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Team leadership: exploring the effects of work experience and self-efficacy on the effectiveness of empowering and directive leadership behavior

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Abstract

Despite research regarding underlying team members' social cognitions to clarify the effectiveness of empowering leadership, little is known about the underlying pathways concerning directive leadership as contrasting leadership behavior. I hypothesized a moderated mediating effect of team member self-efficacy on the relationship between both empowering and directive leadership behavior and team member performance, such that team member work experience as moderator interacted with both leadership styles. Based on social cognition theory, I predicted that, compared to low team member work experience, for highly experienced team members, empowering leadership behavior is positively related to team member self-efficacy beliefs. Besides, I predicted that, compared to high team member work experience, for less-experienced team members, directive leadership behavior is positively related to team member self-efficacy, theorizing that low-experienced team members benefited more from the guidance and direct intervention of directive leadership, where highly team benefited more from the autonomy and shared decision of empowering leadership. Participants in this study were 183 mental health care professionals, subdivided to 45 teams, Contrary to my expectations, using Clustered Linear Regression Analyses on data gathered from leadership and self-efficacy measures and objective team member performance, I did not find any significant effects and therefore rejected my hypothesized model. These results indicate that objective team member performance is dependent on a variety of confounding factors. Furthermore, some theoretical limitations regarding the self-efficacy concept were discussed.

Keywords: team leadership behavior, empowering leadership, directive leadership, self-efficacy, work experience, team member performance

1. Introduction

In order to perform complex tasks, organizations are increasingly organized in small teams, a change that is accompanied by a decentralization of power toward team members (Amundsen & Martinsen, 2014; Gersick & Hackman, 1990; Rapp, Gilson, Mathieu, & Ruddy, 2016). In response to this movement, leadership scholarship has shifted its attention from executive leadership level to the examination of the role of lower-level team leaders in motivating team members to successfully contribute to the attained performance goals (e.g. Burke, Stagl, Klein, Goodwin, Salas, & Halpin, 2006).

Since a growing body of evidence indicates that team leader behaviors have an important impact on team member performance (e.g. Zaccaro, Rittman, and Marks, 2001), recent team leadership studies have focused on the question what specific team leader behaviors promote and develop team performance and distinguishes two types of leadership behavior: empowering leadership and directive leadership (Burke et al., 2006; Ceri-Booms, Curşeu, & Roerlemans, 2017; Srivastava, Bartol, & Locke, 2006). The empowering leadership approach involves encouraging team members to make their own decisions on how they organize their daily tasks and how to use their problem-solving skills if improvements are needed. This form of leadership tends to empower team members to function effectively without continuous active intervention from a team leader, and promotes mutual consultation and shared decision-making (Manz & Sims, 1987; Kirkman & Rosen, 1999). Researchers have found that empowering leadership behavior not only leads to higher levels of team performance but also positively impacts internal psychological processes such intrinsic task motivation, team member self-leadership, team member self-efficacy and empowerment (Amundsen & Martinsen, 2014; Arnold, Arad, Rhoades, & Drasgow, 2000; Bandura, 1987; Chen, Sharma, Edinger, Shapiro, & Farh, 2011, Pearce & Sims, 2001; Seibert, Wang, and Courtright, 2011; Spreitzer, 1995; Srivastava, Bartol, & Locke, 2006). Due to these positive psychological effects, empowering leadership is often seen to be beneficial over the effects of directive leadership (Chen et al., 2011; Zhang & Bartol, 2010), a claim that cannot be considered separately from a management practice in which proactive behavior, ownership and personal initiative are highly appreciated (Cheong, Yammarino, Dionne, Spain, & Tsai, 2019; Fay & Frese, 2001). Consequently, researcher's and manager, the interest of researchers and managers in empowering leadership stimulated further studies toward the effects of empowering leadership on internal psychological processes. In contrast, directive leadership, as the other type of leadership behavior, received less attention (Cheong et al., 2019).

In the directive leadership approach, compared to empowering leadership, team leaders are more actively involved in instructing team members about what specific actions they have to execute in order to perform their daily tasks. Instead of stimulating team members to develop their own feedback systems and shared-decision-making skills, directive leaders provide external feedback on the team performance and directly implement improvements if needed. Decision-making is more centralized and the team leader decides on behalf of the team. Research indicates that directive leadership behavior also positively affects team performance (Manz & Sims, 1987; Pearce & Sims, 2002), and it has been repeatedly established

that different leadership behaviors (empowering and directive) can both lead to positive team performance. These findings led to the acknowledgment among scholars that the relative effectiveness of both leadership styles on the performance level depends on a variety of external and internal factors (Cheong et al., 2019).

In the last two decades, two approaches emerged in leadership literature to clarify this relationship between team leadership and performance: a moderating and a mediating approach. In the moderating approach, scholars suggested that the effectiveness of team leader behavior depends on both contextual factors, such as organizational culture (Tata & Prasad, 2004), team design features (Wagemans, 2001), external events (e.g. Morgeson, 2005) and leader characteristics (e.g. DeRue, Barnes, & Morgeson, 2010), and on internal factors such as team member need for autonomy (Yun et al., 2006), team member self-efficacy (DeRue et al., 2010; Mathieu, Ahearne & Taylor, 2007) and team member work experience (Yun, Faraj & Sims, 2005; Mathieu et al., 2007). For example, Yun et al. (2005) showed that less experienced teams benefited more from directive leadership, where high-experienced teams were more effective when their leaders used a coaching leadership style, suggesting that team member factors affect the relationship between team leader behavior and performance.

In the mediating approach, scholars tried to clarify the team leadership – performance relation not by detecting contingency factors that impacted this relationship, but by disclosing underlying motivational and cognitive pathways that explain the way this relationship itself could work. In their review, Cheong et al. (2019) showed that, among other factors, especially team member psychological empowerment (e.g. Admundsen & Martinsen, 2005; Lorinkova, Pearsall, & Sims, 2013) and self-efficacy (e.g. Srivastava et al., 2006, Zhang & Bartol, 2010) were found to be mediators the relationship between empowering leadership and performance, which suggests that empowering leadership does what it claims to do: it positively affects psychological states of team members and in that way leads to better results.

A major limitation of both approaches is the relative absence of studies focusing on directive leadership. Even though both empowering and directive leadership behaviors led to positive performance outcomes (e.g. Burke, et al., 2006), to the best of my knowledge, most studies examining moderators on and mediators in the leadership behavior – performance relationship were focused on understanding empowering leadership. An exception to this is the study of Lorinkova et al. (2013) that compared the longitudinal effects of both empowering and directive leadership behavior. In their study, Lorinkova et al. (2013) showed that the effect of leadership behavior on performance was moderated by the team developmental stage. They found that in an early developmental phase, directive-led teams performed better than teams with an empowering leader. However, in the long run, teams with an empowering leader outperformed the directive-led teams due to higher levels of shared attitudes and cognitions among team members and higher levels of coordination of actions within the team. These findings suggest that empowering and directive leadership behavior have different effects on the psychological state of a team.

Besides, these findings also imply that teams do not always significantly benefit from empowering leadership, an implication that was supported by the incongruent results of some recent studies regarding empowering leadership (Cheong, Spain, Yammarino, & Yun, 2016; Wong & Giessner, 2018). For

example, Cheong et al. (2016) found that empowering leadership has both positive effects on performance by enhancing team member self-efficacy and negative effects on performance by inducing job-related tension and thereby diminishing the positive effect of empowering leadership on performance. These findings question the often made claim, which I referred to earlier in this paper, that empowering leadership is more desirable than directive leadership (e.g. Srivastava, et al., 2006).

Both notions imply that a comprehensive understanding of leadership behavior and its effects cannot be achieved without considering both types of leadership behavior together. Following Cheong et al.'s (2019) recommendation, adding directive leadership behavior as a contrasting leadership style to future empowering leadership studies would increase both our understanding of underlying motivational and cognitive mechanisms in the team leader behavior – performance relationship as well as our understanding under what circumstances team leader behavior would lead to better performance outcomes. For example, it is important to examine to what extend the frequently confirmed mediating effect of self-efficacy on the empowering leadership – performance relationship can be replicated for the directive leadership – performance relationship.

Another, more specific limitation of existing empowering leadership models is that they often oversimplify the relationship between empowering leadership behavior and performance by considering either a mediating or a moderating model. This is a theoretical gap because, for example, it is likely that team member characteristics as an individual need for autonomy or work experience level would function as moderators on the mediating effect of self-efficacy in the relationship between different team leader behaviors and performance. If that would be the case, which is my position, existing leadership models need to be redesigned by adding these factors to future models.

A more general limitation in previous studies examining the effect of leadership behavior on performance is the relatively limited use of objective performance data. According to Cheong et al. (2019), most studies regarding leadership behavior used perceived team effectiveness measures or experimental tasks to generate their outcome measures instead of objective data. It would be interesting to what extend earlier results can be replicated while using objective outcome data.

This study aims to address these limitations by examining the way empowering and directive team leader behaviors affect objective performance outcomes. I consider team member self-efficacy to be an important mediating factor in the relationship between leadership behavior and team member performance. Building from a social cognitive perspective, I theorize that the effects of directive and empowering leadership on team member self-efficacy depend on the team member work experience level. By doing this, my study aims to extend existing theory about the relative effects of different leadership behaviors on team member performance. In the next chapter, I will outline the theoretical background and my hypotheses, followed by the results and discussion sections, in which I discuss the theoretical and practical implications of my findings.

2. Theoretical background and hypotheses

2.1 Empowering and directive team leadership

Scholars repeatedly showed that leadership behavior has an important impact on team performance and team member performance (for an overview see e.g. Zaccaro et al., 2001), establishing a variety of leadership concepts as authoritarian leadership, autocratic leadership, transactional leadership, and directive leadership on the one hand, and participative leadership, transformational leadership, laisser-faire leadership and empowering leadership on the other hand (e.g. Burke et al., 2006; Cheong et al., 2019; Pearce and Sims, 2002; Manz & Sims, 1987); Wong & Giessner, 2018). In their reviews of leadership behavior, Burke et al. (2006) and Ceri-Booms et al. (2007) proposed a primary classification of leadership behaviors and corresponding leadership concepts into two categories: person-focused behaviors (behaviors facilitating team interaction and development) and task-focused behaviors (behaviors dealing with task execution). Applying this distinction to the concepts I used in this study, empowering leadership can be seen as a form of person-focused leadership behavior and directive leadership as task-focused behavior (Burke et al., 2006).

Given the aforementioned context of the increasing organization of work activities in teams and the accompanied delegation of power towards team members, I have chosen to use the empowering-directive leadership approach due to its focus on providing autonomy to team members. Empowering leadership can be defined as "*a process of sharing power, and allocating autonomy and responsibilities to followers, teams, or collectives through a specific set of leader behaviors for employees to enhance internal motivation and achieve work success*" (Cheong et al., 2019, p. 34). In this definition, empowerment is more than a set of leader behavior in itself but also aims to impact the internal motivation of team members and, in that way, leads to a better team performance. This addition, which was originally suggested by Thomas and Velthouse (1990), emphasizes that the empowerment definition must refer to both the empowering leader's actions as well as the motivational effects of empowering leadership on followers. In leadership scholarship, these two distinct parts of empowering leadership were later described as the socio-structural perspective and the psychological empowerment perspective (Seibert, Wang & Courtright, 2011; Spreitzer, 1995).

In the empowering perspective, the team leader refrains from direct intervention and aims to help the team to develop the ability to detect and solve problems without continuous leader intervention. In this perspective, difficulties are seen as learning possibilities, where the team needs to be encouraged to take responsibility for solving these difficulties and thereby, performance improvements (Manz & Sims, 1987). In the directive perspective the team leader shows the team where possible problems arise and directs the teams actions towards solving difficulties and meeting the team goals. If team members are not performing well, the directive leader actively intervenes in the team by providing feedback and directing team member's actions toward what is needed to perform better. Although impacted by a variety of internal and external factors, both approaches can have a positive impact on performance outcomes

(Burke et al., 2006; Ceri-Booms et al., 2017; Lorinkova et al., 2013; Rapp et al,. 2016; Zaccaro et al., 2001).

In this study, I examined the effect of both forms of leadership behaviors on team member performance, and theorize that this relationship is mediated by team member self-efficacy. An illustration of my hypothesized model is depicted in Figure 1. Existing research did not examine the impact of directive leadership on team member self-efficacy. In the next sections, I theorize that both empowering and directive leadership have an effect on team member efficacy, dependent of the level of prior team member work experience.

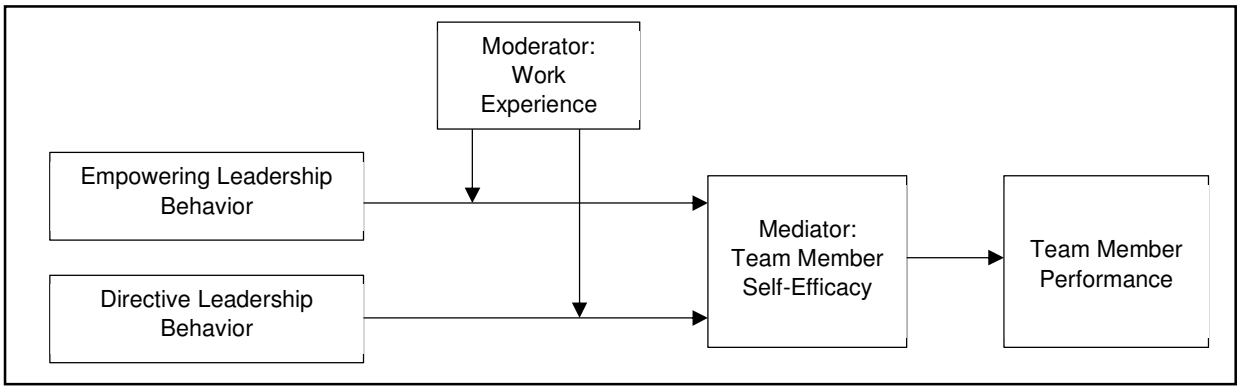

Figure 1. *Hypothesized model.*

2.2 Self-efficacy as a mediating mechanism in the leadership behavior– performance relationship

Leadership theories suggest that leader behavior affects the cognitions of individual team members (e.g. Cheong et al., 2019), which is called social cognition (Bandura, 1986). Social cognition refers to the internal ideas of individuals or teams that emerge from social interaction and can be seen as the effect of individual or collective information processing in interaction with other team members or with a broader social context (Cannon-Bowers & Salas, 2001). Self-efficacy, defined as "*the belief in one's capabilities to organize and execute the actions needed to manage prospective situations"* (Bandura, 1982, p. 122, is seen as one of the essential social cognitions in understanding how individuals and teams deal with goals and challenges (Bandura, 1982, 1986). Given my interest in detecting underlying motivational and cognitive pathways in the leadership behavior – performance relationship, I focus on self-efficacy and posit that team member self-efficacy is one mechanism through which empowering and directive leadership impacts team member performance.

In order to succeed as a team, team members need to be willing to commit themselves to the actions that need to be accomplished in order to achieve team performance goals. Bandura (1997) stated that team members find it hard to commit themselves to these goals if they are not sure that their actions

toward goal accomplishment will be successful. In that case, team members have the tendency to spare their limited psychological resources for attaining other, more realistic goals. Bandura (1982, 1997) showed that self-efficacy is one of the keys to understand differences in this risk-aversive tendency. He found that individuals with high self-efficacy are more likely to engage in new actions than individuals with low self-efficacy since those high on self-efficacy are convinced that they possess the required abilities to achieve new goals.

In this study, self-efficacy was hypothesized to be an important underlying mediating mechanism in the relationship between empowering versus directive leadership behavior and performance. I focused on individual differences between team members and thereby used individual team member self-efficacy, which differs from collective self-efficacy. Collective self-efficacy refers to the shared belief among the team members about their abilities to succeed as a team (Bandura, 2000; Cannon-Bowers & Salas, 2001). Katz-Navon and Erez (2005) found that in highly interdependent tasks that required close interaction and coordination among team members, collective efficacy would be a more helpful concept than individual team member self-efficacy. I focus on team member self-efficacy because I believe that for my research participants, most daily actions toward the team performance goals were individually determined and did not need that high levels of coordination. Previous studies have shown that team member self-efficacy positively affects team performance (e.g. Srivastava, et al., 2006) and that individual self-efficacy is associated with individual performance (e.g. Stajkovic & Luthans, 1998). Based on these results, I expected to replicate these findings on an individual level.

Subsequently, as already stated in the introduction section of this paper, previous research examining the mediating impact of self-efficacy on empowering leadership behavior – team performance relationship showed a positive effect of empowering leadership on team performance (e.g. Srivastava et al., 2006, Zhang & Bartol, 2010). To the best of my knowledge, the mediated effect of self-efficacy has never been investigated for directive leadership, Based on the previous evidence that was outlined in this paragraph, I theorize that team member self-efficacy is an important mediating mechanism in the relationship between both empowering and directive leadership behavior and individual performance.

Thus, I theorize the following:

Hypothesis 1: The relationship between different team leadership behaviors (empowering and directive) and individual team member performance is mediated by team member self-efficacy.

2.3. The moderating role of work experience on the mediated leadership behavior – performance relationship

Team leadership theories do not only claim that the effect of team leader behavior is mediated by the team members' social cognitions, as outlined in the previous section, it also claims that the effect of leader behaviors is moderated by other team member factors, such as team members skills level, team

developmental level and work experience (Kozlowski, Gully, Salas & Cannon-Bowers, 1996; Lorinkova et al., 2013; Yun, Faraj, & Sims, 2005). For example, in their study to leadership effectiveness in trauma resuscitation situations Yun, Faraj, and Sims (2005) found that leaders using a coaching leadership style were more effective in highly experienced teams, where leaders using a directive leadership style were more effective in less experienced teams. These findings are in line with earlier studies that when team members possess the information required to complete their tasks, participative decision making by team members is more appropriate than leader-bound decision making (e.g. Vroom, 2000). More recently, Lorinkova et al. (2013) found that the effects of leadership behaviors on team performance depend on the developmental phase of the team. They found that in the first period after team formation, a team benefited more from a directive team leader style than from an empowering style, whereas in the long run, due to improved learning and coordination capabilities and the formation of shared cognitions among team members, teams that were led by an empowering team leader outperformed the directive-led teams. These findings showed that both the degree of individual work experience and team tenure do affect the effectiveness of different leadership styles. In other words, the context in which leaders operate to stimulate their teams to better performance levels changes as time goes by due to developing individual work experience level and cooperation between team members. Consequently, leaders have to change their team interventions over time in order to fit them to the individual needs of teams and team members: leader interventions that worked well in the past, may not be effective enough in the future. In this context, effective leadership can be characterized as having the ability to recognize the different needs of teams and team members and to react to those needs in a corresponding way, an asset that can be defined as behavioral flexibility (Yukl, 2012).

This study aims to contribute to a better understanding of team leadership effectiveness by further examining the role of team member self-efficacy as an important underlying motivational pathway in the team leader behavior – performance relationship. In addition to previous studies regarding the role of self-efficacy in this relationship, as outlined in the previous chapter, I combine this approach with the findings that the effects of team leadership (empowering and directive) are contingent on team member experience level by theorizing that the motivational effects of team leader behavior (empowering and directive) can be distinguished for low-level and high-level team member experience. As described in the last paragraph, the effectiveness of leadership behavior depends on team member work experience and team cooperation experience, suggesting that performance differences between teams and team members are due to the interaction of leadership style and team member work experience or team tenure (Kozlowski, Gully, Salas & Cannon-Bowers, 1996; Lorinkova et al., 2013; Yun, Faraj, & Sims, 2005). In line with this, I theorize that the effects of different team leadership behaviors (empowering and directive) on team members self-efficacy as a mediating mechanism, depend on team member work experience level, expecting that individual differences in self-efficacy beliefs can be explained by an interaction between different team leader behavior and team member work experience. In other words, I propose a moderated mediation model and posit that the relationship between directive versus empowering leader behavior and performance is mediated by team member self-efficacy and that the mediating effect of team member self-

efficacy in this model is moderated by team member work experience (see Figure 1). I will outline the argument of my hypotheses in the following paragraphs.

First, directive leaders provide their team members with clear expectations about the attained performance goals, direct feedback and direct team interventions (e.g. Zaccaro et al., 2001). On the contrary, empowering leaders delegate autonomy and responsibility to team members and provide opportunities for team members to solve problems without direct intervention from the team leader (e.g. Zaccaro et al., 2001)). As shown by Yun et al. (2005), less experienced teams benefited more from directive leadership than coaching leadership, whereas highly experienced teams benefited more from empowering leadership, suggesting that the effectiveness of leadership behavior is contingent on the required knowledge and skills level of team members to perform their tasks (e.g. Vroom, 2000).

Second, building on social learning theory, Bandura argued in his self-efficacy theory (Bandura, 1997) that, in order to enhance self-efficacy, people need a social environment in which they can gain mastery experience from successes and failures. Successes may lead to a strong belief in one's own abilities, where failure may have a negative impact on self-efficacy, especially when people, due to a lack of experience, did not have developed robust self-efficacy beliefs yet. Besides, if people are not able to judge whether or not their actions were good or bad, they typically learn by observing the performance of others on the same activities. Drawing on this theory, in order to develop a strong sense of self-efficacy, the work place offers numerous possibilities to gain mastery experience and learning possibilities to team members.

Based on these findings I theorize that, due to their limited knowledge level, less experienced team members have more difficulty in directing their own actions autonomously without the support and intervention of a team leader and thereby will benefit more from directive leadership, and, as a consequence, they will gain mastery experience which will lead to enhancing team member self-efficacy. On the other hand, I theorize that more experienced team members due to their information and skills level will have less difficulty to direct their own actions autonomously without direct team leader intervention and thereby benefit more from empowering leadership. Consequently, empowering leadership behavior from their team leader will help them to gain mastery experience, which enhancing team member self-efficacy.

Thus, I hypothesize the following:

> *Hypothesis 2:* The relationship between team leadership behaviors and team member self-efficacy is moderated by team member work experience. Specifically, directive leadership behaviors provide more team member self-efficacy enhancement when team members are inexperienced, but empowering leadership behaviors provides more team member self-efficacy enhancement when team members are experienced.

3. Method

3.1 Participants and procedure

Participants were 186 employees from 45 teams who worked as clinical psychologists in a Dutch mental health care organization. Each participant received an e-mail with a unique code which gave access to an online questionnaire consisting of questions about team leadership behavior and self-efficacy. After completion of the survey questions, objective performance data was automatically added to the data file in which the individual responses were logged. In order to prevent socially desirable outcomes, participants were informed that all data were collected against the highest privacy standards and were anonymized so that the researcher had no insight in the specific responses on the team level or individual level. After one week, a reminder was sent to all employees who did not responded yet. After completion of the online questionnaire, the total response rate on the self-report data collection was 51%, and the average team response rate was 52% (SD = 20%, range 0 – 100%). The average team size was eight, ranging from two to 16, and the average team tenure was 38 months (SD = 35.64). The average team member age was 31, and 92.5% was female. All the participants had the same educational degree (master's degree in psychology), although job level differed dependent on work experience: 9.7% of them had psychologist trainee level, 36% had junior level, 22% has mid-level and 33.3% was a senior level employee.

3.2 Measures

Team members completed measures about team leadership behavior and self-efficacy. Both measures were rated using a five-point Likert-type scale (1 = strongly disagree; 5 = strongly agree) and were translated in Dutch before the data collection phase. Objective performance data that was earlier collected by the mental health care organization the research participants were employed were used as my dependent variable.

Empowering versus directive leadership behavior. Leadership behavior was measured using the 12-item Leadership Strategies Questionnaire II (LSQII), which was constructed by Yun, Cox and Sims (2006), who borrowed it from the study of Pearce and Sims (2002). The LSQII consists of a 6-item scale measuring empowering leadership behaviors (sample item: "My leader encourages me to find solutions to my problems at work without his/her direct input") and a 6-item scale measuring directive leadership behaviors (sample item: "My leader provides commands in regard to my job"). Yun et al. (2006) stated that leadership needs to be conceptualized as a group-level variable. They argue that although leaders do not always react to team members in the same way, they usually execute similar behavioral patterns toward

an entire group of followers. Yun et al. (2006) found that both subscales of the LSQIII were not correlated to each other, assuming that the directive behaviors were clearly distinguished from the empowering leadership behaviors.

Team member self-efficacy. Team member self-efficacy as a mediating variable was assessed by using Quinones' (1995) measure of self-efficacy (SE), consisting of 10 items. Ratings across the 10 items were averaged for each participant (sample item: "I feel confident in my ability to perform this task effectively").

Team member work experience. Work experience was measured by asking participants for how long they have been worked as a psychologist.

Dependent variable. In order to test my model, I used individual objective performance scores as outcome measure. Since all participants worked in a mental health care organization, I used the participants' average treatment outcome scores over the last six months in terms of their relative improvement score on the Dutch version of the Symptom Questionnaire (SQ-48), a questionnaire that was filled in by the participant's clients in the last six months (Carlier et al., 20142. The SQ-48 consists of 48 items regarding psychological complaints (sample items: "I was afraid or anxious" and "I was dissatisfied with my work or study").

3.3 Analyses

Data inspection revealed missing data on the dependent variable (8.6%), and the self-efficacy variable (1%). The use of regression-based data imputation techniques was explored for estimating missing data. Since the imputation of data did not significantly alter the results, I decided not to use data imputation techniques. Visual data inspection revealed that the variables were normally distributed, but self-efficacy scores and work experience data were skewed. Following Fidell & Tabacknick (2007), due to the relatively big sample size, we did not make an adjustment for that. Before calculating interaction terms, the dependent variables were centered by subtracting individual scores on those variables from the mean score.

To examine the effects of team leader behaviors and team members work experience on self-efficacy and team member performance, Clustered Regression Analyses (CRA) was used, a function that was available in the R statistical package. In CRA, the values of standard errors were adjusted for the fact that individual observations were clustered in groups, which was the case in my data collection. To test the hypothesized moderated mediation model, two clustered regression models were created. For that purpose, two interaction effects were calculated by multiplying empowering team leadership behavior and directive team leadership behavior with team member work experience. The first model specified the effects of the independent variables (empowering and directive leadership), the moderator variable (team member work experience) and their interactions on the dependent variable (team member performance) when controlling for the mediator variable (team member self-efficacy). The second model specified the

effect of the independent variables (empowering and directive leadership behavior), the moderator variable (team member work experience) and their interactions on the mediator variable (team member self-efficacy). Subsequently, I planned to test the mediation function by comparing both models and test the significance of the indirect effect of team member work experience by adding team member work experience as a covariate to the mediating method in R, using the bootstrapping method of Preacher & Hayes (2004). Since no significant results were found for both regression models, this method is omitted from the analysis.

4. Results

Table 1 presents descriptive statistics, Cronbach's alphas and Pearson correlations. The Cronbach's alphas indicated good reliability for both the LSQ-II and the SE scale. Since I translated the items of the LSQ-II and used them in a different context, I tested Yun et al. (2006) assumption that both subscales need to be uncorrelated. Contrary to their findings, I found both subscales of the LSQIII to be significantly correlated to each other ($r = .36$, $p < .01$). Although the correlation is medium size, these findings may suggest both scales could be redundant to each other.

Looking to the Pearson correlations, I found team member work experience to be positively related to self-efficacy ($r = .229$, $p < .05$) as expected, and found directive and empowering leadership behavior to be significantly related to each other ($r = .356$, $p < .01$), which was contrary to previous studies (cf. Yun et al., 2006). Directive ($r = .013$, *ns*) and empowering leadership behavior ($r = -.101$, *ns*) were not found to be significantly related to team member self-efficacy, indicating that any possible differential effects of directive and empowering leader behavior had to be contingent to team member work experience or other, not hypothesized factors. The correlation between team member self-efficacy and team member performance was not found to be significant ($r = .083$, *ns*) and I did not find a significant correlation between team member work experience and team member performance.

Table 1: *Descriptive Statistics and Pearson Correlations*

Variable	Mean[a]	SD[a]	α	1	2	3	4	5
1. Directive leadership behavior	3.27	.66	.79					
2. Empowering leadership behavior	3.91	.58	.79	.356**				
3. Team member self-efficacy	3.79	.52	.82	.013	.101			
4. Team member experience	5.48	4.42		-.104	.033	.199**		
5. Team member performance	10.05	3.59		.052	-.019	.083	.089	

Note: For directive and empowering leadership behavior and team member work experience N = 186; for team member self-efficacy N = 184; for team member performance N = 170; a = unstandardized; ** $p < .01$, * $p < .05$ (two-tailed).

Table 2: *Results of Clustered Regression Analysis predicting Team Member Performance from Directive and Empowering Leader Behavior, Team Member Experience and Team Member Self-Efficacy*

Independent Variable	Main Effects	*p*-value	*ß* Moderated Effects	*p*-value
Directive leadership behavior	.08	.403		
Empowering leadership behavior	-.05	.644		
Team member experience	-.00	.865		
Team member self-efficacy	.18	.387		
Directive leadership behavior x team member experience			.03	.148
Empowering leadership behavior x team member experience			-.07	.135
R^2			.05	

Note: For directive and empowering leadership behavior and team member work experience N = 183; for team member self-efficacy N = 181; for team member performance N = 167; ** p < .01, * p < .05 (two-tailed).

Table 3: *Results of Clustered Regression Analysis predicting Team Member Self-Efficacy from Directive and Empowering Leader Behavior and Team Member Experience*

Independent Variable	Main Effects	*p*-value	*ß* Moderated Effects	*p*-value
Directive leader behavior	-.00	.987		
Empowering leader behavior	.09	.321		
Team member experience	.02	.008**		
Directive leader behavior x team member experience			.00	.786
Empowering leader behavior x team member experience			-.00	.758
R^2			.05	

Note: For directive and empowering leadership behavior and team member work experience N = 183; for team member self-efficacy N = 181; for team member performance N = 167; a = unstandardized; ** *p* < .01, * *p* < .05 (two-tailed).

As summarized in Table 2 and 3, Clustered Regression Analyses did not led to any statistically significant effects of created interaction effects of both created models and all main effects were also not significant, except the effect of team member experience on team member self-efficacy (*ß* =.02; *p* <.01*)* The explained variance (R2) in both models was less than 5%, indicating that our data did not support the regression models that were created in preparation of the analyses. For that reason, we did not further test the differences between both models and rejected our H1 hypothesis. For our first regression model, as shown in Table 2, in line with our expectations, we found directive team leadership behavior (*ß* =.08; *p* = *ns)* and empowering team leadership behavior (*ß* = -.05, *p* = *ns*) to have no direct significant independent effects on team member performance. However, contrary to our expectations, we also did not find found team member self-efficacy significantly affecting team member performance, (See Table 2; β = .18; *p* = *ns*).

To see my mediated moderation hypothesis to be sustained by the data, the independent variables (empowering and directive leadership behavior) must interact with the moderator (team member work experience. As shown in Table 3, this was not the case, for both directive leadership behavior (*ß* = .00; *p* = *ns*) and empowering leadership behavior (*ß* = -.01; *p* = *ns*). On this base, I rejected the H2 hypotheses. Besides, these findings did not provide a base for further testing the indirect effects of team member experience as planned by adding team member experience as a covariate to the comparison of

both created regression models, using Preacher & Hayes' (2004) bootstrapping method. However, contrary to my expectations, I found a very small but significant direct effect of team member work experience on team member self-efficacy (β = .02; p < .01), indicating that work experience has more impact on self-efficacy beliefs than team leader behaviors.

In order to test whether job level could possibly have influenced the effect of team member self-efficacy on team member performance or the team leader behavior x team member work experience interaction effects on team member self-efficacy, I executed post-hoc clustered regression analyses for my models in which I included job level as a predictor (see Table 4 and 5), but this did not lead to a significant effect of team member self-efficacy on team member performance ((β = .02; p = ns) or significant team leader behavior x team member performance interaction effects on team member self-efficacy ((β = .02; p < .01).

Table 4: *Results of Clustered Regression Analysis predicting Team Member Performance from Directive and Empowering Leader Behavior, Team Member Experience, Team Member Job Level and Team Member Self-Efficacy*

			ß	
Independent Variable	Main Effects	*p*-value	Moderated Effects	*p*-value
Directive leadership behavior	.06	.282		
Empowering leadership behavior	-.03	.643		
Team member experience	-.12	.314		
Team member job level	.17	.191		
Team member self-efficacy	.15	.457		
Directive leadership behavior x team member experience			.07	.266
Empowering leadership behavior x team member experience			-.20	.127
R^2			.06	

Note: For directive and empowering leadership behavior and team member work experience N = 183; for team member self-efficacy N = 181; for team member performance N = 167; ** p < .01, * p < .05 (two-tailed).

Table 5: *Results of Clustered Regression Analysis predicting Team Member Self-Efficacy from Directive and Empowering Leader Behavior, Team Member Experience and Team Member Job Level*

			ß	
Independent Variable	Main Effects	*p*-value	Moderated Effects	*p*-value
Directive leader behavior	.00	.963		
Empowering leader behavior	.05	.289		
Team member experience	.05	.262		
Team member job level	.07	.242		
Directive leader behavior x team member experience			.00	.946
Empowering leader behavior x team member experience			-.00	.711
R^2			.06	

Note: For directive and empowering leadership behavior and team member work experience N = 183; for team member self-efficacy N = 181; for team member performance N = 167; a = unstandardized; ** p < .01, * p < .05 (two-tailed).

Thus, my proposed moderated mediation model in which the relationship between directive and empowering leader behavior and team member performance was mediated by team member self-efficacy

in that sense that the mediating effect of team member self-efficacy in this model was moderated by team member work experience found no evidence in the data.

5. Discussion and conclusion

This study was aimed to examine the role of team member self-efficacy as underlying motivational mechanism in the relationship between team leader behavior and team member performance. Specifically, I investigated how team member work experience interacts with two different approaches of leadership (empowering and directive) to influence team member self-efficacy and team member performance. By doing that, my aim was to broaden the understanding of different team leadership styles in the context of the increasing team work in organizations. Contrary to previous studies regarding effective team leader behavior and contrary to my expectations, I did not find a significant effect of team member self-efficacy on team member performance. I also did not find significant interaction effects between team leader behaviors and team member work experience on team member self-efficacy. Consequently, I found no evidence self-efficacy should be considered as a mediator in the team leadership – performance relationship.

Despite its insignificant results, this study makes several contributions to the team leadership literature. Many previous studies regarding the effectiveness of team leadership relied on subjective team (member) performance measures or experimental manipulations of team leadership behavior (Cheong et al., 2019). First, by using objective performance data, this study tried to test whether these findings could be replicated in everyday team practice. A possible explanation for the absence of significant effects of both empowering and directive leadership on team member performance could lie in the character of this everyday practice in which team member performance depends on a variety of contextual factors that cannot be controlled for in a non-experimental setting, which could possibly have confounded the effects of team leader behaviors on team member performance. For example, Tata and Prasad (2004) already showed that organizational culture influenced the effectiveness of team leader behavior. Based on these findings, it is not strange to imply that team leadership influences can be confounded by more powerful factors that confound the impact of team leadership influences. Even though this study did not led to significant results, this study should urge future researchers to further test experimental knowledge in a variety of real-life team contexts.

Second, this study contributes to leadership literature by including directive leadership as a contrasting leadership approach to the more intensively studied empowering team leadership. Although it did not lead to significant results, including directive leadership behavior in my study gave me the possibility to examine the separate effects of both approaches on self-efficacy and team performance, a possibility that often lacked in previous studies regarding the effectiveness of team leadership behavior. A possible explanation for the absence of specific effects for empowering and directive leadership could be that, in essence, it does not matter what specific leadership behaviors were showed. The found significant

correlation between the team members' perceptions of directive and empowering leadership points into that direction, suggesting that both styles were more similarly perceived by team members than conceptualized by Yun et al. (2006). Given the ability of an effective team leader to adapt his behavior to the developing experience level of individual team members over time, this suggestion seems not strange to me. If this is true, it may indicate that existing claims regarding the beneficial effects of empowering leadership on performance should be questioned. In order to clarify the distinguished effects of both leadership styles, future studies need to compare different measures of contrasting leadership behaviors.

Third, the non-significant leadership behavior styles – team member work experience interaction effects on team member self-efficacy raise some questions referring to the presumed mediating effect of team member self-efficacy in the leadership behavior – performance relationship. This is in line with some scholar's criticism regarding the self-efficacy concept (e.g. Vancouver, Thomas, & Williams, 2001; Vancouver & Kendall, 2006). These scholars suggest that self-efficacy could be better explained by prior experience, instead of explaining future performance outcomes, as was suggested by previous scholars who based their propositions on often cited meta-analysis of Stajkovics and Lufthans (1999) in which a cross-sectional correlation between self-efficacy and performance was found. However, Vancouver & Kendall, (2006) found self-efficacy to be negatively related to motivation and exam performance among students if they experienced prior study results as sufficient. In that case, due to good study results on prior exams, they had relatively strong self-efficacy beliefs, but these beliefs did not further enhance motivation to push themselves to the limit in the preparation to future exams. These findings led Vancouver & Kendall (2006) to question the assumed motivational effect of Bandura's self-efficacy concept (Bandura, 1997). Consequently, they proposed a more complex motivational pathway between self-efficacy and performance in which not individual efficacy beliefs but a comparison between these beliefs and the desired goals leads to positive performance outcomes (Vancouver et al., 2001).

Our study also has several important limitations that need to be mentioned here and addressed in future studies. Due to the absence of repeated measures, a within-subject analysis was not possible, which makes it difficult to draw conclusions about the relationship between team leader behavior and team member self-efficacy and performance. Given this notion, I recommend to use pre-post-tests in future studies. A second limitation refers to another levels-of-analysis issue, regarding the differences between group-level and individual-level analysis. Although I controlled for the fact that the individual observations were clustered in team, in this study, examining the effects of leadership behavior was limited to the individual level. Future studies regarding the leadership behavior – performance relationship would gain more strength if the results would have been analyzed on both the individual and the group level. In that case, it would be possible to examine on what specific level leadership interventions affect performance. A third limitation of this study is that I did not control for the complexity of treatments that were assigned to our participants. It is possible that more experienced team members got more complex patients with severe psychological problems than less experienced team members. This could possibly explain the absence of any effects of leadership behavior on team member performance.

Despite its limitations, this study enriches the understanding of team leadership behavior. In

general, the results suggest that the effects of different leadership behaviors on team member performance and its motivational pathways are contingent on a variety of factors that are controlled for in an experimental condition, but not in a setting in which objective performance data is used. Although our study did not lead to significant results, it poses questions regarding the relative effect of leadership interventions on team member performance and its motivational pathways. Furthermore, its design offers some insights into how different leadership styles may be investigated in future studies.

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