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The Relationship Between Leaders' Psychological Capital and Organizational Outcomes: A Crossover Model

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Abstract: The study investigated the potential role of human resources exemplified by leaders' psychological capital (PsyCap) as a resource that may cross over to team-member exchange (TMX), and bring about desired organizational outcomes. We suggest a model where TMX of senior management teams serves as a team resource mediating the relationship between leaders' PsyCap and organizational outcomes, as represented by team innovation, organizational citizenship behavior (OCB), and employees' job satisfaction. The study, carried out among 86 elementary and junior high schools, indicated a positive relationship between leaders' PsyCap and TMX. In addition, we found a significant relationship between TMX and the three measures of organizational outcomes. Furthermore, TMX partially mediated the relationship between leaders' PsyCap and the desired outcomes, excepting innovation. The findings provide support for the importance of the leaders' personal resource of psychological capital as a complementary perspective that may enhance our understanding of leadership's impact on organizational success. In addition, the study provides significant support for the expanded model, broadening the definition of the crossover model by examining the translation of positive resources from leaders' PsyCap to organizational outcomes via teams' positive resources. From a practical perspective, the findings bring to the forefront the importance of psychological capital as a state-like construct that can be developed through leader preparation and professional development programs.

Keywords: *Organizational citizenship behavior, psychological capital, team, team-member exchange.*

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Introduction

Contemporary leaders face growing work-related pressures, increasing complexity of managerial tasks, and volatile environmental conditions (Ganon-Shilon & Schechter, 2019; Sweetland & Hoy, 2000). As a top of the pyramid, leaders are expected to cope adaptively with these challenges and bring about organizational effectiveness (Benoliel, 2017). The research has been mainly focused on the effects of leadership styles and behaviors on work outcomes (e.g., Benoliel & Somech, 2016; Bogler, 2001; Bush & Glover, 2014). The paradigm of the positive organizational behavior (POB; Luthans, 2002) offers a new management perspective that focuses on leaders' and employees' positive resources and performance (Luthans et al., 2006; Turner et al., 2002). POB is defined as "the study and application of positivity oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace" (Luthans, 2002, p. 59). Accordingly, the POB approach offers shifting the focus from leadership styles to a new perspective of human resources, such as leaders' psychological capital (PsyCap), which is still in its infancy (Berkovich & Bogler, 2021; Crook et al., 2011; Wang et al., 2021).

PsyCap is defined as "an individual's psychological state of development" (Luthans et al., 2006, p. 388). It is a higher-order construct representing leaders' personal resources that express self-efficacy, hope, optimism, and psychological resilience (Luthans & Youssef-Morgan, 2017). Desired work outcomes are brought about by a multi-dimensional structure that defines PsyCap with these four positive psychological sources (Q. Chen et al., 2017; Loghman et al., 2023). PsyCap is distinguished from other organizational capitals, such as social, human and economic, and addresses the question "who are you?"

Studies examining PsyCap have mostly focused on employees' PsyCap resource as a factor affecting work outcomes (Walumbwa et al., 2010), while PsyCap as a personal resource among leaders has remained largely uninvestigated (Q. Chen et al., 2019). The studies that were conducted among leaders' PsyCap have mainly focused on its influence on

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leaders' personal outputs, such as the ability to handle stress and crisis, solve problems creatively, learn new work tasks, technologies, and procedures, and generally perform better at work (Grözinger et al., 2022; Krauter, 2018). A high level of leader PsyCap is considered as a personal psychological property that enables leaders to foster positive work attitudes and behaviors (Pitichat et al., 2018). Research also shows a trickle-down relationship between leaders and their employees in which leaders with high PsyCap have a positive influence on their employees' PsyCap (Gojny-Zbierowska, 2024). Wang et al. (2021) argue that leaders with high PsyCap influence their employees' innovative behavior positively. That is because leaders with high PsyCap may empathically support their followers, give them a sense of confidence regarding their future development, and foster them with positive resources. However, studies that investigated the implications of leaders' PsyCap on employees have focused particularly on outcomes at the individual level such as employees' performance (Walumbwa et al., 2010; Wang et al., 2021), while ignoring outcomes at the team and the organizational levels. It should be noted, though, that outcomes at the organizational and team levels are better indicators of organizational functioning and effectiveness than individual sporadic outcomes (Eliyahu & Somech, 2022). Overall, the influence of leaders' PsyCap is still not fully understood. Research, furthermore, has not yet identified the team mechanisms that translate the resource of leaders' PsyCap into organizational outcomes.

Drawing from the Conservation of Resources Theory (COR; Hobfoll, 1989) and the crossover model (S. Chen et al., 2015; Westman, 2001), the current study is designed to investigate the potential role of leaders' psychological capital as a resource that may cross over to team-member exchange (TMX), and bring about organizational outcomes. We suggest a mediating model where the TMX of the Senior Management Team (SMT) serves as a team resource mediating the relationship between leaders' PsyCap and organizational outcomes (innovation, OCB, and job satisfaction; see Figure 1).

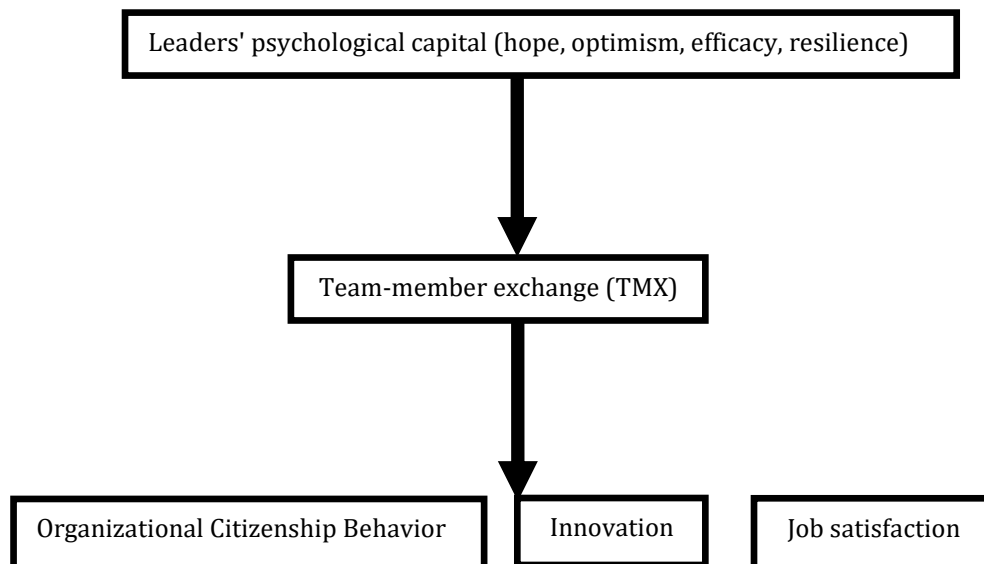


Figure 1. Research Model

The crossover model which developed from the COR theory has mainly focused on the dyadic relationships occurring when negative psychological states experienced by one person affect the negative experience of another person in the same workplace setting (Bolger et al., 1989; Li et al., 2016). Westman (2001) expanded the model by also referring to the transmitting of positive psychological resources among different levels in the organizational hierarchy – from the dyad, to the team, and to the organization. However, since studies have mainly examined evidence of crossover of strain (Westman et al., 2004) and distress (Li et al., 2016), evidence regarding the transmitting of positive resources among the multilevel in the organization (Bolger et al., 1989; Westman, 2001) remains meagre. Reflecting on the broadening definition of the crossover model, the current study suggests that the positive resources of leaders' PsyCap cross over to senior management teams and facilitate the development of the team resource of TMX, which in turn translates into organizational outcomes.

The current study makes several theoretical and practical contributions. From a theoretical perspective, far less attention has been paid before to the leaders' personal resources as a complementary perspective that may enhance our understanding of leaders' impact on organizational success. Additionally, our study may provide support for broadening the theoretical definition of the crossover model about the possibility of translating positive personal resources from leaders to different levels in the organizational hierarchy lines both directly and indirectly. The findings of the study, from a pragmatic viewpoint, bring to the fore a discussion about the importance of leaders' psychological capital as a state-like construct that can be developed through leader preparation and professional development programs.

Literature Review

Leaders' Psychological Capital

Psychological capital (PsyCap) is “a state-like positive core construct” (Avey et al., 2010, p. 434), which is distinguished from trait-like constructs such as big five personality traits, since it can be furthered and changed over time (Pitichat et al., 2018). PsyCap is a cognitive state that comprises beliefs, attributions, and expectations of the individual with respect to him/herself or others and a specific task or context (Avey et al., 2010). PsyCap has four dimensions (self-efficacy, optimism, hope, and resilience) characterized by:

- (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back, and even beyond (resilience) to attain success (Luthans et al., 2007, p. 3).

Each of the components of PsyCap has the potential to influence motivation and performance, though PsyCap should not be considered as a simple sum of its individual components. The four psychological resources composing PsyCap may best be understood as being part of a higher-order core confidence capacity, which has a greater and powerful impact on desired work outcomes compared to each of the four dimensions by itself (Luthans et al., 2006).

PsyCap has been widely investigated, though most of the research has focused on employees' PsyCap (e.g., Bogler & Somech, 2019; Ziya et al., 2015). Only in the recent decade have researchers begun to consider the influence of leaders' PsyCap both on themselves and on their employees' attitudes and behaviors in the dyadic relationships (Q. Chen et al., 2019; Wang et al., 2021). Researchers suggest that high levels of hope, optimism, self-efficacy, and resilience increase leaders' personal ability to handle stress and crises, solve problems unexpectedly, deal with indeterminate and unpredictable work situations, and learn new work tasks, technologies, and methods (Krauter, 2018). Leaders with high PsyCap generally perform better at work compared to leaders with low PsyCap (Q. Chen et al., 2019).

Whereas research on leaders' PsyCap has made progress in the last decade (Q. Chen et al., 2019; Pitichat et al., 2018), scholars have paid little attention to understanding whether the positive personal resource of leaders' PsyCap could cross over on vertical lines in the organization hierarchy and affect desired work outcomes (Luthans & Youssef-Morgan, 2017). Drawing from COR theory (Hobfoll et al., 2018) and the crossover model (S. Chen et al., 2015; Westman, 2001), the current study examined leaders' PsyCap as a positive personal resource that creates an environment resulting in desired outcomes at the team and the organizational levels (S. Chen et al., 2015). COR theory is “a motivational theory that outlines a key axis that determines people's behavior” (Hobfoll, 2012, p. 228). The central tenet of COR theory is that individuals obtain, maintain, and protect resources that are valuable to them (Hobfoll et al., 2018). Resources are defined as “those objects, personal characteristics, conditions, or energies that are valued by the individual, or that serve as a means for attainment of those objects, personal characteristics, conditions, or energies” (Hobfoll, 1989, p. 516). The crossover model, which evolved from COR theory principles, argues that psychological resources can be exchanged and transmitted between levels within the organization from leaders to employees both directly and indirectly (Bolger et al., 1989; Westman, 2001). The direct mechanisms used to explain the crossover process are empathy or emotional contagion (Li et al., 2016), and the indirect mechanisms are via social interaction process (Gutermann et al., 2017). Extant studies have mainly focused on the crossover of negative experience and states (e.g., Li et al., 2016). However, more recent studies explored the crossover of positive resources in the workplace setting. For example, a study by Butt et al. (2019) has shown that the crossover of positive resources within the dyadic relationships between leaders and their subordinates such as work passion may enrich their positive resource reservoir. Results from a study that was conducted in a large service organization identified leader-follower crossover effects, such that the leaders' work engagement was positively linked to their employees' engagement (Gutermann et al., 2017). Schmidt and Flatten (2022) conducted a study on the crossover of positive resources in an employment agency in Germany. The results show that psychological capital as a positive personal resource cross over from counselors to job seekers, which in turn lowers their stress. The studies mentioned have mainly focused on the transmitting of positive resources in the dyadic relations in work settings. However, research about translating positive psychological resources on the vertical lines in the organizational hierarchy from leaders' PsyCap to their teams' members and to organizational outcomes is still in its infancy (Q. Chen et al., 2017).

Relying on COR theory and crossover model principles, we argue that there is a process of transmitting positive resources from leaders' PsyCap to TMX at the team-level (Westman, 2001). Leaders with high PsyCap have the ability to create a supportive and trusting environment that provides SMTs with positive resources to fulfill their professional and social needs, thereby enhancing the high quality of TMX (K. Y. Kim et al., 2021).

The Crossover of Resources From Leaders' PsyCap to TMX

The current study examined the crossover of the positive resource, PsyCap, from the leader to the TMX of the senior management team. We argue that the frequent and close working routines between the leader and his or her SMT members provide fertile ground for the transferring of resources from the leader to the SMTs (Z. Chen, 2018; K. Y. Kim et al., 2021; Seers et al., 1995). SMTs are organized in interdisciplinary teams to which managerial duties are delegated

(Benoliel & Somech, 2016). Furthermore, these teams have the responsibility to shape organizations' policy and to achieve desired outcomes (Benoliel, 2021).

The notion of team-member exchange developed from the basic assumptions of the social exchange theory (Blau, 1964). TMX is defined as “the reciprocity between a member and his or her team with respect to the member’s contribution of ideas, feedback, and assistance to other members, and, in turn, the member’s receipt of information, help, and recognition from other team members” (Seers et al., 1995, p. 21). Seers et al. (1995) suggested exploring the quality of the relationship among the team members at the team level, where TMX reflects the overall quality, horizontal reciprocal relationship within the team.

Based on the COR theory principles, the crossover model suggests that resources can be exchanged between levels within the organization (Bolger et al., 1989; Westman et al., 2013). The model focuses on the interpersonal process happening when job stress or psychological strain experienced by one individual affects the strain level of another individual in the same social environment. To our knowledge, studies of crossover have focused mainly on the effects of leaders' diminished psychological resources on their employees (Byrne et al., 2014). For example, research results drawn from 86 business teams and their leaders indicate that leaders' psychological distress positively impacts their subordinates' psychological distress (Li et al., 2016). Westman (2001) expanded the model by referring to positive resource crossover, adopting a multi-level approach where resources are transferred at the level of the dyad, the team, and the organization. Accordingly, researchers recommend focusing on leaders' positive personal resources since they have the ability to create the appropriate conditions that generate, maintain and foster their employees' positive and important resources for achieving desired organization outcomes (Gutermann et al., 2017; Xu et al., 2017).

Reflecting on the broadening definition of the crossover model, the main argument of the current study is that there is a positive link between the personal resource of leaders' PsyCap and the quality of exchange relationships among SMT members. Three sources may provide theoretical support for this claim. First, leaders with high PsyCap provide a supportive work environment built on trust, team identification and engagement (Q. Chen et al., 2017; Xu et al., 2017). In this supportive work environment, teams may create a sense of responsibility to provide support and collective assistance to other members, which indirectly facilitates the development of high-quality TMX (Z. Chen, 2018). Second, leaders with high PsyCap also serve as role models (Walumbwa et al., 2010). They are motivated by new challenges in their work to succeed in solving problems, hence providing the team with high standards and expectations that are intertwined with a supportive work environment that fosters high quality of team exchanges to achieve the desired work outcomes (Fay & Frese, 2001; Hakanen et al., 2008). Third, leaders with high resources of hope, efficacy, resilience and optimism have been found to preserve high quality of exchange relationship with their team members (Story et al., 2013). They build open and honest interactions, and they are more likely to have increased self-efficacy, confidence, and trust in their team members to accomplish their job responsibilities (Q. Chen et al., 2017; Story et al., 2013). These positive behavioral norms and cognitive skills, which are integral resources of high leader's PsyCap, can be transferred to their management team members through social learning processes and emotional contagion (Story et al., 2013; Walumbwa et al., 2010), resulting in high quality TMX. Hence, we hypothesize that:

Hypothesis 1: There will be a positive relationship between leader's PsyCap and TMX.

The Relationship Between TMX and Organizational Outcomes

In the current study, organizational outcomes refer to two groups of outcomes: behavioral (innovation and organizational citizenship behavior) and attitudinal (job satisfaction) outcomes. The former might be a crucial criterion for evaluating work functioning from the organization's viewpoint but does not take into account the well-being of the employees. To overcome this potential trade-off, we chose an integrative approach that examines attainment of organization's objectives, on the one hand, while emphasizing the importance of employee's job satisfaction, on the other hand (Bolino & Turnley, 2005). In the following, we will refer to each group of work outcomes in relation to TMX among senior management teams. It is important to mention that most of the research that explored the outcomes of TMX was at the individual level (Banks et al., 2014). Seers et al. (1995) argue that the promotion of TMX to the team level can indicate the quality of working relationship within the team that may have significant influence on work outcomes. The research regarding TMX has mainly focused on the individual level, while little is known about the impact of TMX as a team phenomenon on organizational outcomes (Tan et al., 2022). We argue that the high quality of TMX among senior management team members enhances desired team and organizational outcomes. In the following section, we refer to each component of outcomes in relation to SMT exchange relationships.

Innovation. Team innovation is defined as “the intentional introduction and application within a role, (work) group or organization of ideas, processes, products or procedures which are new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society” (West & Farr, 1990, p. 9). Innovation is comprised of two consecutive stages: generating original ideas (the creativity stage) and converting them into new and beneficial outcomes (the implementation stage) (West, 2002). Researchers have reasoned that developing and maintaining organizational innovative behavior has become a vital outcome for organizations to experience in the competitive and uncertain work environment (T. Kim & Lee, 2013). In the current study we suggest that high quality TMX

relationships constitute fertile ground for developing organizational innovation because TMX provides an important resource for team members such as mutual trust, respect, sharing knowledge, and cooperation (Seers, 1989). The TMX resource enables team members to seek inspiration and feedback for realizing new work ideas (Liao et al., 2010; Liden et al., 2000). Tang et al. (2024) argue that TMX manifests mutual communication and synergy among team members which helps the team overcome obstacles, achieve a deeper understanding of each other's ideas, and, consequently, encourages the achievement of team innovation. Previous research has highlighted the impact of high quality TMX on innovation at the individual level (Ghosh et al., 2019). However, we suppose that the reciprocity between teammates who maintain high quality TMX relationships may provide a supportive environment for the implementation of innovative work ideas and behaviors at the team level. Hence, we hypothesized the following:

Hypothesis 2: TMX will be positively related to team innovation.

OCB: OCB at the organizational level is defined as the “extra efforts performed by the whole team, that are above and beyond what is required, and contribute to the effective functioning of the organization” (Lau & Lam, 2008, p. 142). We suggest that the team resource of high quality TMX will positively affect OCB at the organizational level. Senior management team members who develop a sense of trust, obligation, and mastery or a ‘can do’ perception may encourage their employees to give the extra efforts toward finding solutions and pursue professional development activities that will promote OCB (Tschannen-Moran, 2009). Using the crossover model as a theoretical framework (Westman, 2001), we expected the frequent interactions between SMT members and other employees to provide a fertile ground for transmitting positive resources from the team level (TMX) to the organizational level (OCB). The high levels of trust, support, obligation, and the willingness to make extra efforts for achieving organizational goals are inherent to high quality TMX (Farmer et al., 2015), and may lead to OCBs. The research demonstrates that voluntary behaviors exemplified by OCBs are influenced to a great extent by employees' perceptions of support from the team-member social exchange (Cole et al., 2002; Dasgupta, 2020). Research conducted among companies from a range of industries indicated that TMX was linked to supervisor ratings of organizational OCB (Love & Forret, 2008). Hence, we hypothesized the following:

Hypothesis 3: TMX will be positively related to OCB.

Job satisfaction: Job satisfaction is defined as positive perceptions and beliefs concerning several facets of the job or the profession (Organ, 1990). Job satisfaction as an organizational outcome was chosen based on the assumption that it best characterizes employees' attitudes of well-being toward their work (Spreitzer et al., 1997). Job satisfaction as an organizational property enables scholars to identify factors in the work environment that encourage or discourage the shared experience of job satisfaction (Ehrhart et al., 2013). In the current study, we suggest that employees' job satisfaction is a product of high quality horizontal exchange relationships among SMT members. Similar to the pattern of crossover of resources between TMX among SMT members and OCB, there is a process of transmitting positive resources from TMX to employees' job satisfaction at the organizational level (Westman, 2001). SMTs with high quality TMX have the ability to create the appropriate conditions that instill their employees with positive and important resources to fulfill their professional and social needs, thereby enhancing organizational job satisfaction (S. Chen et al., 2015; Tschannen-Moran, 2009). Hence, we hypothesized the following:

Hypothesis 4: TMX will be positively related to employees' job satisfaction.

Relationship Between Leaders' PsyCap, TMX and Organizational Outcomes

The current study suggests that TMX plays a mediating role between personal resource, leaders' PsyCap, and organizational outcomes. Leaders with high PsyCap translate their positivity to organizational outcomes indirectly via team resource, namely TMX. When the positive personal resource of leaders' PsyCap is transmitted and available to SMT members, this will result in SMTs' opportunity to develop their own resource of TMX toward achieving the organizational goals (Banks et al., 2014; Benoliel, 2017; Westman, 2001). Leaders' PsyCap has been found to be positively related to organizational outcomes such as performance and innovation (Waters et al., 2020). Researchers argue that the positive influence of leaders' PsyCap on work outcomes occurs through team mechanisms (Q. Chen et al., 2017; Walumbwa et al., 2010). We offer SMT members exchange relationships (Seers et al., 1995) as a mediating team resource between leaders' PsyCap and organizational outcomes. Senior management team members, who work in close and frequent association with their leader, are more apt to exchange resources, information, reciprocity of trust and obligation that construct high quality TMX. In addition to the process of exchanging and transmitting positive resources from the leaders' PsyCap to SMT exchange relationships, there is a process linking TMX with organizational outcomes. SMT high quality TMX has the ability to create the appropriate conditions that instill their employees with important resources for achieving organizational outcomes (Banks et al., 2014; Seers et al., 1995). Therefore, we propose that TMX will mediate the link between leaders' PsyCap and organizational outcomes. Hence, we hypothesized:

Hypothesis 5: TMX will mediate the relationship between leaders' PsyCap and organizational outcomes.

Methodology

Sample and Data Collection

Data were collected from a total of 86 elementary and junior high schools. To avoid problems associated with single-source bias (Podsakoff & Organ, 1986), we collected the data from three sources: the school leader, SMTs, and teachers who are not members of the SMT. The SMT is a work group consisting of senior personnel at the school, such as deputy principals, grade-level and disciplinary coordinators, and the principal who usually serves as the team leader of the school. SMTs interact interdependently to shape their schools' objectives and policies as well as being responsible for planning and monitoring the work of other school staff (Benoliel & Somech, 2016; Goldring et al., 2008; Koh et al., 2011). As an inclusion condition, SMTs needed to consist of 60% or more of the management team members (excluding the principal; Waters et al., 2020). Teachers needed to consist of 10% or more of the teaching staff who are not members of the SMT. School leaders filled out the PsyCap questionnaire, schoolteachers' OCB and school innovation; SMT members completed the scale of team TMX; and teachers filled out a questionnaire on job satisfaction. All participants completed a demographic questionnaire. Overall, 1,126 school members were included in the sample: 86 principals, 357 SMT members, and 683 school teachers. Principals were from 66 from elementary schools and 20 from junior high schools; 40.2% were women. Their average age was 52 years old ($SD=7.32$), and their average years of experience as principals was 10 years ($SD=6.99$). Of the SMT members, 77% of the participants were women; their average age was 43 years ($SD=7.31$), and their average years of experience was 18 years ($SD=7.84$). SMT size ranged from three to ten ($M=5.48$; $SD=1.56$). Of the teachers who participated in the study, 83.2% were women. Their average age was 41 years ($SD=8.24$), and their average years of experience was 16 years ($SD=8.81$).

Following the approval by the Institutional Review Board (IRB) to conduct the research, school leaders were contacted to obtain their consent to carry out the research in their schools. Anonymity and confidentiality were assured to encourage the SMT members and teachers' cooperation in filling out the questionnaires.

Measures

Leaders' PsyCap was measured by a 12-item scale adapted from the PsyCap questionnaire (PCQ-24) developed by Luthans et al. (2007). The scale includes items that measure the four dimensions of PsyCap: self-efficacy ($\alpha = .59$), (e.g., "I feel confident seeking feedback to improve as a principal"), hope ($\alpha = .71$), (e.g., "I can think of many ways to reach my current leadership developmental goals"), resilience ($\alpha = .54$), (e.g., "I usually take stressful principal development activities in stride"), and optimism ($\alpha = .57$), (e.g., "when facing difficulties in my development as a principal, I usually expect the best"). Rating leaders' PsyCap was assessed by the leader on a Likert-type scale ranging from strongly disagree (1) to strongly agree (6). ($\alpha = .78$).

OCB was measured using Vigoda-Gadot et al.'s (2007) scale which was developed to evaluate group-level OCB. The scale has 18 items that measure two facets: OCBI, namely, OCB directed at and contributing to an individual at school (9 items: e.g. "The teachers in our school help others who have been absent"); and OCBO, namely, OCB directed at the school as a whole (9 items: e.g. "The teachers here make innovative suggestions to improve school life"). Rating OCB was assessed by the principal on a 5-point Likert-type scale from never (1) to always (5). The OCB score was calculated as the mean of the 18 items. ($\alpha = .88$).

Innovation was measured on a 4-item scale adapted from West and Wallace (1991). The scale requested principals to rate the degree to which SMT members in their school had initiated changes in each of four job areas: work objectives, working methods, teaching methods, and development of skills (e.g., "SMT members initiated new teaching methods"). Rating innovation was assessed by the principal on a Likert-type scale from never (1) to always (6). ($\alpha = .89$).

Team-member exchange (TMX). Team members rated the strength of team-member exchange with their team using the 10-item scale developed by Seers (1989) (e.g., "other members of my team are willing to help finish work that was assigned to me"). Responses were measured on a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). ($\alpha = .89$).

Job satisfaction was measured using Bahl and Ansari's (1996) scale. Respondents were asked to evaluate how satisfied they are with each of the seven items representing intrinsic and extrinsic job satisfaction (e.g., "I feel a worthwhile accomplishment when doing my job"). The teachers rated job satisfaction on a 5-point Likert-type scale from very little satisfied (1) to very satisfied (5). The score was calculated as the mean of the eight items and was aggregated to the team level. ($\alpha = .88$).

Data Analysis

The unit of analysis in the current study was the team and the organizational level. The OCB and innovation variables were initially measured at the team and the organizational levels, completed by the school leader. TMX was evaluated by SMT members, while job satisfaction was measured by surveying teachers. To justify aggregation of TMX and teachers' job satisfaction to the organizational level, two measures were examined: r_{wg} (within-team agreement) and ICC (intra-

class correlation). A value of 0.70 or above is suggested as a 'good' amount of within-group interrater agreement (r_{wg} ; James et al., 1993). The average r_{wg} score for TMX scale was 0.98, and for job satisfaction 0.95 in our study. These findings showed that the r_{wg} indexes of the variables were all greater than 0.7, indicating a 'good' value of within-group interrater agreement (James et al., 1993). ICC(1) reflects the extent of within versus between team variability, and ICC(2) estimates the reliability of the team means (Bliese, 2000). As shown by Bliese (2000), ICC(1) generally ranges from 0 to 0.50 with a median of 0.12. In our study, ICC(1) value for TMX was 0.13, and for job satisfaction 0.01. Regarding the cutting point for ICC(2), there is no common agreement (LeBreton & Senter, 2008). Koo and Li (2016) suggested that ICC(2) values around 0.50 are desirable to justify aggregation. In the current study, ICC(2) value of TMX was 0.47, and for job satisfaction 0.40. Hence, we concluded that aggregation was justified for SMT members' responses of TMX variable and for teachers' job satisfaction.

Results

Table 1 shows the means, standard deviations, and intercorrelation matrix of the study variables at the school level.

Table 1. Means, Standard Deviations, and Correlation Matrix of Study Variables

Scale	Mean	SD	2	3	4	5
1. Leaders' psychological capital	5.40	.41	.66**	.62**	.28**	.23*
2. Organizational citizenship behavior	3.99	.49		.52**	.38**	.28**
3. Innovation	4.82	.75			.16	.12
4. Job satisfaction	4.21	.61				.47**
5. TMX	4.32	.61				

N=86, * $p < .05$, ** $p < .01$

To test the models for predicting organizational outcomes, a complete mediation can be demonstrated by showing the following (Baron & Kenny, 1986). First, the antecedent is related to the mediator. Support for this argument is provided by examining the relationship between leaders' PsyCap and TMX. Second, the TMX mediator is related to the organizational outcomes. Third, the relation between the antecedent and the consequence is eliminated when the mediator is controlled (Baron & Kenny, 1986). To confirm this condition, we conducted a hierarchical regression analysis for predicting organizational outcomes. Three mediating models were tested. The first examined the mediating role of TMX between leaders' PsyCap and organizational OCB. The second examined the mediating role of TMX between leaders' PsyCap and team innovation. The third model tested the mediating role of TMX between leaders' PsyCap and job satisfaction.

First, we hypothesized that there will be a positive relationship between leaders' PsyCap and TMX. The results indicated a positive and significant relationship between leaders' PsyCap and TMX ($B=0.22$, $p < 0.05$), supporting the first hypothesis. Second, we hypothesized that there will be a positive relationship between TMX and innovation. TMX was not significantly related to innovation ($B=0.23$, $p > 0.05$). Therefore, the second hypothesis was not supported. Third, we hypothesized that there will be a positive relationship between TMX and OCB. TMX was significantly and positively associated with OCB ($B=0.35$, $p < 0.05$), thus supporting the third hypothesis. Fourth, we hypothesized that there will be a positive relationship between TMX and job satisfaction. Results indicated that TMX was significantly and positively associated with job satisfaction ($B=0.33$, $p < 0.0001$), in support of the fourth hypothesis. We also found a positive relationship between leaders' PsyCap and organizational outcomes, as exemplified by innovation, OCB, and job satisfaction. A positive and significant relationship was indicated between leaders' PsyCap and innovation ($B=1.15$, $p < 0.0001$), OCB ($B=0.78$, $p < 0.05$), and job satisfaction ($B=0.19$, $p < 0.01$).

Fifth, we hypothesized that TMX will mediate the relationship between leaders' PsyCap and organizational outcomes as exemplified by innovation, OCB, and job satisfaction. We found that the direct effect of leaders' PsyCap on OCB was partially mediated by TMX ($B=0.74$, $CI=0.55$ to 0.94 , $p < 0.0001$). Mediation analysis revealed that 4.9% of the total effect was mediated by TMX ($p < .05$) (see Figure 2). Regarding the dependent variable of job satisfaction, we found that the direct effect of leaders' PsyCap on job satisfaction was partially mediated by TMX ($B = 0.12$, $CI=0.01$ to 0.25 , $p < 0.05$). Mediation analysis revealed that 34.4% of the total effect was mediated by TMX. This mediation effect was significant ($p < .05$) (see Figure 3). However, TMX did not mediate the association between leaders' PsyCap and innovation ($p > .05$).

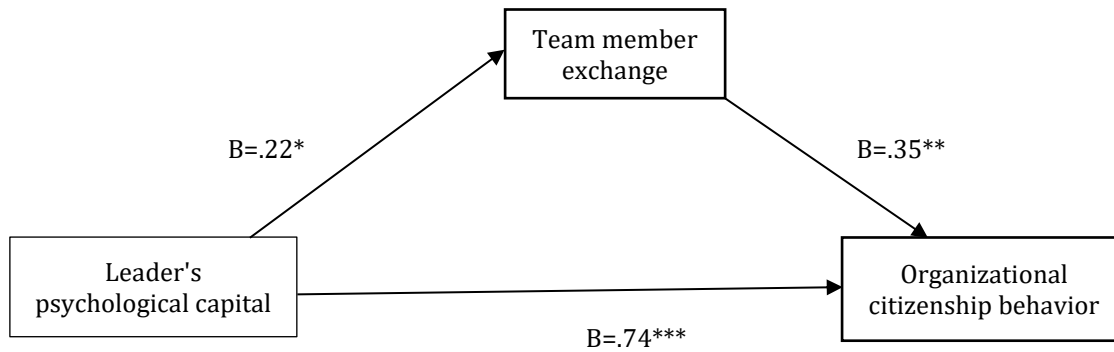


Figure 2. Team-Member Exchange as a Mediator Between Leader's Psychological Capital and Organizational Citizenship Behavior: A Hierarchical Regression Analysis (* $p < .05$, ** $p < .01$, *** $p < .001$)

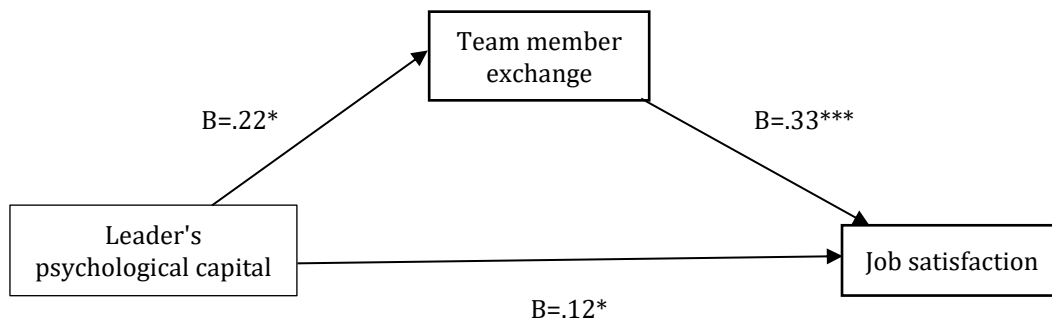


Figure 3. Team-Member Exchange as a Mediator Between Leader's Psychological Capital and Job Satisfaction: A Hierarchical Regression Analysis (* $p < .05$, ** $p < .01$, *** $p < .001$)

Discussion

Nowadays, leaders face growing work-related pressures and challenges (Feng, 2016; Ganon-Shilon & Schechter, 2019) due to the increasing volatility, uncertainty, complexity and ambiguity of the environment in which they operate (Lawrence, 2013). To better understand and to promote organizational functioning and effectiveness, these challenging circumstances may require shifting the focus from the common approach of leadership styles and behaviors to a new perspective of human resources, exemplified by leaders' psychological capital. PsyCap has been a subject of considerable interest within the theory and research of the POB field (Bogler & Somech, 2019; Loghman et al., 2023). While studies have shown positive links between employees' PsyCap and desired work outcomes (Grözinger et al., 2022; Ho & Chan, 2022), leaders' PsyCap and organizational outcomes and about the mechanism through which leaders' PsyCap relates to organizational outcomes have been insufficiently explored (Berkovich & Bogler, 2021; Q. Chen et al., 2017; Waters et al., 2020). In the present study, we aimed to examine the relationship between leaders' PsyCap and organizational outcomes (innovation, OCB, and job satisfaction) via the mechanism of TMX. The results reveal a positive relationship between leaders' PsyCap and TMX among senior management team members. Additionally, we found that TMX mediated the relationship between leaders' PsyCap and organizational outcomes (OCB and job satisfaction). These findings highlight the importance of transmitting leader's PsyCap as a positive resource to his or her teams' TMX resulting in desired organizational outcomes.

The present research contributes to management literature in several ways. The first contribution is that it sets the spotlight on the crossover of leaders' personal resource, such as PsyCap, to organizational outcomes. Previous studies have mainly focused on investigating leadership styles and behaviors, such as transformational and participative leadership for developing organizational outcomes (Berkovich & Bogler, 2021; Loghman et al., 2023; Somech, 2010). Hence, exploring the role of leaders' PsyCap as a personal resource contributes to understanding the complementary perspective of leaders' impact on organizational outcomes. Furthermore, the study results show the significance of the process of transmitting positive resources in the organizational hierarchy, directly and indirectly, for achieving organizational success. The crossover model which evolved from the COR theory has mainly focused on the interpersonal processes occurring when job stress or psychological strain experienced by one person affects the level of strain of another person in the same organization (Bolger et al., 1989; Byrne et al., 2014). Westman (2001) proposed to extend the model by referring to a positive crossover of psychological resources, adopting a multi-level approach where resources are transferred at the level of the dyad, the team, and the organization. However, studies have mainly provided evidence of crossover of negative states (Westman et al., 2004), while less is known regarding the transmitting of positive resources among levels in the organizational hierarchy (Westman, 2001). Therefore, our findings extend the research on positive crossover within organizations beyond dyadic interaction. The findings show that leaders' personal resources of PsyCap

may be transmitted in the organizational hierarchy from the dyadic level to the team-level affecting high quality TMX, and to the organizational-level, affecting team and organizational outcomes.

The second contribution of our study is in identifying TMX resource among members of the senior management team as a mechanism that may encourage organizational outcomes. Previous studies regarding the implications of leaders' PsyCap on work outcomes have been found to be positively related to organizational outcomes such as performance and innovation (Waters et al., 2020). Researchers argue that the positive influence of leaders' PsyCap on work outcomes occurs through teams' mechanisms (Q. Chen et al., 2017; Walumbwa et al., 2010). The current study results highlight the impact of TMX as a team phenomenon on organizational outcomes. The finding regarding the mediating role of TMX between leaders' PsyCap and the desired outcomes of OCB and employees' job satisfaction may imply that the personal resource of leaders' psychological capital contributes to organizational outcomes not only directly by exhibiting desired outcomes of OCB and job satisfaction, but also indirectly, through TMX – the leader's impact on his or her SMT relationship exchange. The frequent and close working routines of the leader and SMT members provide a fertile ground for the transferring of resources from the leader (PsyCap) to TMX (Z. Chen, 2018; K. Y. Kim et al., 2021; Seers et al., 1995). Furthermore, researchers argue that leaders, as credible role models, may influence their teams through social learning processes and emotional contagion (Walumbwa et al., 2010; Waters et al., 2020). SMT members tend to mimic the behaviors and the mood of their leader, which then leads them to develop their own team resources (Sy et al., 2005), resulting in organizational outcomes. In this regard, it is important to mention that we did not find statistically significant mediation of TMX between leaders' PsyCap and innovation. The lack of a relationship between TMX and team innovation may be due to the possibility that high quality TMX creates homogeneity among members and therefore may lead to group-think (Janis, 1972) that limits innovation. Previous research has revealed other mechanisms that may mediate the association between leaders and team innovation, such as leader external boundary behaviors (Benoliel, 2021). Further studies may be required to examine other mediation mechanisms that connect between leaders' PsyCap and organizational innovation.

The third contribution of the study lies in the indication of a positive relationship between leaders' PsyCap and organizational outcomes. Specifically, the results showed that a leader's high level of PsyCap may increase desired work outcomes, as exemplified in organizational OCB, employees' job satisfaction, and team innovation. Previous research has shown that leaders' PsyCap leads to increased employees' motivation and confidence to put extra effort into successfully accomplishing goals and tasks and be more active in exploring solutions to bounce back from obstacles, thus contributing to desired employees' outcomes, mainly at the individual level, and somewhat on the team level (Avey et al., 2011; Q. Chen et al., 2019). Our study findings extend the implications of leaders' PsyCap on outcomes from the individual level to outcomes at the organizational level. Thus, the current research demonstrates the influence of leaders' PsyCap on organizational outcomes, taking into account the attainment of behavioral outcomes of OCB and innovation, on the one hand, while emphasizing the importance of employees' attitudes regarding job satisfaction, on the other hand.

Conclusion

The purpose of the current study was to investigate the potential role of human resources, exemplified by leaders' PsyCap as a resource that may cross over to TMX, and bring about desired organizational outcomes (innovation, OCB, and job satisfaction). The findings indicated a positive relationship between leaders' PsyCap and TMX. In addition, we found a significant relationship between TMX and the three measures of organizational outcomes. Furthermore, TMX partially mediated the relationship between leaders' PsyCap and the desired outcomes, excepting innovation. Accordingly, our findings provide support for the importance of the leaders' personal resource of PsyCap as a complementary perspective that may enhance our understanding of leadership's impact on organizational success. Furthermore, the study results highlight the translating of personal resource from leaders' PsyCap to SMTs' positive resource of TMX, which results in promoting organizational outcomes.

Recommendations

From a practical perspective, the findings of the study bring to the forefront a discussion about the importance of psychological capital as a state-like construct that can be developed through leader preparation and professional development programs (Luthans et al., 2007). Furthermore, the study findings reinforce the impact of senior management teams' resource of TMX on achieving organizational outcomes. Therefore, leaders carry the responsibility to cultivate a high quality of team-member exchange relationships among senior management teams through team training and guidance.

Limitations

The present study has several limitations requiring further attention in future research. First, the research sample was based on school leaders, SMT members and teachers. To be able to generalize the current findings, we recommend testing the study model in other settings such as business and health care organizations. Second, the current study focused on a single mechanism, TMX, mediating leaders' PsyCap – organizational outcomes relationships. To better understand how leaders' PsyCap may influence desired work outcomes, future studies should identify additional mediators, such as organizational commitment, which is considered related to various team outcomes (Bogler & Berkovich, 2022). Third, the construct of TMX as a team phenomenon is considered as a positive construct (Seers et al., 1995), and our findings

regarding the mediation role of TMX between leaders' PsyCap and OCB and job satisfaction support this notion. However, we found a lack of relationship between TMX and team innovation. Therefore, it is possible to assume that there may be additional mechanisms that can explain the study outcomes, specifically regarding team innovation, such as leaders' behaviors (Benoliel & Somech, 2016) and leadership style (Purwanto et al., 2021). Fourth, although scholars indicated alternative explanations or factors not examined that may explain the study outcomes, such as leadership style (Purwanto et al., 2021) or the Big Five personality traits (Therasa & Vijayabanu, 2015), it is important to note that those studies have mainly focused on models at the individual-level. The current study examined outcomes at the team and the organizational levels. Hence, those explanations are less suitable for our model. Finally, we recommend extending the current research model to include contextual variables as well, such as demographic similarities (Bakar & McCann, 2014; Tsui & O'Reilly, 1989), and leader-member exchanges (LMX: Bois & Howell, 2006; Graen & Uhl-Bien, 1995). This line of research may encourage a multi-level perspective for examining the crossover model of transferring positive resources from leaders' PsyCap to different levels in the organizational hierarchy.

Ethics Statements

The study involving human participants was reviewed and approved by the Ethics Committee of Haifa University, Israel.

Declaration of Conflicting Interest

The authors declare that there is no conflict of interest.

Authorship contribution statement

Birani-Nasraldin: Conceptualization, design, data acquisition, data analysis and interpretation, drafting manuscript, writing. Somech: Conceptualization, design, data analysis and interpretation, supervision, critical manuscript editing and revision, final approval. Bogler: Conceptualization, design, data analysis and interpretation, supervision, critical manuscript editing and revision, final approval.

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