when it comes to follower engagement and commitment to the in-group (Haslam et al., 2011). By decreasing the power distance between group members, transformational leadership is known to affect follower creativity (Shin & Zhou, 2003). Nevertheless, there appears to be some disagreement relating to the direct effect of transformational leadership on creativity (Liu et al., 2021), and some research papers also acknowledge the impact of methodological as well as cultural limitations (Shin & Zhou, 2003; Ma et al., 2020). The discrepancies in the above-mentioned findings do not assist in illuminating potential antecedents of follower creativity and suggest the involvement of another factor that either reinforces or weakens the relationship between transformational leadership and creativity.

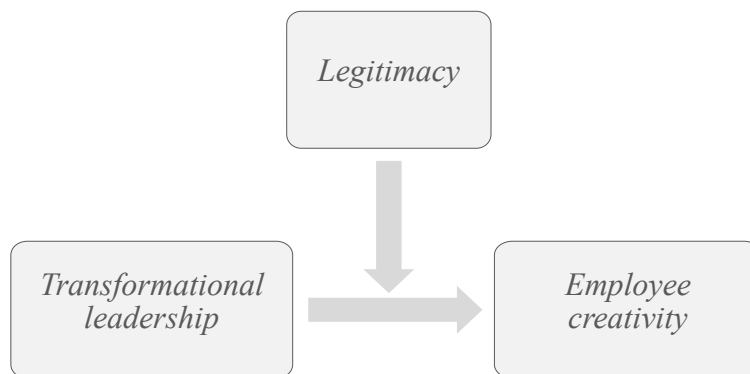
For a leader to be influential and credible in their role as both a team leader and an in-group member, they need to abide by the in-group norms (Haslam et al., 2011) as well as fulfill their expectations as a leader by supporting and advancing the goals of the team. This is known as leader legitimacy. Legitimacy according to Mark C. Suchman is defined as: "... a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions." (Suchman, 1995, p. 574). This implies that situational factors as well as employee expectations are decisive for

a leader to be perceived as legitimate (Hollander, 1993). A study by Ma et al. (2020) found a U-inverted relationship between transformational leadership and creativity, implying that there is a point at which the positive effect of transformational leadership on creativity becomes negative (Ma et al., 2020). This means that extremely high levels of transformational leadership lead to low levels of employee creativity, which suggests the presence of a third variable. Previous studies have also reported the presence of potential moderators and mediators impacting this relationship (Koh et al., 2019). Given that legitimacy is essential for the influence of leadership on positive team outcomes (Aime et al., 2014; Ratcliff & Vescio, 2018), perceived leader legitimacy is a potential moderator of this relationship.

Hence, the current study is centered around the investigation of how the perceived legitimacy of leaders affects the relationship between transformational leadership and employee creativity. The importance of follower characteristics in affecting creative performance outcomes has been emphasized in previous research papers (Shin & Zhou, 2003), although fewer studies have acknowledged the importance of qualities associated with the leader. As a result, with this study I aim to respond to the limitations of contradicting results of previous studies on the effects of transformational leadership on employee creativity, while expanding on the potential moderation effect of perceived leader legitimacy. Furthermore, I will try to illustrate the implications of the relationships of transformational leaders, employee creativity and legitimacy in organizational settings. Notably, a few other studies have approached moderation analysis on a dyadic level (Mittal & Dhar, 2015; Wang et al., 2014; Liu et al., 2021), which is the least well-understood of all levels (“individual-, dyad-, group-, and collective-level”: Kim et al., 2020, p. 1). Ultimately, by using a sample of leader-follower dyads, this study tries to shed light on the understanding of the dynamics between the leader and the follower in the organizational setting in relation to transformational leadership, employee creativity and legitimacy.

Figure 1

The model of this study showing the moderating effect of legitimacy on the relationship between transformational leadership (IV) and employee creativity (DV).



Theory and hypotheses' development

Employee creativity. Creativity is the ability to generate new approaches, novel ideas and solutions to problems (Ma et al., 2020; Kasimoglu & Ammari, 2019). In an organizational context this applies to the employee's ability to come up with new ideas, challenge their own thinking and create new approaches to work (Liu et al., 2021; Oedzes et al., 2018). For team members to display creative behavior they need to engage in deliberate information processing, which involves the consideration of all information available to the individual in a specific context (Oedzes et al., 2018). In different cultural and organizational settings creativity may manifest in different ways, but in general scholars have noted that an environment that encourages employee participation in work and idea production processes leads to more creative behavior in employees (Koh et al., 2021), and thus further enhances the work team and the organization's ability to be innovative (Cropley & Cropley, 2015). Additionally, the influence of the leader on individual team members and teamwork processes further influences employee creative behavior (Kasimoglu & Ammari, 2019). Aime et al. (2014) suggested that the dynamic exchange of knowledge and power between leaders and subordinates fosters

creative processes and team outcomes. Many studies have pointed to transformational leadership as a good predictor of employee creativity in an organizational context (Shin & Zhou, 2003).

Transformational leadership and employee creativity. The most effective way for a leader to influence his/her follower is by challenging the followers' intellectual thinking, inspiring them to rise above their own self-interest, and as a result, contributing to advancing organizational goals and visions (Haslam et al., 2011). With common team goals in mind, followers are inspired to attain the highest potential and find new ways to advance with the organization. These qualities are associated with transformational leadership (Ma & Jiang, 2018). According to literature, transformational leadership can be divided into four different dimensions, namely *idealized influence*, *inspirational motivation*, *intellectual stimulation*, and *individualized consideration* (Ma et al., 2020). In particular, the three latter dimensions have been associated with employee creativity (Ma et al., 2020).

The qualities of transformational leadership have mainly been associated with employee creativity through a mediation or moderation relationship (Koh et al., 2021). Shin and Zhou, (2003) found a positive direct influence of transformational leadership on individual creativity, and this relationship was further mediated by intrinsic motivation and moderated by 'individual conservation' (i.e. "conservation – a value favoring propriety and harmony in interpersonal and person-to-group relations": Shin & Zhou, 2003, p. 705). The mediation effect also yielded a significant result. Furthermore, Wang et al. (2014) reported a significant effect of the relationship between transformational leadership and creativity, but only when mediated by creative self-efficacy. Hence, many researchers cannot confirm a direct relationship between transformational leadership and creativity (Liu et al, 2021; Ma et al., 2020; Ma & Jiang, 2018; Nguyen et al., 2022), or that any differences are due to an organization's cultural context

(Kasimoglu & Ammari, 2019; Ma & Jiang, 2018; Shin & Zhou, 2003). Other scholars have shown that transactional leadership has had more influence over employee creativity than transformational leadership (Ma & Jiang, 2018).

There appears to be a connection between dimensions of transformational leadership and the cognitive processes of creativity, especially as transformational leadership directly impacts followers' intrinsic motivation which is positively associated with creativity (Shin & Zhou, 2003). Transformational leadership positively challenges and encourages team members to express themselves and inspire them to attain higher working goals, which leads to team members possessing more creative potential in attainment of common team objectives (Kasimoglu & Ammari, 2019). Despite previous studies showing contradictory results on the direct association between transformational leadership and creativity, it is relevant to examine this association due to the strong theoretical link between both variables. Therefore, I hypothesize that:

Hypothesis 1: Transformational leadership is positively associated with employee creativity.

Perceived leader legitimacy and employee creativity. Effective leadership applies to the quality of influence and persuasion, rather than directly imposing power over subordinates (Haslam et al., 2011). The leader-follower relationship exists in the form of reciprocity and social exchange, where the leader is given the right to lead and exert power over the follower through socially constructed norms. Leader legitimacy exists as a social contract (Ratcliff & Vescio, 2018) between the leader and the follower in relation to what is expected of the leader as a prototype member of the in-group (Haslam et al., 2011). How much influence a leader has over the team is determined by the degree of legitimacy they possess in the face of their followers (Ratcliff & Vescio, 2018). Previously, scholars have noted that an increase in status

attribution and decrease in power differentials leads to an increase in the perceived legitimacy of the team leader (Vial et al., 2016). Status is associated with expertise, special skills and abilities of the leader, which in turn leads to admiration and respect from the followers. These positive attributes grant the leader legitimacy (Vial et al., 2016). In turn, this increases team commitment and cooperation, further leading to an increase in follower creative behavior. A study by Aime et al. (2014) confirmed that team functioning relies on the shift in power expression of individual team members by sharing expertise and knowledge to resolve shifts in situational demands. These shifts in power expression need to be perceived as legitimate given the specific context, in order to have a positive impact on team functioning and employee individual creativity (Aime et al., 2014). Therefore, my hypothesis is:

Hypothesis 2: Perceived leader legitimacy is positively associated with employee creativity.

Perceived leader legitimacy moderates the relationship between transformational leadership and employee creativity. Aime et al. (2014) found a positive relationship with shifts in legitimacy and team creativity, consequently suggesting perceived leader legitimacy plays a role in the relationship between transformational leadership and employee creativity. Transformational leadership possesses a growth mindset towards the organization and its employees, aiming to constantly achieve higher goals by stimulating followers' intellect and challenging preconceived beliefs (Kasimoglu & Ammari, 2019). However, a large number of studies have emphasized the presence of mediator or moderator variables in relationship between transformational leadership and employee creativity, of which a few of the most researched mediator variables include psychological empowerment (Nguyen et al., 2022; Ma & Jiang, 2018), creative self-efficacy (Wang et al., 2014), and intrinsic motivation (Shin & Zhou, 2003). However, a study by Ma et al. (2020) illustrated a curvilinear (U-inverted)

relationship between the level of transformational leadership and creative performance of the employee. According to these findings, there is an optimal level of transformational leadership at which employee creative performance is at its highest. After passing this optimal level, the level of creativity starts to decrease with extremely high levels of transformational leadership. Even though this relationship was moderated centralized power in organizations, a moderation effect could similarly be hypothesized with legitimacy (Ma et al., 2020). As legitimacy of the leader is essential to the leader's influence over followers (Hollander, 1993), once the influence of the transformational leader decreases, the legitimacy of the leader is questioned. Given the profound role that leader legitimacy plays in the leader-follower relationship, and given the numerous mediators and moderators identified in previous studies (Koh et al., 2019), it is likely that legitimacy plays a central role in moderating the relationship between transformational leadership and employee creativity. Hence, I posit the following:

Hypothesis 3a: Perceived leader legitimacy moderates the relationship between transformational leadership and employee creativity. This relationship is positive when perceived leader legitimacy is high.

Previous studies have raised concerns about excessively high levels of transformational leadership could potentially lead to overoptimism on part of the leader (Ma & Jiang, 2018), who may not be able to provide a good work foundation for the employees, such as a sense of security and the tools necessary for employees to tackle concrete problems at work. This would evidently lead to lower levels of employee creative performance, according to the theory of Maslow's hierarchy of needs (Mcleod, 2023). According to the theory, transformational leaders are more attuned to meeting employees' self-actualization needs and therefore, may overlook the necessity to assist employees with more concrete, lower-level needs, such as safety (Ma & Jiang, 2018). Consequently, this may compromise both the legitimacy of the transformational

leader as well as the creative behavior of individual team members. Other scholars have found that perceived leader legitimacy is associated with positive team functioning and perceived leader illegitimacy is linked to negative team functioning and outcomes (Ratcliff & Vescio, 2018). When a transformational leader is seen as illegitimate by the follower, the influence and ability to exert power over the followers become disrupted. A decrease in the perceived legitimacy of a leader has a negative impact on the willingness of a follower to commit to common goals established within the team. This consequently evokes negative attitudes and feelings, such as anger (Ratcliff & Vescio, 2018; Marques et al., 2021), decreasing employee creativity. These results were confirmed by a study by Marques et al. (2021) and a study by Ratcliff and Vescio (2018), who argued that perceived leader illegitimacy has a negative effect on followers' willingness to abide by the established in-group norms and a negative effect on team functioning (e.g. creativity). Finally, Vial et al. (2016) found that female leaders benefit from adopting a transformational leadership style as it will help decrease power differentials and downplay any biases or stereotypes against female leaders that traditionally have made female leaders appear more illegitimate. Given the proposed evidence regarding the effects of leader legitimacy versus illegitimacy, I hypothesize the following:

Hypothesis 3b: Perceived leader legitimacy moderates the relationship between transformational leadership and employee creativity. This relationship is negative when perceived leader legitimacy is low.

Method

Participants

The participants were collected as part of leader-follower dyads, where some of the participants identified as leaders and the others identified themselves as followers. In the survey, the leaders and followers were referred to as managers and employees of the organization, respectively. In this section, I refer to each dyad in terms of leaders and followers.

A total number of 166 participants was collected, and the first step of the analysis required identifying the leader-follower dyads in the sample. This meant excluding 50 followers and 58 leaders as they did not present with matching codes, leaving a total of 29 dyads. Furthermore, three dyads were excluded on the basis of working less than 17 hours per week, being younger than 18 years, or not having completed the questionnaire, which yielded 26 dyads as a result. Of the remaining dyads, leaders were between 22 and 65 years of age ($M = 43.38$, $SD = 13.35$), where 38,5% of the participants identified as women ($n = 10$) and 61,5% who identified as men ($n = 16$). The followers of the remaining dyads reported their age ranging from 19 to 57 years ($M = 33.00$, $SD = 11.05$), where the majority identified as women (61,5 %, $n = 16$) and the minority as men (38,5 %, $n = 10$). We also asked participants about the type of industry they work in, the number of working hours per week, their educational background, and for how long they have occupied their current position within the organization. The majority of the participants responded working in *Construction/installation companies/retail/wholesale, university & education, catering industries and business services* (46 %, $n = 12$). Leaders reported working hours ranging between 20 and 60 hours per week ($M = 36.00$, $SD = 8.58$), whereas the working hours of followers ranged from 19 to 40 ($M = 31.44$, $SD = 6.94$). The majority of the participants indicated that they had a higher education (i.e. HBO or WO), including both leaders (77.00 %, $n = 20$) and followers (73.10 %, $n = 19$). Additionally, the majority of the leaders had occupied their position as a manager 5 years or

longer (46.20 %, $n = 12$), whereas the majority of the followers had been working in the same position between 2 and 5 years (34.60 %, $n = 9$), followed by 6 months to one year (23.10 %, $n = 6$).

Design and Procedure

This research study was done as part of a bachelor thesis project, in collaboration with six other students and a principal researcher, who also functioned as the group mentor. In this study, I chose to investigate the effect of one independent variable (*transformational leadership*) on one dependent variable (*employee creativity*) and a moderation effect of a third variable (*leader legitimacy*). The study was designed using a cross-sectional field study, where potential participants were collected using multisource sampling. This meant that collection of participants was realized by walking into local businesses in the city of Groningen and asking them to participate, as well as contacting people online.

Before starting the data collection process, the ECP form was sent to the University of Groningen's Ethics Committee BSS-Psychology for approval of the study. As soon as the study had been approved, data collection was initiated on May 4th and ended on May 26th, 2023. Participants were selected based on a few relevant criteria, including, being 18 years of age, working in an organization for at least 17 hours per week, based in the Netherlands, and speaking fluent Dutch. Our bachelor thesis group contacted potential candidates via email and by walking into local businesses, mainly in the city of Groningen. Participants were asked to fill out a survey using Qualtrics.com, starting with the leader of the dyad. Using the snowball sampling method, the leader was then asked to appoint a suitable follower from the same work team to complete the corresponding survey for the follower. The phrasing of the questions in the survey had been changed to match the perspective of either half of the dyad, the follower or the leader (see revised scales: Appendix C). Each version of the questionnaire was identified with a code (two last characters of the leader's name, the two last characters of the leader's

surname, and the two first characters of the organization). This facilitated the identification of the relevant dyads for the main analysis. Before filling out the survey, the participants were given general information about the study and informed about participation as both anonymous and voluntary, with the exclusion of any type of compensation. An informed consent was also given to participants before participating in the survey. In total there were 19 questions in the questionnaire for the leader and 22 questions in the questionnaire for the follower. All questions were answered in one session, which estimated the total length of the survey to be around 15 minutes per participant.

Constructs and Measures

Employee creativity

The scale by Janssen et al (2004), measuring *Innovative Work Behavior*, identifies three categories of creative behavior, namely *Idea Generation*, *Idea Promotion*, and *Idea-Realization*. In *Idea Generation* items include: “Come up with original solutions to work problems”, whereas for *Idea promotion*, items such as “Support mobilizes for innovative ideas” and “Making key figures enthusiastic about innovative ideas”, are prominent examples. Finally, “Develop innovative ideas into workable applications” and “Introduce innovative ideas systematically” are examples of *Idea-Realization*. The responses to these questions were measured on a seven-point scale ranging from 1 (*never*) to 7 (*always*). This scale had a high internal consistency ($\alpha = 0.96$).

Transformational Leadership

Transformational leadership was measured as part of the scale for *Shared leadership* (Hoch, 2013), which was included in the questionnaire for the follower of the leader-follower

dyad, but not in the corresponding questionnaire for the leader. The whole scale of Shared leadership includes 18 items, but the first 6 items on the seven-point scale by Hoch et al (2013) measured the effects of transformational leadership. For example, followers responded to questions such as: “My supervisor is driven by higher goals and ideals”, “My supervisor encourages me to reconsider ideas that have never been questioned before” and “My supervisor uses many different perspectives to solve problems”. Followers were asked to evaluate their answers from 1 (*strongly disagree*) to 7 (*completely agree*). The scale had a relatively high internal consistency ($\alpha = 0.69$).

Legitimacy

The legitimacy scale, developed by Dr. Gerben van der Veght, (2018), was intended to measure leader legitimacy and therefore appeared solely in the questionnaire of the follower. The followers evaluated four items in total, including: “My manager’s level of influence is based on what he/she does or knows”, “My manager’s level of influence is based on his/her contribution of success of our collaboration”, “In our collaboration, my manager has direct influence over decisions”, and “Generally, I find the power structure in the cooperation with my supervisor honestly”. The legitimacy scale was a seven-point scale with values ranging from 1 to 7 (1 = *strongly disagree*, 7 = *completely agree*). The higher the value, the more legitimate the leader is perceived by the follower, and a lower value corresponds to an illegitimate leader. The scale turned out to have a relatively low internal consistency ($\alpha = 0.49$). This internal consistency was improved slightly by deleting the 4th item of the scale, i.e. “I find the power structure in working with my supervisor generally fair.” ($\alpha = 0.56$), but improved significantly when further deleting the 3rd item of the scale, i.e. “In our collaboration, my manager has direct influence on decisions.” ($\alpha = 0.79$).

Results

Descriptive Statistics

I tested the effects of transformational leadership on employee creativity, moderated by the effects of perceived leader legitimacy. This model was performed as an investigation at the level of the dyadic relationship between leaders and followers, however the model variables: transformational leadership and perceived leader legitimacy, were measured from the follower perspective, whereas employee creativity was measured from the leader perspective.

The analyzed model comprised of 26 dyads. The dependent variable (*employee creativity*) had a mean of 3.76 and a standard deviation of 1.28 (min: 1.22, max: 6.11), whereas the independent variable (*transformational leadership*) has a mean of 5.33 and a standard deviation of 0.75 (min: 3.83, max: 7.00). The moderator variable (*legitimacy*) had a mean of 5.45 and a standard deviation of 0.79 (min: 4.00, max: 6.75). The relatively high mean value of *transformational leader* and *legitimacy* indicates that these variables were perceived as relevant at the workplace, as rated by the followers, whereas *employee creativity* was perceived to be relatively low, as rated by the leaders. On the other hand, employee creativity appeared to imply more variance in ratings among leaders, than perceived transformational leadership and legitimacy in ratings among followers. Furthermore, correlations between the model variables showed no significant relationships, which can be observed in the random scatter of the scatter plot matrix (see Figure 3, Appendix A). The results are shown in the table below (see Table 1). Finally, the complete model fit was observed at $R^2 = 0.042$ with a p-value of 0.810, meaning that the predictors *transformational leadership* and *legitimacy* only explain 4,2% of variation in *employee creativity*, and the complete model was found not to be significant.

Table 1

Means, standard deviations, and correlations between model variables.

Variable	Mean	SD	1.	2.	3.
1. Employee creativity ^b	3.76	1.28	–		
2. Transformational leadership ^a	5.33	.75	.121	–	
3. Legitimacy ^a	5.45	.79	-.055	-.311	–

Note. $N = 26$ dyads composed of 26 leaders and 26 followers.

^a rated by followers, ^b rated by leaders.

Assumptions

With employee creativity as dependent variable, the assumptions of the model were investigated. The assumption of normality was met, which can be observed in the Q-Q plot (see Figure 4, Appendix A). The scatter follows the linear line of normality, with no severe deviations along the line. Also, the residual plot (see Figure 5, Appendix A) showed no deviant pattern in the scatter of the residuals, and thus meeting both the assumption of homoscedasticity and linearity. Hence, it can be concluded that all relevant assumptions were met. Additionally, no significant outliers were observed in the scatter plot matrix (see Figure 3, Appendix A), and both predictors had a variance inflation factor of 1 ($VIF=1.000$), giving evidence of no severe multicollinearity between predictors.

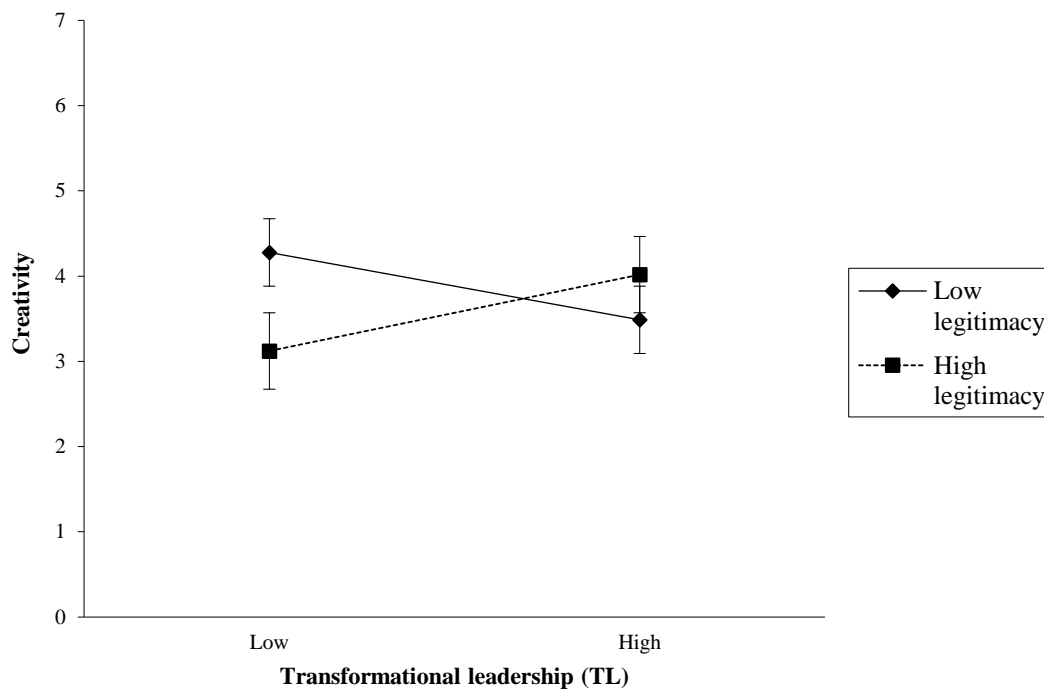
Table 2

Multiple regression analysis predicting effects on employee creativity, with transformational leadership (IV), and legitimacy as moderator.

Variable	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Constant	3.73	.278	13.44	<.001
Transformational leadership (TL)	.026	.456	.058	.954
Legitimacy	-.157	.354	-.442	.663
Interaction (TL×legitimacy)	.422	.506	.833	.414

Figure 2

The effect of the interaction (TL×legitimacy) on employee creativity.



Hypothesis testing

Having observed the data, I concluded that my model was not significant ($F(3,22) = 0.321, p = 0.810$), at a significance level of 5% ($\alpha = 0.05$). None of the predictors of my model, i.e. transformational leadership ($t = 0.06, p = 0.95$) and perceived leader legitimacy ($t = -0.44, p = 0.66$), is observed to have a significant effect on employee creativity. Additionally, there was no significant interaction between transformational leadership and legitimacy ($t = 0.83, p = 0.41$), evidence that neither Hypothesis 3a nor Hypothesis 3b were confirmed. Hypothesis 1 was not confirmed, as the relationship between the independent variable (*transformational leadership*) and the dependent variable (*employee creativity*) was found not to be significant. Furthermore, the relationship between the moderator (*legitimacy*) and the dependent variable (*employee creativity*) proved to not be significant, which also did not confirm Hypothesis 2. However, there appears to be a small effect of the moderator on the relationship between transformational leadership and employee creativity as shown in Figure 2. This relationship is

positive when legitimacy is high, and negative when legitimacy is low. There appears also to be a small difference between high and low legitimacy for low levels of transformational leadership on employee creativity, suggesting that legitimacy has a slightly stronger effect of low levels of transformational leadership than the effect of legitimacy on high levels of transformational leadership on employee creativity. Interestingly, under conditions of low transformational leadership, low levels of legitimacy are associated with higher levels of employee creativity than high levels of legitimacy, whereas under conditions of high transformational leadership, high levels of legitimacy is associated with higher levels of employee creativity than low levels of legitimacy. Figure 2 shows an interaction effect, but this cannot be observed in the moderation analysis.

Additional Exploratory Analysis

As previous scholars have emphasized the presence of other variables on the relationship between transformational leadership and creativity, I decided to run an additional analysis by including a mediator, namely self-efficacy. Model 1 (see Table 3, Appendix B) yielded a significant result ($F(3,22) = 5.25, p < .01$), with a value of $R^2 = 0.417$. Furthermore, the effect of the moderator became significant ($t = 2.35, p = 0.028$), showing that legitimacy significantly impacts self-efficacy. However, Model 2 (see Table 4, Appendix B) illustrating self-efficacy as a mediator of the relationship between transformational leadership and employee creativity, did not yield a significant result on employee creativity ($F(3,22) = 0.145, p = 0.866$). This shows that self-efficacy does not help to explain the relationship between transformational leadership and employee creativity, and it does not help to further explain the effect of legitimacy as a moderator of the relationship (*transformational leadership and employee creativity*).

Discussion

This study entailed an investigation into the moderating effect of legitimacy on the relationship between transformational leadership and follower creativity in an organizational setting. Previous studies have found mixed results concerning the direct relationship and have emphasized the presence of mediator or moderator variables (Koh et al., 2020). Therefore, the aim of the study was to shed further light on potential moderators of this relationship. Primarily, I hypothesized that both the relationship between transformational leadership and employee creativity (H1), as well as the relationship between perceived leader legitimacy and employee creativity (H2) were positive. Secondly, I hypothesized that the higher the perceived leader legitimacy of transformational leadership, the higher the employee's creativity (H3a). Equally, the lower the perceived leader legitimacy of transformational leadership, the lower the employee's creativity (H3b). This moderation effect of legitimacy responded to previous reports linking legitimacy, leader influence and creativity in organizational contexts (Aime et al., 2014; Ratcliff & Vescio, 2018). To further build on previous research, I chose to examine the model on a leader-follower dyadic level (Kim et al., 2020), meaning followers were asked about qualities relating to transformational leadership as well as perceptions of leader legitimacy, and leaders of the leader-follower dyads were asked about employee creativity. This allowed for a more in-depth analysis of the dynamics between leaders and followers regarding these concepts.

Unfortunately, this study yielded no significant results on the outcome variable (*employee creativity*). The results of the moderation analysis showed no significant relationship between transformational leadership and employee creativity, which is in line with reports from some studies (Ma & Jiang, 2018; Koh et al., 2020), while contrasting results of others (Shin & Zhou, 2003), consequently supporting the argument of mixed results. Thus, the first hypothesis was rejected. A non-significant relationship was also found between perceived leader legitimacy and employee creativity, as well as the moderation effect of perceived leader

legitimacy on the relationship between transformational leadership and employee creativity was observed as not significant. These results are contradictory to the results illustrated by Aime et al. (2014), where shifts in legitimacy showed a significant moderation effect on the relationship between shifts in power expression and employee creativity. On other hand, the study by Aime et al. (2014) analyzed a dynamic relationship with legitimacy as a moderator, whereas my study investigated a static moderation effect on the relationship between the predictor (*transformational leadership*) and the outcome variable (*employee creativity*). Nonetheless, Figure 2, describing the relationships between the predictors and the outcome variable, showed an interaction effect between the predictors ($TL \times legitimacy$). Also, due to the non-significant results of the interaction effect, hypotheses 3a and 3b were also not confirmed. Nevertheless, the positive relationship between the main predictor (*transformational leadership*) and the outcome variable (*employee creativity*), moderated high levels of legitimacy, is observed in Figure 2. Similarly, the negative relationship moderated by low levels of legitimacy is apparent. These results may point to a third predictor of the model.

As mentioned earlier, the presence of various mediating and moderating variables on the relationship between transformational leadership and employee creativity (Liu et al., 2021) implies the dynamic and complex nature of this interaction in the real world of work. Undoubtedly, leader legitimacy plays a crucial role in the leader-follower relationship as demonstrated by several studies (Ratcliff & Vescio, 2018; Vial et al., 2016), but as leader legitimacy is dependent on both situational and personal factors, e.g., cultural context (Aime et al., 2014; Yang et al., 2022) and follower expectations (Hollander, 1993), there appears to be additional predictors missing from the proposed model. To test this assumption, I performed an additional exploratory analysis, including self-efficacy as a mediator, further extending the initial model (see Figure 5, Appendix B). There are theoretical arguments for choosing self-efficacy. Previous studies have looked at the mediating effects of creative self-efficacy (Koh et

al., 2019; Wang et al., 2014) and intrinsic motivation (Shin & Zhou, 2003), both associated with the psychological inner drive of the follower, which may further impact follower's ability to be creative. The first model revealed a significant result, with a significant relationship between legitimacy as the moderator and the outcome variable (*self-efficacy*). However, no other binary effects in the mediation-moderation model were found to be significant (see Table 4, Appendix B), including the effect of the complete model. This suggests that self-efficacy is not a potential mediator of the relationship between transformational leadership and employee creativity, even if it is associated with legitimacy. Further research needs to investigate other potential explanatory mediators or moderators, such as creative self-efficacy (Koh et al., 2019; Wang et al., 2014), which would help to link leader legitimacy with transformational leadership and follower creativity.

Strengths and Limitations

One of the main strengths of my model was the use of a dyadic approach in examining the relationships between the different variables in an organizational environment. Despite the low number of dyads collected for this study, the approach allowed for a thorough insight into the perspectives of the dyads and extend previous research that has focused mainly on the perspective of one member of the dyad (Kim et al., 2020). Furthermore, the study was carried out in a Dutch organizational context, which on one hand limits the generalizability of our findings to other cultural contexts. On the other hand, given that the Dutch culture is highly individualistic, it provides an alternative perspective on the research conducted in collectivistic cultural contexts (Shin & Zhou, 2003; Ma et al., 2020; Ma & Jiang, 2018; Nguyen et al., 2022; Wang et al., 2014; Mittal & Dhar, 2015). Finally, the associations between the proposed concepts for this model are based on theoretical evidence from various different cultural settings (Shin & Zhou, 2003; Ma et al., 2020; Ma & Jiang, 2018; Nguyen et al., 2022; Wang et al., 2014;

Mittal & Dhar, 2015; Aime et al, 2014), which provides stronger arguments for the variable associations.

However, there are also a fair number of limitations to the study. First of all, the sample size of this study was very low. After having excluded all leaders and followers that were not part of a dyad, or did not meet the other relevant criteria, the main analysis was conducted using a sample of 26 dyads. In partial, this may explain why the proposed model did not yield a significant result. Hence, any results should be interpreted with caution and future studies should pay attention to the conclusions drawn from the outcome of this study. In order to increase the number of dyads participating in the study, the data collection procedure could have been improved by asking for the contact details of each participant to follow up on the participation process. This may have persuaded more followers and leaders to participate.

Second of all, the study was conducted using a cross-sectional design, meaning that participants were measured at one point in time and that simply associative relationships can be established (no causal relationships). As previously mentioned, the model variables are impacted by personal and situational factors, and consequently, tend to fluctuate over time. Hence, a longitudinal design would better describe the changes in the relationship between the variables, as the participants are followed up on during a longer period of time.

Finally, the reliability analysis of the revised legitimacy scale (van der Veght, 2018) yielded a very low Cronbach's alpha ($\alpha = 0.49$). This may have had a profound effect on the validity of the model and consequently the overall effect of the outcome. Despite deleting items 3 and 4, which increased the reliability of the scale ($\alpha = 0.79$), the moderation effect was not significant. Future research should use employ another scale to measure the moderation effects of legitimacy on the relationship between transformational leadership and employee creativity.

Future research

This study responded to previous studies by extending the model to specific types of leadership (Aime et al., 2014), namely transformational leadership, as well as cultural context that differ from previous studies (Shin & Zhou, 2003; Ma et al., 2020; Ma & Jiang, 2018; Nguyen et al., 2022; Wang et al., 2014; Mittal & Dhar, 2015). There appears to be theoretical support for the model transformational leadership – employee creativity, moderated by legitimacy, but future research should establish which potential mediator or moderator variables assist in linking these concepts together. The study also had a limitation in the design, i.e. cross-sectional design, which could be further improved by using a longitudinal design. In future research, other cultural or organizational contexts should also be investigated to enhance the understanding of how the leader-follower dynamics operate in different contexts with regard to the variables this study has tried to explore.

Conclusion

Leaders and followers are equally impacted by each other throughout different organizational processes in the workplace. Theoretically, this study has shown that legitimacy plays an essential role in the influence of leadership on team functioning, especially employee creativity, and the type of leadership that affects the likelihood of employees engaging in creative work behavior. Yet, there is a lot of research to be done in this area, but on theoretical grounds the arguments for the connection between transformational leadership, employee creativity and legitimacy remains strong. Nevertheless, future research needs to investigate these concepts in more detail by applying more specific variables that assist in linking these concepts directly to one another. Ultimately, this will give more concrete ideas and concepts for organizations to implement in the workplace in the future.

References

- Aime, F., Humphrey, S. E., DeRue, D. S., & Paul, J. B. (2014). The riddle of heterarchy: Power transitions in cross-functional teams. *Academy of Management Journal*, 57(2), 327–352. <https://doi-org.proxy-ub.rug.nl/10.5465/amj.2011.0756>
- Cropley, D. H., & Cropley, A. J. (2015). *The psychology of innovation in organizations*. Cambridge University Press. Retrieved June 25, 2023, from INSERT-MISSING-URL.
- van der Veght, G. (2018), unpublished manuscript.
- Haslam, S. A., Reicher, S. D., & Platow, M. J. (2011). *The new psychology of leadership: Identity, influence and power*. Psychology Press.
- Hoch, J.E. Shared Leadership and Innovation: The Role of Vertical Leadership and Employee Integrity. *J Bus Psychol* 28, 159–174 (2013).
- Hollander, E. P. (1993). Legitimacy, power, and influence: A perspective on relational features of leadership. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions*. (pp. 29–47). Academic Press.
- Janssen, O. & Van Yperen, N.W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of Management Journal*, 47, 368-384.
- Kasımoğlu, M., & Ammari, D. (2020). Transformational leadership and employee creativity across cultures. *Journal of Management Development*, 39(4), 475–498. <https://doi-org.proxy-ub.rug.nl/10.1108/JMD-05-2019-0153>
- Kim, J., Yammarino, F. J., Dionne, S. D., Eckardt, R., Cheong, M., Tsai, C.-Y., Guo, J., & Park, J. W. (2020). State-of-the-science review of leader-follower dyads research. *The Leadership Quarterly*, 31(1). <https://doi-org.proxy-ub.rug.nl/10.1016/j.leaqua.2019.101306>
- Koh, D., Lee, K., & Joshi, K. (2019). Transformational leadership and creativity: A meta-analytic review and identification of an integrated model. *Journal of Organizational Behavior*, 40(6), 625–650. <https://doi-org.proxy-ub.rug.nl/10.1002/job.2355>
- Liu, H., Bracht, E., Zhang, X., Bradley, B., & van Dick, R. (2021). Creativity in non-routine jobs: The role of transformational leadership and organizational identification. *Creativity and Innovation Management*, 30(1), 129–143. <https://doi-org.proxy-ub.rug.nl/10.1111/caim.12419>
- Ma, X., & Jiang, W. (2018). Transformational leadership, transactional leadership, and employee creativity in entrepreneurial firms. *Journal of Applied Behavioral Science*, 54(3), 302–324. <https://doi-org.proxy-ub.rug.nl/10.1177/0021886318764346>

- Ma, X., Jiang, W., Wang, L., & Xiong, J. (2020). A curvilinear relationship between transformational leadership and employee creativity. *Management Decision*, *58*(7), 1355–1373. <https://doi-org.proxy-ub.rug.nl/10.1108/MD-07-2017-0653>
- Marques, A. G., Pinto, I. R., Leite, A. C., de Moura, G. R., van Prooijen, J., & Marques, J. M. (2021). “A right to lead”: The role of leader legitimacy on group reactions to transgressive leadership. *Journal of Applied Social Psychology*, *51*(4), 350–362. <https://doi-org.proxy-ub.rug.nl/10.1111/jasp.12739>
- McLeod, S. (2023, June 30). *Maslow’s Hierarchy of Needs*. Simply Psychology. <https://www.simplypsychology.org/maslow.html>
- Mittal, S., & Dhar, R. L. (2015). Transformational leadership and employee creativity: Mediating role of creative self-efficacy and moderating role of knowledge sharing. *Management Decision*, *53*(5), 894–910. <https://doi-org.proxy-ub.rug.nl/10.1108/MD-07-2014-0464>
- Nguyen, T. P. L., Nguyen, T. T., Duong, C. D., & Doan, X. H. (2022). The effects of transformational leadership on employee creativity in Vietnam telecommunications enterprises. *Management Decision*, *60*(3), 837–857. <https://doi-org.proxy-ub.rug.nl/10.1108/MD-07-2020-0882>
- Oedzes, J. J., Rink, F. A., Walter, F., & Van Der Vegt, G. S. (2019). Informal hierarchy and team creativity: The moderating role of empowering leadership. *Applied Psychology: An International Review*, *68*(1), 3–25. <https://doi-org.proxy-ub.rug.nl/10.1111/apps.12155>
- Ratcliff, N. J., & Vescio, T. K. (2018). The effects of leader illegitimacy on leaders’ and subordinates’ responses to relinquishing power decisions. *European Journal of Social Psychology*, *48*(3), 365–379. <https://doi-org.proxy-ub.rug.nl/10.1002/ejsp.2335>
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, *46*(6), 703–714. <https://doi-org.proxy-ub.rug.nl/10.2307/30040662>
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review*, *20*(3), 571–610. <https://doi-org.proxy-ub.rug.nl/10.2307/258788>
- Vial, A. C., Napier, J. L., & Brescoll, V. L. (2016). A bed of thorns: Female leaders and the self-reinforcing cycle of illegitimacy. *The Leadership Quarterly*, *27*(3), 400–414. <https://doi-org.proxy-ub.rug.nl/10.1016/j.leaqua.2015.12.004>
- Wang, C.-J., Tsai, H.-T., & Tsai, M.-T. (2014). Linking transformational leadership and employee creativity in the hospitality industry: The influences of creative role identity, creative self-efficacy, and job complexity. *Tourism Management*, *40*, 79–89. <https://doi-org.proxy-ub.rug.nl/10.1016/j.tourman.2013.05.008>

Yang, I., Tossan, V., & Law, F. (2022). French leadership: Exploring organizational leadership in French contexts. *European Journal of Work and Organizational Psychology, 31*(1), 128–144. <https://doi-org.proxy-ub.rug.nl/10.1080/1359432X.2021.1937995>

Appendix A

Figure 3

A scatterplot matrix of employee creativity (1), transformational leadership (2), and legitimacy (3), (ref. Table 1).

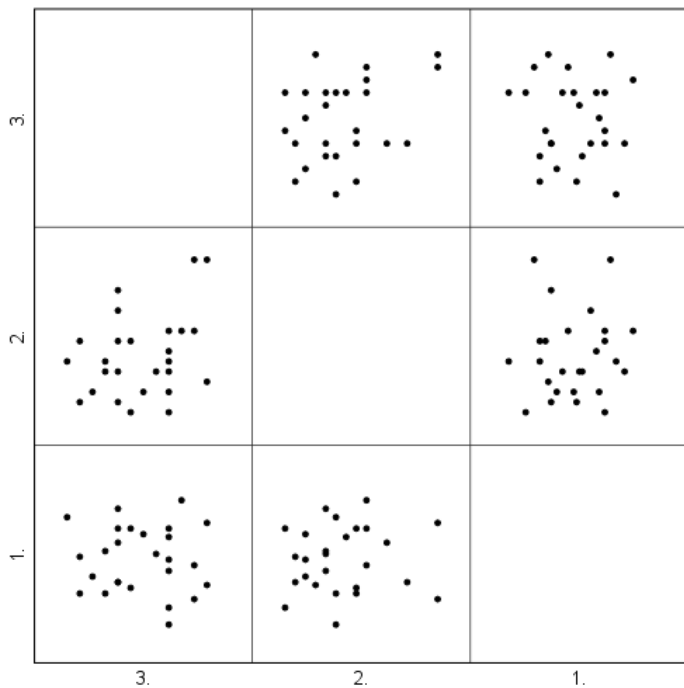


Figure 4

Normality Q-Q plot

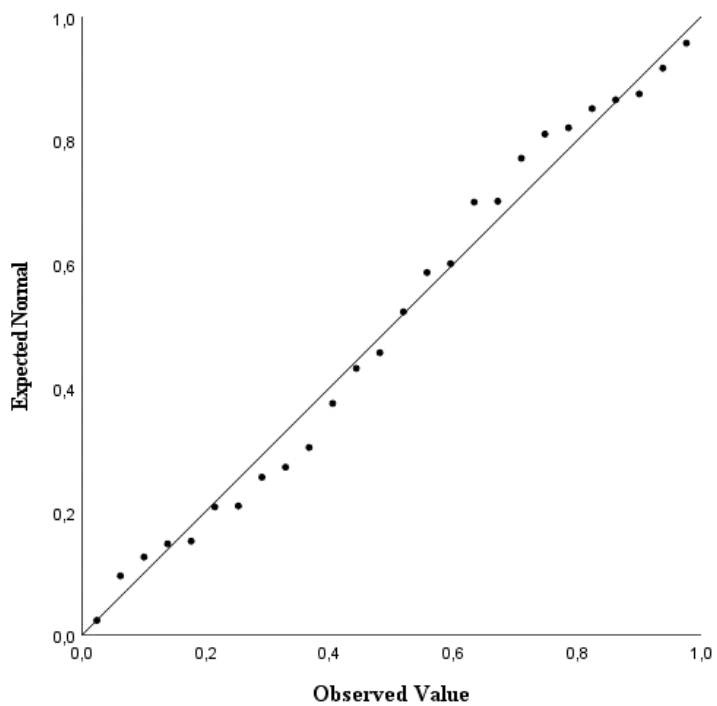
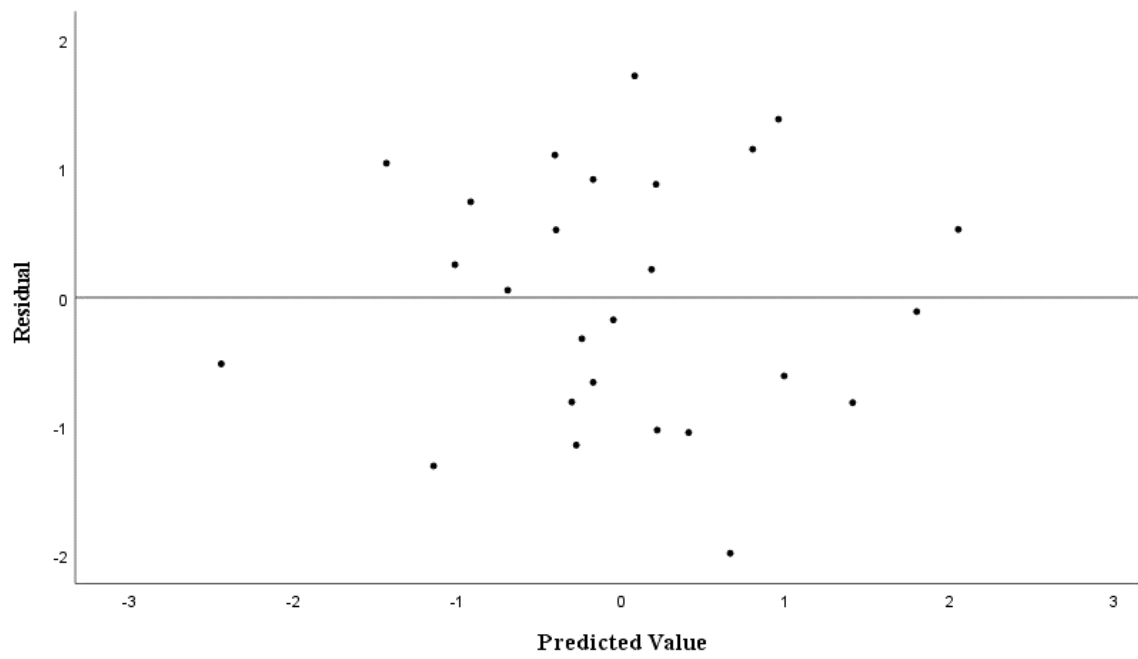


Figure 5*Standardized Residual plot*

Appendix B

Figure 6

The moderating effect of legitimacy on the relationship between transformational leadership (IV) and employee creativity (DV), mediated by self-efficacy.

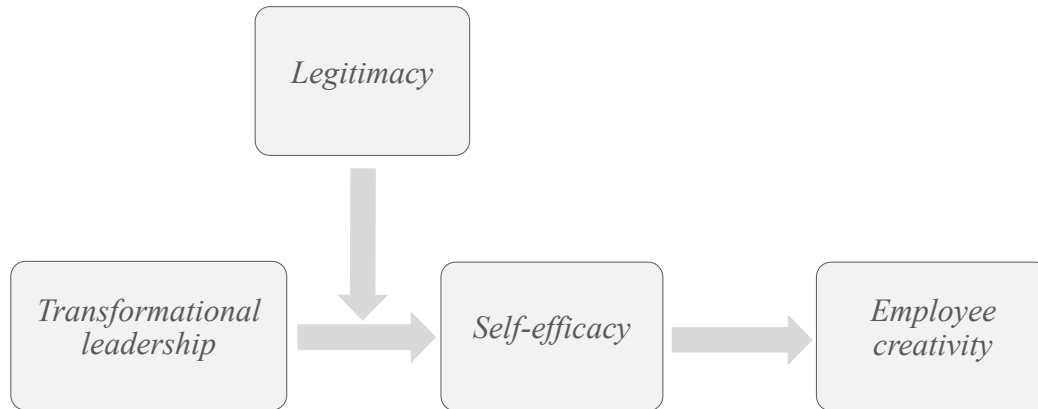


Table 3

Model 1 analysis predicting effects on self-efficacy, with transformational leadership (IV) and legitimacy as moderator.

Variable	B	SE	t	p
Constant	5.65	.133	42.5	<.001
Transformational leadership (TL)	.358	.219	1.63	.116
Legitimacy	.400	.170	2.35	.028
Interaction (TL×legitimacy)	.190	.243	.784	.442

Table 4

Model 2 analysis predicting effects on employee creativity, with transformational leadership (IV) and self-efficacy as mediator.

Variable	B	SE	t	p
Constant	4.71	2.22	2.12	.045
Transformational leadership (TL)	.228	.451	.506	.618
Self-efficacy	-.161	.389	-.413	.684

Appendix C

Legitimacy (revised) – scale (van der Veght, 2018)

The following questions are about your manager.

Please indicate to what extent you agree with the statements.

[1 Strongly disagree; 7 Completely agree; 4 neither agree nor disagree]

1. My manager's level of influence is based on what he/she does or knows.
2. My manager's level of influence is based on his/her contribution to the success of our collaboration.
3. In our collaboration, my manager has direct influence on decisions.
4. I think the power structure in the cooperation with my manager is generally fair.

Shared leadership (revised; transformational leadership) – scale (Hoch, J.E., 2013)

The following questions are about your manager.

Please indicate to what extent you agree with the statements.

[1 Strongly disagree; 7 Completely agree; 4 neither agree nor disagree]

1. My manager gives a clear vision of what our team stands for.
2. My supervisor is driven by higher goals or ideals.
3. My supervisor shows appreciation for my efforts.
4. My supervisor encourages me to reconsider ideas that have never been questioned before.
5. My supervisor uses many different perspectives to solve problems.
6. My supervisor encourages me to do more than what is expected of me (e.g. extra effort).

Innovative Work Behavior (revised) – scale (Janssen et al., 2004)

Below are a number of specific work behaviors related to new ideas. Please indicate how often your employee displays these work behaviors in his or her work situation.

[1 = never; 2 = sporadic; 3 = occasionally; 4 = regularly; 5 = often; 6 = very often; 7 = always]

How often does it happen that your employee in his/her work....

[Idea Generation]

1. devises new methods, techniques or tools.
2. comes up with original solutions to work problems.
3. comes up with creative ideas for improvements.

[Idea Promotion]

4. supports mobilizes for innovative ideas.
5. reaps acclaim for innovative ideas.
6. makes key figures enthusiastic about innovative ideas.

[Idea-Realization]

7. develops innovative ideas into workable applications.
8. introduces innovative ideas systematically.
9. thoroughly evaluates the introduction of innovative ideas.