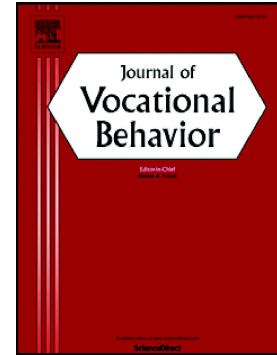


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Serving followers and family? A trickle-down model of how servant leadership
shapes employee work performance

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Serving followers and family?**A trickle-down model of how servant leadership shapes employee work
performance****Abstract**

Previous studies have identified servant leadership as an important driver of organizational effectiveness. However, so far little research attention has been given to whether servant leadership displayed by leaders across an organization's hierarchy can increase the effectiveness of its members. In this study, we integrate prosociality models with role motivation theory to examine how manager servant leadership trickles down to affect employee work performance as well as the role of supervisor family motivation in influencing the trickle-down process. Using a matched sample of employees and their supervisors from three companies in the Dominican Republic, multilevel structural equation modeling results show that manager servant leadership trickles down to inspire supervisor servant leadership, which in turn increases employee prosocial motivation and subsequent work performance. Furthermore, supervisor family motivation buffers the trickle-down mechanism in that the effect on employee work performance is weaker for supervisors with high levels of family motivation. Our research breaks new ground by shedding light on how and when servant leadership trickles down to shape employee work performance.

Keywords: Servant leadership, family motivation, prosocial motivation, work performance, trickle-down model

Introduction

Empirical research exploring the effects of servant leadership in organizations stretches back for 20 years (Laub, 1999). By and large, researchers found that displaying servant leadership increases organizational effectiveness in a number of ways (e.g., by facilitating work performance, fostering creativity, and encouraging organizational citizenship behaviors of employees; Liden, Wayne, Liao, & Meuser, 2014; Walumbwa, Hartnell, & Oke, 2010; Yoshida, Sendjaya, Hirst, & Cooper, 2014; see Eva, Robin, Sendjaya, van Dierendonck, & Liden, 2019 for a systematic review). Nevertheless, despite considerable research, questions remain with regards to *how* and *when* the display of servant leadership makes positive contributions in organizations and promotes the effectiveness of its members. Specifically, when examining the effects of servant leadership on employee work performance, prior research has primarily focused on the role of the immediate supervisor (e.g., Chiniara & Bentein, 2015, 2018; Hu & Liden, 2011), neglecting the potential influence of higher-level managerial leadership. As managers are said to “set the tone at the top” (Barney, 2005; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009), they could plausibly either directly influence employee behavior, or indirectly, through their influence on mid-level supervisors. Our first aim is therefore to examine how manager servant leadership shapes the work performance of employees. To this end, we integrate supervisor servant leadership and employee prosocial motivation as mechanisms to explore how manager servant leadership affects employee work performance. By doing so, we demonstrate a top-down trickle-down process of servant leadership

influence across hierarchical organizational levels (i.e., differentiating between manager, supervisor, and employee levels).

Our second aim is to examine when a servant leadership trickle-down effect shapes employee work performance. We introduce the moderating role of supervisor family motivation as a boundary condition that should influence the effect of supervisor servant leadership on employee prosocial motivation and subsequent work performance. A focus on family motivation is important because previous research established a distinction between work (e.g., being motivated to help co-workers; Lin, Ilies, Pluut, & Pan, 2017) and non-work prosociality (e.g., displaying helping behaviors outside work; van Dyne, Vandewalle, Kostova, & Latham, 2000), with the family domain being one of the most important aspects of people's lives outside of work (e.g., Greenhaus & Powell, 2006). In the context of servant leadership, however, the distinction between the work and family domain is less clear-cut as servant leaders ought to not only serve at work but indeed in all domains of their life (Greenleaf, 1977; van Dierendonck, 2011). Drawing on research on the negative effects of prosociality at work (e.g., citizenship fatigue and work-family conflict; Bolino, Harvey, & Lepine, 2015; Bolino & Turnley, 2005; Halbesleben, Harvey, & Bolino, 2009), we propose that supervisors' family motivation (i.e., a desire to expend effort at work to benefit one's family; Menges, Tussing, Wihler, & Grant, 2017) might be a "double-edged sword": On the one hand, family motivation has been shown to energize individuals to work harder (Menges et al., 2017). Supervisors, who work with the desire to benefit their own family, are likely to experience the benefits and hardships of caring for others. Thus, they may be better equipped to serve those who they work with (e.g., Las Heras, De Jong, Van Der Heijden, & Rofcanin, 2017). On the other hand, since a core characteristic of servant leadership is to go beyond one's

self interest to serve employees (e.g., van Dierendonck, 2011), such a leadership style might conflict with a supervisor's family needs or interests. Thus, at the present moment it is not evident whether the effects of servant leadership and family motivation, when combined, positively reinforce each other, or alternatively, cancel each other out.

Our study makes two primary contributions. First, we delineate the role of supervisor servant leadership and employee prosocial motivation as linchpins between manager servant leadership and employee work performance. In integrating different hierarchical levels, we contribute to recent debates on whether servant leadership displayed by managers or supervisors has the most crucial influence on facilitating employee work performance (e.g., Peterson et al., 2012 for the impact of higher-level managers; Chiniara & Bentein, 2015, 2018; Hu & Liden, 2011 for the impact of mid-level supervisors). Moreover, we not only test whether dyadic servant leader influence trickles down but also offer a more nuanced picture of how the trickle-down process unfolds across hierarchical organizational levels – by means of role modeling (i.e., the manager to supervisor link), as well as motivational processes (i.e., the supervisor to employee link).

Second, we contribute to the growing literature on the effects of leaders' prosocial motives on employees (e.g., Frazier & Tupper, 2018; Shao, Cardona, Ng, & Trau, 2017) by introducing a leader's family motivation as a relevant contingency factor for when servant leadership trickles down in organizations. By examining two constructs that have been lauded for their positive work-related consequences (Liden, Wayne, et al., 2014; Menges et al., 2017), we scrutinize the joint effects of supervisors' willingness to serve their employees as well as their family. In so doing, we aim to explore the *not-so-bright* side of family motivation in line with recent

debates (Bergeron, 2007; Bolino & Grant, 2016) as well as empirical research (Lin et al., 2017; Rofcanin, de Jong, Las Heras, & Kim, 2018) on how a ‘concern for others’ may come at a cost.

Conceptualizing servant leadership as a form of prosocial leader behavior

Servant leadership, as conceptualized by Liden and colleagues (2014), consists of the following seven dimensions: Emotional healing (i.e., being sensitive to the personal setbacks of followers), creating value for the community (i.e., encouraging followers to volunteer and help their local communities), conceptual skills (e.g., problem-solving abilities to be able to help followers), empowering subordinates, helping subordinates grow and succeed, putting subordinates first, and behaving ethically. The definitional core that relates to most dimension of servant leadership can be described as going beyond one’s own self-interest to support and develop followers (Greenleaf, 1977; van Dierendonck, 2011). This may be why, according to several scholars (e.g., Bolino & Grant, 2016; Liden, Panaccio, et al., 2014), servant leadership reflects typical prosocial leader behavior. Specifically, according to Bolino and Grant’s (2016) key dimensions of what constitutes prosocial behavior (i.e., genesis, target, goal, and resource), servant leadership can be classified as a proactive prosocial leader behavior (i.e., servant leaders proactively seek out opportunities to support followers; van Dierendonck & Nuijten, 2011), predominantly targeted at individuals (i.e., as part of dyadic leader-follower relationships; Greenleaf, 1977; van Dierendonck, 2011), pursuing affiliative goals (e.g., supporting and developing followers; Liden, Panaccio, et al., 2014) and requiring personal and informational resources (i.e., an investment of time, effort, and skills to serve followers; van Dierendonck, 2011).

A trickle-down model of servant leadership and employee work performance

The premise of trickle-down models is that the perceptions, attitudes, or behavior of one individual in an organization (usually a leader) affects the perceptions, attitudes, or behavior of other individuals (usually followers; Wo, Ambrose, & Schminke, 2015). A recent integrative review distinguishes between homeomorphic (in which the construct remains the same throughout the trickle-down process) and heteromorphic (in which the construct varies) trickle-down effects (Wo, Schminke, & Ambrose, in press). For example, Wo and colleagues (2015) explored a homeomorphic trickle-down effect in their examination of how interactional justice perceptions trickle down from managers to supervisors and from supervisors to employees. Mayer et al.'s (2009) study, in turn, is an example of the more commonly examined heteromorphic trickle-down effect, focusing on how ethical leadership trickles down supervisors and subsequently affects employee work outcomes such as deviance behaviors.

In the context of the present study, the notion that servant leaders turn followers into servants themselves can be considered one of the most important consequences of servant leadership (Greenleaf, 1977; van Dierendonck, 2011), implying a trickle-down mechanism at the heart of the servant leadership literature. Furthermore, models on prosociality at work (Bolino & Grant, 2016; Grant, 2007) suggest that the display of servant leadership might play a key role in the development of prosocial motives and behaviors of followers. Following from these theoretical accounts concerning servant leadership, we delineate how a heteromorphic trickle-down mechanism initiated by managerial servant leadership could affect both supervisors and employees across hierarchical organizational levels (i.e., higher level managers, mid-level supervisors, and lower-level employees).

For mid-level supervisors, we argue that role modeling higher-level managers makes them more likely to adopt servant leadership with regards to their own lower-level employees (Bolino & Grant, 2016; Brief & Motowidlo, 1986). In a leadership context, role modeling involves followers idealizing the leader as symbol for what kinds of traits, values, beliefs, or behaviors are good and legitimate to display in a given organization (Gibson, 2004; Mayer et al., 2009). Leaders provide an ideal or point of reference for followers to emulate and learn from (Gibson, 2004; Wood & Bandura, 1989). Role modeling may be particularly relevant in the case of servant leadership as a leadership style that emphasizes the selfless notion of putting followers first as well as empowering them to succeed (Liden, Wayne, Zhao, & Henderson, 2008; van Dierendonck, 2011). Guided by this logic, mid-level supervisors are likely to mimic the encouraging and considerate leadership practices of their higher-level managers to the end of adapting their own leadership style (Shamir, House, & Arthur, 1993; Wood & Bandura, 1989), thus displaying servant leadership to their respective lower-level employees as well (Liden et al., 2008; van Dierendonck, 2011).

Our argumentation concerning servant leaders as role models is in line with theory on prosociality at work (Bolino & Grant, 2016; Brief & Motowidlo, 1986) that views role modeling as a key mechanism determining the spread of prosocial behaviors in organizations. Based on the above reasoning, we hypothesize:

H1: Manager servant leadership is positively related to supervisor servant leadership.

For lower-level employees, we suggest that the exposure to mid-level supervisor servant leadership enhances their prosocial motivation because servant leadership encourages a concern for oneself and others (van Dierendonck, 2011),

which is inherently linked to prosocial motivation (De Dreu, Nijstad, & van Knippenberg, 2008; Grant, 2008a). Although prosocial motivation has been defined as a desire to benefit others (Grant, 2008a), various scholars have argued that it more broadly represents a “concern for collective welfare and joint success” (De Dreu, Nijstad, & van Knippenberg, 2008, p.24), which we recognize as a less self-sacrificial conceptualization. Thus, prosocial motivation at work is likely to drive both a concern for oneself and others in the interest of the collective welfare of one’s organization (De Dreu, 2006). We argue that for lower-level employees, being exposed to servant leadership should augment their work motivation (Peterson et al., 2012). Indeed, many general definitions of leadership imply that motivating followers to contribute to the effectiveness and success of their organization represents one of a leader’s main duties (e.g., House & Javidan, 2004).

More specifically, we suggest that mid-level supervisor servant leadership primarily enhances employee prosocial motivation because the consequences of certain servant leader behaviors (e.g., *helping subordinates grow and succeed* or *behaving ethically*; Liden et al., 2008; van Dierendonck, 2011) mirror the dual nature of prosocial motivation (i.e., a drive to benefit oneself and others; De Dreu et al., 2008; De Dreu, 2006). It follows that certain servant leader behaviors should facilitate prosocial motives because such behaviors reinforce values and norms that are in line with greater prosocial impact (van Dierendonck, 2011). For example, when servant leaders *help subordinates grow and succeed* or *put subordinates first*, they should enable employees to build their own career paths, allowing them to gather conceptual skills and practical experience in the process. What is more, other servant leader behaviors such as *empowering* and *behaving ethically* are likely to motivate employees to make their own decisions at work while emphasizing the importance of

interacting openly, fairly, and honestly with others. By displaying servant leadership, mid-level supervisors should thus create normative expectations for employees on how to successfully perform their work tasks (Bolino & Grant, 2016; Brief & Motowidlo, 1986) – to their own benefit and to the benefit of others around them. In support of this notion, Liden et al. (2014) suggested that servant leaders in particular build their follower's prosocial identity, which influences their work motivation. Similarly, past research demonstrated that leaders can increase the perceived prosocial impact of their followers (Grant, 2012). We therefore hypothesize:

H2: Supervisor servant leadership is positively related to employee prosocial motivation.

We further suggest that lower-level employee prosocial motivation augments their work performance because such motivation should drive behaviors in the interest of the collective welfare of one's organization and thus elicit better performance evaluations from supervisors (De Dreu et al., 2008; Grant, Parker, & Collins, 2009). Work performance is typically defined as things people do and actions they take, that contribute to organizational goals (Campbell & Wiernik, 2015). We suggest that when employees are concerned about the welfare of their organization, they are more likely to put forth greater effort to work toward attaining their organization's goals. Following from this, it is plausible to suggest that if an employee acts on prosocial motivation, this may also facilitate his or her own individual performance levels. In support of our argumentation, past research shows that prosocial motivation and related behaviors such as helping or knowledge sharing can promote employee work performance levels, by way of more favorable supervisor performance evaluations (Grant et al., 2009; Grant, 2008a; Podsakoff et al., 2009).

Taken together, we hypothesize:

H3: Employee prosocial motivation is positively related to employee work performance

Combining Hypotheses 1-3, we propose a trickle-down model of servant leadership across hierarchical levels of an organization (i.e., higher-level managers, mid-level supervisors, and lower-level employees).

Previous research demonstrates that servant leadership does not only positively predict employee work performance but that it also explains incremental variance over and above similar leadership styles such as leader-member exchange, transformational, or ethical leadership (Hoch, Bommer, Dulebohn, & Wu, 2018; Liden et al., 2008; Peterson et al., 2012). We thus hypothesize:

H4: Supervisor servant leadership and employee prosocial motivation sequentially mediate the positive relationship between manager servant leadership and employee work performance.

The moderated mediating role of supervisor's family motivation

Drawing on the principles of role motivation theory (Miner, 1993), we argue that the beneficial effects of supervisor servant leadership for employee prosocial motivation should be less strong when the supervisor is highly motivated to work in order to benefit his or her family. Role motivation theory (Miner, 1993) states that different job role expectations exist for different positions in an organizational hierarchy (e.g., a mid-level supervisor or a lower-level employee), and that each job role comes with its own motivational requirements that enable effective performance. More specifically, Miner and colleagues (1994) suggest that, depending on the respective type of job performed, effective performance is influenced by one of the following five motives: Desire to learn and acquire knowledge, desire to exhibit independence, desire to acquire status, desire to help others, and desire to have a

value-based identification with one's job. Miner et al. (1993, 1994) further propose a fit perspective between role expectations and the job incumbent's motivation, suggesting that a role-motivation fit as opposed to a misfit ensures effective performance. We suggest that the desire to help others, also often referred to as a "desire to serve others" at work (Miner et al., 1994, p.89), is most important for jobs that explicitly involve providing help as a role expectation such as the role of a servant leader (Greenleaf, 1977; van Dierendonck, 2011).

When considering the beneficiaries of a supervisor's work more generally, one can distinguish between work and non-work prosociality (Grant, 2007). The display of helping behaviors at work, for example, can be interpreted as work-related prosociality because the beneficiaries of one's actions are organizational members (e.g., Lin et al., 2017). Conversely, pursuing and completing household responsibilities can be considered non-work prosociality related to the family domain (e.g., Las Heras, Rofcanin, Bal, & Stollberger, 2017). In this context, we view family motivation (i.e., a desire to expend effort at work to benefit one's family Menges et al., 2017) as a type of prosocial motivation related to the family domain because the primary beneficiaries of motivated behavior at work are one's own family members and not organizational actors. Servant leadership, on the other hand, can be interpreted as prosociality in both work and family domains as the actions of servant leaders ought to not only benefit the organizations they work for but beyond that the wider society as well (e.g., Greenleaf, 1977; van Dierendonck, 2011), including a servant leader's family. Summarizing the above discussion, the question becomes what the implications of high family motivation are for the effectiveness of servant leadership at work.

Drawing on the propositions of Miner et al. (1994), we suggest that a supervisor's family motivation as a motive pattern conflicts with the expectations of the role of a servant leader, and thus buffers the positive effect of servant leadership on employee prosocial motivation. For example, it may be possible for supervisors to book annual leave during school holidays to be with their families at a time when an important project would enter its final phase, and the only means available for supervisors to support their employees would involve irregular phone contact and e-mail exchanges. Similarly, highly family-motivated supervisors may grant themselves flexible working hours to accommodate their family commitments, making it more challenging to meet employee support needs from alternative working locations. As a result, in situations when supervisors actually display servant leader behaviors to employees, they may be perceived as unreliable and should thus be less effective in facilitating employees' prosocial motivation. Prior research showed that perceptions of inconsistency in leader behavior can lead to negative employee reactions across organizational hierarchical levels (e.g., Simons, Friedman, Liu, & McLean Parks, 2007). More recent research provides indirect support for our argument: Lin et al. (2017) revealed that displaying helping behaviors at work can come at the cost of neglecting family responsibilities at home. The results in Rofcanin et al. (2018) showed that employees who are prosocially motivated at work are worse at negotiating family and work responsibilities, and end up displaying lower work performance.

With Hypotheses 1-4 in place, we propose a moderated serial mediation model of servant leadership and work performance across hierarchical organizational levels (i.e., managers, supervisors, and employees). Specifically, we suggest that manager servant leadership positively relates to supervisor servant leadership, which in turn

increases employee prosocial motivation and subsequent work performance. We further suggest that this relationship is buffered by supervisor levels of family motivation.

H5: Supervisor family motivation moderates the sequential mediation of manager servant leadership on employee work performance via supervisor servant leadership and employee prosocial motivation, such that the serial mediation effect is weaker for supervisors with high family motivation and stronger for supervisors with low family motivation.

Method

Sample and data collection

We collected data from supervisor-employee dyads from the under-studied context of the Dominican Republic in 2017. As most studies examining the servant leadership-employee work performance relation have been conducted in North America (e.g., Liden et al., 2008; Liden et al., 2014; Peterson et al., 2012), examining the influence of servant leadership in other national contexts is particularly important to further elucidate the generalizability of previous study results (Liden et al., 2014). Study participants were full-time employees of three organizations from different industries¹. Our local partner² initially established contact to the three study organizations. As an incentive to participate in this research project, we offered companies an in-depth, company-specific research report. After successfully

¹ Company 1 is a Dominican Republic organization that operates in the financial services sector, Company 2 is a Dominican Republic subsidiary of a multinational organization headquartered in Europe, operating in the consumer goods sector, and Company 3 is a small Dominican Republic organization that offers post-graduate education. According to the Occupational Information Network's (O*NET) database (Dye & Silver, 1999), jobs representative of all three companies' sectors involve either high or very high levels of work interdependence as well as collaboration, suggesting that our proposed prosocial trickle down mechanism could plausibly lead to performance improvements for the dyads sampled as part of this study.

² Our partner in the Dominican Republic works as a professor at a post-graduate school and helped to secure access to our study organizations.

negotiating access to our study organizations, we determined a sample size that is representative of the different hierarchical levels of the respective companies we drew our respondents from, the various locations from which the respective company operates from in the Dominican Republic, and all different occupations within the company. Considering each of these parameters, we randomly chose supervisors and invited all of his or her direct reports. Because a differentiation between organizational hierarchical levels was important to our study, we ensured that no one would be invited as both supervisor and employee (of a higher-level manager) to avoid noise in our sample.

We used three different online surveys administered in Spanish and back-translated survey items to maintain conceptual equivalence between the original instruments (in English) and the Spanish versions (Brislin, 1980). We disseminated a survey to lower-level employees, with the aim of measuring variables on the employee level (e.g., prosocial motivation). At the same time, we invited mid-level supervisors to respond to two surveys. The first survey measured manager and supervisor variables (e.g., managerial servant leadership). The second survey required the same respondents to provide work performance ratings for each of their respective lower-level employees. All participants received a maximum of two reminders, within two weeks of the original invitation to participate in the research project. We used e-mails as IDs to match the data collected from supervisor and employee surveys.

In total, invited 131 individuals to participate in our study as supervisors and received 84 usable matched responses (64% response rate). We further invited 311 individuals who were reporting directly to the 131 supervisors, to participate in our study as employees. We received 155 usable matched responses (50% response rate). Forty-seven supervisor and 156 employee responses had to be discarded because

either one or both members of the respective supervisor – employee dyad did not fill out the questionnaire. The supervisor sample consisted of 43 men and 41 women with a mean age of 40.78 years ($SD = 7.78$) and, on average, 1.75 children ($SD = 1.10$). The employee sample consisted of 72 men and 83 women with a mean age of 34.55 ($SD = 8.19$) and, on average, 1.08 children ($SD = 1.21$).

Measures

Unless otherwise stated, all items were measured on a 7-point Likert scale (from 1= *strongly disagree* to 7= *strongly agree*). Reported Cronbach's Alpha coefficients in parentheses refer to the respective measurement scale's reliability in the current study.

Perceived manager servant leadership. Supervisors rated how they perceive their manager's servant leadership using a seven-item servant leadership scale by Liden et al. (2014; $\alpha = .88$). A sample item is "My manager makes my career development a priority".

Perceived supervisor servant leadership. Employees rated how they perceive their supervisor's servant leadership using the same seven-item servant leadership scale by Liden et al. (2014; $\alpha = .88$). A sample item is "My supervisor puts my best interests ahead of his/ her own".

Employee prosocial motivation. Employees rated their prosocial motivation by completing a four-item scale developed by Grant (2008a; $\alpha = .88$). An introductory question asked, "Why are you motivated to do your work?", and items were preceded by the statement "I do this job because". A sample item for prosocial motivation is "Because I want to help others through my work".

Supervisor-rated employee work performance. Supervisors rated the work performance of their employees using a four-items scale by Williams and Anderson

(1991; $\alpha = .94$). A sample item is “He/she meets the formal performance requirements of the job”.

Supervisor family motivation. Supervisors rated their own levels of family motivation using a five-item scale by Menges et al. (2017; $\alpha = .89$). Following the procedures adopted by Menges and colleagues (2017), supervisors were presented with an introductory question that asked, “Why are you motivated to do your work?”, and items were preceded by the statement “I do this job because”. A sample item is “It is important for me to do good for my family”.

Control variables. To avoid spurious relationships, we controlled for employee work-family conflict, which could affect their perceptions of supervisory servant leadership. Specifically, employees with high levels of perceived work-family conflict should benefit the most from servant leadership as they are particularly in need of leader support (Kossek, Pichler, Bodner, & Hammer, 2011). For this reason, these employees are also likely to perceive supervisory servant leader behaviors as particularly unreliable in case supervisors appear to prioritize family needs over those of their employees. We measured work-family conflict using a three-item scale by Matthews, Kath, and Barnes-Farrell (2010; $\alpha = .80$). An example item is “I have to miss family activities due to the amount of time I must spend on work responsibilities”. We further controlled for employee levels of intrinsic and extrinsic motivation as those variables have been shown to influence the effect of prosocial motivation on performance outcomes (e.g., Grant & Berry, 2011; Grant, 2008a). Taking items from Grant and Berry (2011), we asked employees to respond to the question “Why are you motivated to do your work”, and rate their intrinsic motivation via the item “Because I enjoy the work itself” as well as their extrinsic motivation via the item “Because I need the income”. We used single items to measure intrinsic and

extrinsic motivation to minimize tedium and decrease the burden for respondents (see Chua, Morris, & Mor, 2012 for a similar approach). Prior research supports the notion of using single items when it is impractical to use multi-item scales due to situational constraints (e.g., Wanous, Reichers, & Hudy, 1997). We also controlled for supervisor and employee gender (coded 0 = male, 1 = female), age, and number of children, which may play a part in both developing family motivation from the perspective of the supervisor as well as how family-motivated supervisors may interact with employees (e.g., parenthood may influence one's managerial style; Dahl et al., 2012). Finally, we also controlled for company membership using dummy coding to rule out that study results would be influenced by employee differences in company membership.

Analytical strategy

Because of our nested data structure (i.e., employees at Level 1 were nested within supervisors at Level 2), we tested our hypotheses using multilevel structural equation modeling (MSEM; Preacher, Zyphur, & Zhang, 2010) using MPlus 8, an approach that safeguards against a potential conflation of effects across levels of analysis. This is done by separating the Level 1 and Level 2 portion of a given Level 1 variable (i.e., termed multilevel effect decomposition). Following recommendations for MSEM, we group-mean centered Level 1 predictors and control variables and grand-mean centered Level 2 predictors and control variables (Preacher et al., 2010). Using MSEM, we fitted two two-level models (i.e., a serial mediation model and a moderated serial mediation model), in which the Level 1 portions of perceived supervisor servant leadership, employee prosocial motivation, employee work performance, and employee control variables were modeled at Level 1, whereas the Level 2 portions of the aforementioned variables, as well as perceived manager

servant leadership, supervisor family motivation, and supervisor control variables were modeled at Level 2. Following recommendations on testing 2-1-1-1 mediation models by Preacher and colleagues (2010), we specified random slopes for the lower level mediation paths (i.e., the Level 1 effects of supervisor servant leadership on employee prosocial motivation and employee prosocial motivation on employee work performance, respectively). Specifying random slopes for mediation paths on Level 1 ensures a less biased and more precise estimate of the Level 2 indirect effect (Preacher et al., 2010). This is especially relevant for the present mediation models that include an independent variable assessed at Level 2 (i.e., manager servant leadership) as in such cases indirect effects “must occur strictly” at Level 2 as well (Preacher et al., 2010, p. 210). Model 1 simultaneously tested the individual multilevel mediation paths proposed by Hypotheses 1-3 as well as the multilevel serial mediation model proposed by Hypothesis 4. In Model 2, we tested Hypothesis 5 that implies multilevel moderated serial mediation. To do so, we adopted recommendations by Bauer, Preacher, and Gil (2006) as well as Preacher et al. (2010) and computed an interaction term between the Level 2 portion of perceived supervisor servant leadership and supervisor family motivation, subsequently adding the interaction term as a predictor of the Level 2 portion of employee prosocial motivation on Level 2. Following Bauer et al. (2006), the magnitude of the moderated serial mediation effect was calculated as being conditional on the coefficient for the moderator (i.e., at +/- 1 standard deviations). We tested Hypothesis 4 and 5 by constructing confidence intervals around the product term of the (moderated) serial mediation paths using the Monte Carlo method (Preacher & Selig, 2012). This was done by drawing 20,000 replications from the sampling distribution of the product term (see Koopman, Lanaj, & Scott, 2016 for a similar approach) using a

computational tool by Selig and Preacher (2008). The (moderated) serial mediation effect is significant if the Monte Carlo confidence interval does not contain zero (Bauer et al., 2006; Preacher & Selig, 2012).

Results

We initially calculated the ICC(1) for employee work performance to ascertain whether the use of multilevel modeling is necessary to analyze our data (Snijders & Bosker, 2012). The ICC(1) was .21, meaning that 21% of the overall variance in employee performance was due to differences between supervisors, thus warranting a multilevel approach to data analysis (Snijders & Bosker, 2012). Furthermore, we conducted a multilevel confirmatory factor analysis (MCFA) to ensure that our study variables are conceptually distinct. For this purpose, we included variables pertaining to supervisor servant leadership, employee prosocial motivation, work-family conflict, and intrinsic as well as extrinsic motivation at Level 1. At Level 2, we included supervisor-rated work performance, manager servant leadership, and supervisor family motivation. Results of various MCFAs indicate that our proposed eight-factor model provided a better fit (Browne & Cudeck, 1993; $\chi^2(193) = 360.87, p < .001, TLI = .91, CFI = .93, SRMR \text{ within} = .045, SRMR \text{ between} = .072, RMSEA = .075$) than an alternative six-factor model with employee prosocial, intrinsic, and extrinsic motivation loading on a single motivation factor ($\chi^2(202) = 383.68, p < .001, TLI = .91, CFI = .92, SRMR \text{ within} = .064, SRMR \text{ between} = .072, RMSEA = .076$) or a two-factor model where all Level 1 and Level 2 variables loaded on a single factor, respectively ($\chi^2(208) = 1583.53, p < .001, TLI = .31, CFI = .40, SRMR \text{ within} = .16, SRMR \text{ between} = .24, RMSEA = .21$). Our MCFA results thus demonstrate the distinctive factor structure of our study variables.

Hypothesis Tests

Table 1 illustrates means, standard deviations, and intercorrelations among study variables.

 Insert Table 1 about here.

Figure 1a depicts MSEM analysis results for Model 1 (a serial mediation model testing Hypotheses 1-4) whereas Figure 1b illustrates the results of Model 2 (a serial moderated mediation model additionally testing Hypothesis 5). In order to assess the relative improvement in model fit of Model 1 and Model 2, we used the Bayesian Information Criterion (BIC) as well as the Akaike Information Criterion (AIC), where lower values are indicative of a better fitting model (Snijders & Bosker, 2012). Hypothesis 1 proposed a positive relation between manager servant leadership and supervisor servant leadership. Our findings supported this hypothesis ($\gamma = 0.27$, $SE = .11$, $t = 2.56$; $p < .05$). Hypothesis 2 predicted a positive association between supervisor servant leadership and employee prosocial motivation. MSEM results supported this hypothesis as well ($\gamma = 0.16$, $SE = .05$, $t = 3.13$; $p < .01$). Moreover, Hypothesis 3 proposed a positive relationship between employee prosocial motivation and employee work performance. Our findings lent support to this proposition ($\gamma = 1.33$, $SE = .33$, $t = 3.98$; $p < .001$). Further, Hypothesis 4 proposed a positive relationship between manager servant leadership and employee work performance that is serially mediated by supervisor servant leadership and employee prosocial motivation. MSEM results provided support for such a multilevel serial mediation ($\gamma = 0.06$, 95% CI Low = 0.01; CI High = 0.13). Compared to a null model, Model 1 provided a better fit with the data (difference BIC = 105,16; difference AIC = 220,04). We then moved on to test the moderated serial mediation model proposed by Hypothesis 5 by adding an interaction term between the between-portion of supervisor servant leadership and supervisor family motivation to a model predicting

the between-portion of employee prosocial motivation. The interaction term proved to be statistically significant ($\gamma = -0.09$, $SE = .04$, $t = -2.58$; $p < .05$). In line with our expectations, simple slope tests (Preacher, Curran, & Bauer, 2006) revealed a stronger positive relationship between supervisor servant leadership and employee prosocial motivation for supervisors with low (-1 SD below the mean; $\gamma = 0.83$, $SE = .28$, $t = 3.00$; $p < .01$), as opposed to high ($+1$ SD above the mean; $\gamma = 0.63$, $SE = .20$, $t = 3.13$; $p < .01$) levels of family motivation. This suggests that supervisor family motivation buffers the positive effect of servant leadership on employee prosocial motivation. Figure 2 illustrates the interaction effect. Interestingly, when examining the low supervisor servant leadership condition, the interaction effect reveals that high levels of supervisor family motivation augments employee prosocial motivation more so than low levels, thus providing evidence for a compensatory effect of supervisor family motivation in case of low servant leadership in line with previous research (Menges et al., 2017).

 Insert Figure 1 and 2 about here.

Furthermore, MSEM results showed a significant moderated serial mediation effect of family motivation on the relation between manager servant leadership and employee work performance via supervisor servant leadership and employee prosocial motivation with a stronger positive relationship for supervisors with low (-1 SD below the mean; $\gamma = 0.28$, 95% CI Low = 0.03; CI High = 0.60), as opposed to high ($+1$ SD above the mean; $\gamma = 0.21$, 95% CI Low = 0.02; CI High = 0.45) levels of family motivation. Compared to Model 1, Model 2 yielded a better fit with the data (difference BIC = 9,05; difference AIC = 8,18). Taken together, Hypothesis 5 was

supported³. Specifically, our results indicate that the relationship between manager servant leadership and employee work performance via supervisor servant leadership and employee prosocial motivation is stronger for supervisors with low as opposed to high levels of family motivation. Therefore, our findings point to the possibility of a motivational opportunity costs for supervisors with high family motivation, such that their primary motivational drive to provide for their family may buffer the trickle-down effects of managerial servant leadership on employee work performance.

Supplemental Analyses

We conducted additional analyses to examine whether differences in leader gender could affect our study results (see Eagly & Carli, 2003 for a review on the role of gender in the context of leadership). Specifically, we simultaneously examined whether a two-way supervisor gender x supervisor servant leadership interaction, or alternatively, a three-way supervisor gender x supervisor servant leadership x supervisor family motivation interaction moderates the trickle-down effect of managerial servant leadership on employee work performance via supervisor servant leadership and employee prosocial motivation. MSEM results neither supported a two-way supervisor gender x supervisor servant leadership interaction ($\gamma = 0.07$, $SE = .38$, $t = 0.19$; *ns.*), nor a three-way supervisor gender x supervisor servant leadership x supervisor family motivation interaction ($\gamma = -0.00$, $SE = .07$, $t = -0.01$; *ns.*) as a contingency factor of our proposed trickle-down model.

Furthermore, we re-ran MSEM analyses without control variables to explore whether they had an effect on the relationships between our study variables (see recommendations by Becker et al., 2016). Excluding control variables did not change the pattern of our results.

³ Our results remained substantively unaffected when testing all study hypotheses simultaneously in one model.

Discussion

Liden and colleagues (2014) emphasized a lack of empirical studies examining how and when servant leadership trickles down in organizations. To shed light on these processes, we integrated theory on prosociality at work (e.g., Bolino & Grant, 2016; Brief & Motowidlo, 1986) and role motivation (Miner, 1993; Miner et al., 1994) to test a trickle-down model whereby manager servant leadership influences supervisor servant leadership, which in turn affects employee prosocial motivation and subsequent work performance. We extended our model further by considering the role of supervisor family motivation as a contingency factor of the proposed trickle-down mechanism.

Theoretical implications

Our findings extend previous research and theorizing concerning servant leadership as well as prosociality. We discuss our theoretical contributions in the following.

Contributions to the servant leadership literature. Our trickle-down model tests a key prediction of servant leadership theory originally advanced by Greenleaf (1997), that is, whether servant leadership turns followers into servants themselves. We depart from previous research that has examined this mechanism indirectly by proposing that servant leaders create an organizational (Hunter et al., 2013; Liden, Wayne, et al., 2014) or group-level (Walumbwa et al., 2010) service climate and instead suggest the utility of a dyadic process perspective. Our study demonstrated that managerial servant leadership influences organizational members across hierarchical levels and that this influence manifests in two ways – by inspiring servant leadership of supervisors and by increasing the prosocial motivation and work performance of employees through their respective supervisors. By doing so, we

respond to various calls to investigate the dyadic processes concerning how servant leaders influence their followers to become servants themselves (Eva, Robin, Sendjaya, van Dierendonck, & Liden, in press; Liden, Panaccio, et al., 2014).

Contributions to the prosociality literature. From a prosocial motivational angle, our research extends the array of antecedents of prosocial motivation, considering different hierarchical levels within an organization (Grant & Bolino, 2016). Research on the antecedents of prosocial motivation has been largely limited to the job characteristics (e.g., task significance), beneficiary contact, and transformational leadership (Grant, 2008b, 2012). However, a defining aspect of prosocial motives is to care for and serve others' needs (Grant, 2008a); hence our focus on the effects of servant leadership across organizational hierarchical levels not only offers a new perspective but also maps on and complements previous research concerning the emergence of prosocial motivation within dyadic leader-follower relationships.

From a family motivational angle, this is the first study, to the best of our knowledge, that combines an examination of prosocial and family motivation within dyadic leader-follower relationships, thereby responding to calls to study different types of other-oriented motives and their interrelationships (Bolino & Grant, 2016). Furthermore, in showing that the positive association between supervisor servant leadership and employee prosocial motivation weakens for supervisors who are highly family motivated, we contribute to debates that concern a potentially "less bright" side of family motivation (Menges et al., 2017). A closer examination of our interaction effect also revealed a compensatory effect of supervisor family motivation on employee prosocial motivation in case of low servant leadership. In the absence of having to be a servant leader, it may be easier for family-motivated supervisors to

balance work and family responsibilities. This may also have a signaling character and could lead to employee perceptions of their supervisor acting as a role model on how to balance work and family responsibilities, which is considered a form of family supportive supervisor behavior (Hammer, Kossek, Yragui, Bodner, & Hanson, 2009). Such role modeling could, in turn, prosocially motivate employees to support each other with their work demands when they themselves negotiate a satisfactory work-family balance without compromising work performance standards. As previous research has emphasized the positive, compensatory effects of family motivation for individual performance (Menges et al., 2017), we highlight that one caveat of this finding may be that family motivation could be particularly beneficial for jobs where one's family can be the primary motivational driver of work performance. This may be the case in family businesses in which one works with family members, or jobs that directly involve serving family such as a teacher in a home-schooling situation. However, for jobs where role requirements conflict with one's desire to benefit family members (e.g., the role of a servant leader), family motivation may lead to sub-optimal performance outcomes. Future research is suggested to explore how the influence of family motivation is likely to manifest across different job categories.

Furthermore, in supplemental analyses, we explored whether the gender of supervisors influences how servant leadership trickles down in organizations. This is important to examine because previous research provided meta-analytical evidence concerning gender differences for certain leadership styles (Eagly, Johannesen-Schmidt, & van Engen, 2003). Likewise, because women still tend to face more domestic and household responsibilities than men (e.g., Fritz & van Knippenberg, 2018), it is plausible to expect a more pronounced buffering effect of female supervisor family motivation on the relationship between servant leadership and

employee prosocial motivation. We thus tested whether a two-way (supervisor gender x supervisor servant leadership) or three-way (supervisor gender x supervisor servant leadership x supervisor family motivation) interactions influenced our proposed trickle-down mechanism. In both cases, we did not detect a significant interaction effect, suggesting that supervisor gender does not influence how servant leadership trickles down in organizations. These findings resonate with a recent meta-analysis that revealed no gender differences in perceived leadership effectiveness across a variety of leadership contexts (Paustian-Underdahl, Walker, & Woehr, 2014).

Practical Implications

Our research offers various implications for organizational practice. Our finding that managerial servant leadership trickles down and influences employee work performance ought to make managers aware of the importance of displaying servant leadership to supervisors with the aim of creating a ripple effect throughout their organization and boosting performance outcomes. To encourage the trickle-down mechanism between managers and supervisors, we recommend that organizations design and implement training programs to promote the use of servant leadership across hierarchical organizational levels (Day, Fleenor, Atwater, Sturm, & McKee, 2014). Moreover, organizations could give greater visibility to those managers who are exemplary in serving their followers, explain how this benefits the company as a whole, and promote these behaviors among all organizational members. For example, supervisors could be paired up with an appropriate managerial role model to encourage knowledge sharing, receive mentoring and learn how servant leadership is effectively displayed.

Another implication of our research relates to the consequences of family motivation for supervisors displaying servant leadership to their lower-level

employees. We demonstrated that high family motivation does not only diminish the positive effects of supervisor servant leadership, but also buffers the indirect effect of manager servant leadership on employee work performance. Accordingly, organizations should consider introducing work-family balance initiatives especially for direct supervisors with very frequent employee interactions to highlight how to successfully integrate work life with family life. Such initiatives could make supervisors aware of the consequences of their family motivated behaviors with respect to their employees' work performance. Thus, work-family balance initiatives may serve to mitigate the conflict between family and work interests that may ensue for highly family motivated servant leaders with a view of ensuring optimal levels of employee work performance.

Limitations and Directions for Future Research

As with any research, our study comes with limitations that offer directions for future research. The first limitation relates to the cross-sectional nature of our study. Although a common design feature of many studies examining servant leadership (e.g., Chiniara & Bentein, 2018; Liden, Wayne, et al., 2014), cross-sectional designs cannot speak to the causal direction underlying a study's hypotheses. We inferred the causality of our proposed interrelationships from prosociality models (Bolino & Grant, 2016) that suggest a top-down trickle-down effect of manager servant leadership on employee work performance. Future research may employ a longitudinal design with a pre-determined time lag between each variable (e.g., 6 months) to shed light on the causal direction of a servant leadership trickle-down effect in organizations⁴. Second, exploring all possible contingencies of servant leader

⁴ To reduce potential same-source bias in the context of our study, we collected data from different sources (e.g., supervisors and employees), separated independent and moderator variables and randomized items as part of the study questionnaires.

influence on employees was beyond the scope of this study. We specifically focused on the moderating influence of a supervisor family motivation on the supervisor servant leadership – employee prosocial motivation relationship. However, it may also be possible that family motivation could influence how manager servant leadership relates to supervisor servant leadership. For example, it may be conceivable that highly family motivated managers displaying servant leadership do not represent potent enough role models for supervisors to adopt servant leadership as well. Further research could shed light on the specific circumstances when supervisors adopt their manager's servant leadership behaviors. Relatedly, past research also emphasized the role of employee individual differences in response to servant leadership. For example, Donia, Raja, Panaccio, and Wang (2016) showed that followers averse to impression management reap less benefits from servant leadership compared to their colleagues who are less concerned with managing impressions. Thus, depending on various characteristics, different employees may benefit more from servant leadership than others. Furthermore, in our data the mean for family and prosocial motivation was quite high, which may partly explain the equally high mean value for work performance. This could point to the presence of cultural factors that may influence the generalizability of our findings. Even though acting prosocially to benefit one's group or caring for one's family can both be considered universal, socially focused values (Schwartz et al., 2012), different cultural contexts may emphasize such values more so than others. As both our study as well as previous family motivation research (Menges et al., 2017) was conducted in Latin American countries, future research could explore whether our findings replicate in North America or Europe as well. It follows that our research could be extended by incorporating three or four-way interactions between servant leadership,

a leader's family motivation, employee's individual differences, as well as cultural factors to ascertain whether these variables play a role in promoting or curtailing a trickle-down effect of servant leadership in organizations.

Third, we did not empirically test some of the possible psychological and behavioral mechanisms involved in our trickle-down argumentation whereby managerial servant leadership translates into increased employee work performance. Specifically, we did not measure the kinds of behaviors family-motivated supervisors would display when acting in their family's interest and used their family motivation as a proxy for such behaviors. Future research could explore what kinds of family-related behaviors have the potential to undermine an employee receptivity to servant leadership. Similarly, in line with previous trickle down approaches to leadership (e.g., Mayer et al., 2009), we did not measure the proposed transferal mechanism of servant leadership from managers to supervisors by means of role modeling. The above points provide future research directions and an opportunity to extend the trickle-down mechanism we advanced as part of our study.

Conclusion

Despite considerable research efforts highlighting the benefits of servant leadership for organizational effectiveness, researchers and practitioners had little insight into how and under which conditions servant leadership displayed by leaders across hierarchical levels of an organization affects the effectiveness of its members. Our findings suggest that higher-level managerial servant leadership trickles down to influence the work performance of lower-level employees through their supervisors. This finding illustrates that manager behaviors have an extended reach and not only influence their direct reports, but act through them, and affect the work performance of employees at lower levels of an organization's hierarchy. Furthermore, our results

suggest the need for organizations to promote work-life balance initiatives for supervisors to avoid that a conflict between work and family interests adversely affects the performance outcomes of lower-level employees.

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Table 1
Means, Standard Deviations, and Intercorrelations among Study Variables^a

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Level 1 predictors</i>																
1. Employee gender	0.54	0.50	—													
2. Employee age	33.99	7.62	.04	—												
3. Employee no. of children	1.03	1.19	-.07	.48**	—											
4. Employee work-family conflict	3.04	1.60	.00	.02	.24**	—										
5. Employee prosocial motivation	6.24	1.03	-.05	-.05	.11	.05	—									
6. Employee intrinsic motivation	6.21	1.16	.04	.04	.20*	-.23**	.53**	—								
7. Employee extrinsic motivation	6.42	0.90	-.04	-.07	-.03	-.11	.33**	.20*	—							
8. Employee in-role performance	5.93	0.98	.05	-.04	.13	-.14	.15	.33**	.15	—						
9. Supervisor servant leadership	5.36	1.18	-.02	-.07	.03	-.21*	.34**	.38**	.09	.31**	—					
<i>Level 2 predictors</i>																
10. Supervisor gender	0.46	0.50	.32**	-.11	-.22*	-.04	-.09	-.10	-.09	-.06	.08	—				
11. Supervisor age	40.23	7.75	.04	.20*	.16*	.22**	.00	-.01	-.02	.15	.01	-.06	—			
12. Supervisor no. of children	1.70	1.10	-.10	.12	.14	-.06	-.11	.02	-.07	-.02	.11	-.12	.39**	—		
13. Supervisor family motivation	5.97	1.15	-.21**	-.12	.11	-.01	.12	.04	.07	.15	.13	-.20*	.20*	.15	—	
14. Manager servant leadership	5.44	1.12	.10	-.13	.03	.21**	.30**	.15	.06	.09	.21**	.04	.24**	.14	.26**	—

Note. ^aLevel 1 *N* = 155; level 2 *N* = 84. Level 1 variables were aggregated to provide correlations with level 2 variables.

* *p* < .05 level (two-tailed).

** *p* < .01 level (two-tailed).

Figure 1. MSEM model results¹.

a)

b)

*Note.*¹Model 1a depicts results of a multilevel serial mediation model, Model 1b illustrates moderated serial mediation results. In both Model 1a and 1b, nonstandardized coefficients are shown with standard errors in parentheses. Level 1 $n = 155$; level 2 $n = 84$. For clarity, control variable paths are not pictured. * $p < .05$. ** $p < .01$. *** $p < .001$.

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Figure 2. The interaction of supervisor's servant leadership and supervisor's family motivation on employee's prosocial motivation.

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Highlights

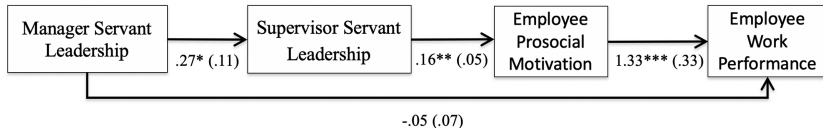
- We examined whether servant leadership (SL) effects trickle down in organizations.
- Higher-level manager SL increases the performance of lower-level employees.
- Mid-level supervisor SL is key in passing on the manager's positive influence.
- Supervisor SL increases employee performance by boosting prosocial motivation.
- Supervisor's own family motivation buffers the positive motivational effect of SL.

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A

Control variables used in the analysis:

Employee work-family conflict
 Employee intrinsic and extrinsic motivation
 Employee gender, age, and presence of children
 Employee company membership
 Supervisor gender, age, and presence of children



B

Control variables used in the analysis:

Employee work-family conflict
 Employee intrinsic and extrinsic motivation
 Employee gender, age, and presence of children
 Employee company membership
 Supervisor gender, age, and presence of children

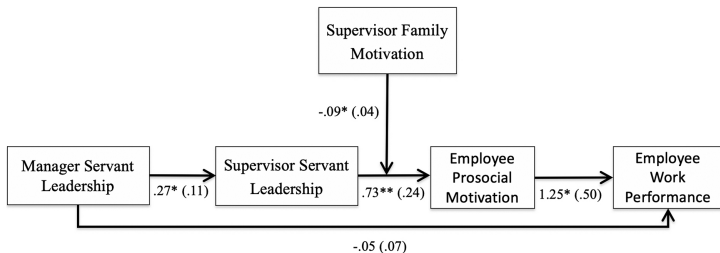


Figure 1

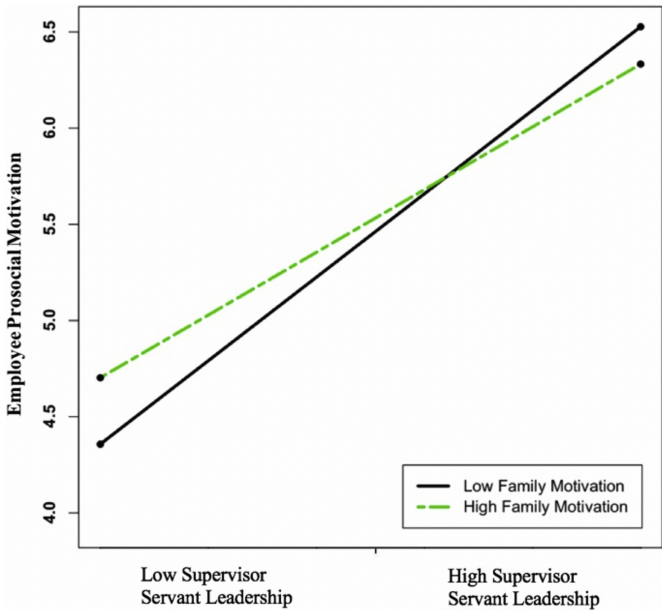


Figure 2