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### Do servant-leaders help satisfy follower needs? An organizational justice perspective

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## Do servant-leaders help satisfy follower needs? An organizational justice perspective

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While theoretical work has discussed the link between servant-leadership and the satisfaction of follower needs, empirical research has yet to examine this relationship. The present article seeks to fill this void by reporting on a survey study ( $n = 187$ ) linking servant-leadership to follower need and job satisfaction through the mediating mechanism of organizational justice. Drawing on the multiple needs model of justice, self-determination theory, needs-based theories of job satisfaction, and the servant-leadership literature, we find support for a theoretical model linking servant-leadership to job satisfaction with organizational justice and need satisfaction as mediators of this relationship.

**Keywords:** Servant-leadership; Organizational justice; Need satisfaction; Job satisfaction.

In recent years there is a growing interest in ethical styles of leadership (Avolio & Gardner, 2005; Brown & Treviño, 2006; Northouse, 2001; van Knippenberg, De Cremer, & van Knippenberg, 2007). One leadership style that has an ethical component, referred to as servant-leadership, views the leader as a “servant” to the needs of his or her followers (Graham, 1991; Greenleaf, 1970, 1977). Specifically, Greenleaf (1970) proposed that to be a servant leader one must, “first make sure that other people’s highest priority *needs* are being served” (p. 4). Similarly, Matteson and Irving (2006) stated that, “servant-leadership is essentially focused on placing the *needs* of followers before personal interests” (p. 36). Whereas servant-leadership has commonalities with other models of leader behaviour with ethical

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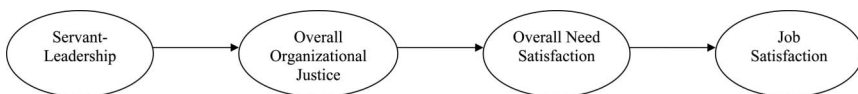
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components, such as transformational leadership (Bass, 1985), the explicit focus on a leader's ethical responsibility to be concerned with follower *needs* distinguishes it from related types of leadership (see Grahm, 1991, for a review).

While theory has described servant-leaders in terms of their focus on follower needs, empirical research has yet to explore whether servant-leaders do in fact satisfy their followers' basic needs and ultimately whether this need satisfaction translates into satisfaction with the job itself (see Barbuto & Wheeler, 2006, for an exception). The purpose of this research is to fill this void by empirically examining the relationship between servant-leadership and need and job satisfaction. In this article, we propose and test a theoretical model linking servant-leadership to justice perceptions, which in turn is related to need satisfaction, and ultimately eventuates in job satisfaction. In justifying our model, we draw on theoretical and empirical work linking servant-leadership to justice perceptions (e.g., Ehrhart, 2004) and need satisfaction (e.g., Barbuto & Wheeler, 2006; Greenleaf, 1970, 1977; Matteson & Irving, 2006). In addition, we draw on the multiple needs model of justice (MNM; Cropanzano, Byrne, Bobocel, & Rupp, 2001), and self-determination theory (SDT; Deci & Ryan, 1985, 2000) in order to link justice perceptions to need satisfaction. Finally, we utilize needs-based theories of job satisfaction (Hackman & Oldham, 1976; Herzberg, Mausner, & Snyderman, 1959) to support the final relationship in our model. Given that need satisfaction (Baard, Deci, & Ryan, 2004) and job satisfaction (Harrison, Newman, & Roth, 2006) have each been associated with performance on the job, these outcomes of servant-leadership are of particular interest to organizations. Our theoretical model is depicted in Figure 1. In what follows, we provide a theoretical rationale for the various links in our proposed model.

## SERVANT-LEADERSHIP AND ORGANIZATIONAL JUSTICE

Servant-leadership is a form of leadership that includes a specific focus on follower (and other stakeholder) needs, with the goal of helping followers grow, develop, and prosper (Grahm, 1991; Greenleaf, 1970, 1977). While there is conceptual overlap between servant-leadership and other prominent



**Figure 1.** Hypothesized theoretical model linking servant-leadership and follower need satisfaction.

leadership theories such as transformational, charismatic, and leader-member exchange (LMX), the moral imperative to focus on serving followers is a fundamental way that servant-leadership differs from related leadership constructs (see Barbuto & Wheeler, 2006; Ehrhart, 2004; Graham, 1991; Matteson & Irving, 2006 for extensive reviews differentiating servant-leadership from other leadership theories). While theoretical work has discussed the link between servant-leadership and follower need satisfaction, empirical work has yet to examine this relationship.

In order to highlight the process through which servant-leaders help satisfy follower needs, we draw on the organizational justice literature (Greenberg, 1987). In recent years, there has been growing acceptance that there are four dimensions of organizational justice: *distributive justice* (i.e., the perceived fairness of decision outcomes; Adams, 1965), procedural justice (the perceived fairness of the procedures used to arrive at outcomes; Leventhal, 1976; Thibaut & Walker, 1975), and interactional justice (Bies & Moag, 1986), which consists of *interpersonal justice* (i.e., treating others with politeness, impropriety, dignity, and respect) and *informational justice* (i.e., providing adequate and truthful explanations about procedures and outcomes) (Colquitt, 2001; Greenberg, 1993).

Recently, though, some researchers have suggested that a shift towards an overall justice construct may be useful. Justice researchers have recently begun to acknowledge that an individual's justice perceptions may not be accurately evaluated when there is a focus on the various dimensions of justice (Ambrose & Arnaud, 2005). For example, Greenberg (2001) suggested that when individuals form justice perceptions, they do so with a "holistic judgment in which they respond to whatever information is both available and salient" (p. 211). Thus, although focusing on the specific facets of justice is necessary for certain research questions, research that uses an overall justice construct is also needed (Ambrose & Schminke, 2006).

In line with these suggestions regarding the utility of an overall justice construct, we examine overall organizational justice in the current research. We do so for a number of reasons. First, because the outcomes of interest are broad constructs (i.e., need satisfaction and job satisfaction), we sought to use a justice measure at a similar level of breadth. Second, servant-leaders are likely to influence perceptions of all the justice dimensions which should translate into an overall sense of justice. Third, work by Ambrose and Schminke (2006) found that a direct overall justice measure is a more proximal determinant of employee attitudes than an indirect measure that asks about justice rules associated with each dimension. For these reasons, we focus on overall organizational justice in this article.

In an effort to link servant-leadership to an overall organizational justice judgement, we draw on the literature on justice rules. For example, given that servant-leaders are sensitive to the "needs and desires" of followers

(Graham, 1991, p. 117), it is likely that they will treat employees in an interpersonally sensitive manner thus improving followers' sense of justice. Further, servant-leaders' moral orientation is likely to help them to engage in ethical behaviours and to reduce bias from decision-making processes. Further, because servant-leaders provide an opportunity for followers to voice their concerns, it is likely that justice perceptions will be more favourable when one has a servant-leader. Finally, because servant-leaders focus on the growth and development of followers, leaders will make sure that followers are appropriately rewarded and encouraged thus improving justice perceptions. In sum, servant-leaders are expected to satisfy many of the rules used to govern justice perceptions and ultimately followers' overall perceptions of justice are expected to be more favourable.

In addition to the theoretical support for the link between servant-leadership and the satisfaction of a number of different justice rules, there is some empirical research linking servant-leadership and justice perceptions. For example, Ehrhart (2004) found a positive relationship between servant-leadership and follower procedural justice climate (i.e., justice perceptions aggregated to the group level). Thus, theoretical and empirical work supports the link between servant-leadership and organizational justice.

**Hypothesis 1:** Servant-leadership will be positively related to overall organizational justice perceptions.

## ORGANIZATIONAL JUSTICE AND NEED SATISFACTION

In the previous section we proposed a link between servant-leadership and justice perceptions. There is also reason to believe that when individuals report being treated fairly, they will be more likely to feel like their basic needs at work have been satisfied. A set of theories in the organizational justice literature, referred to as content models (Cropanzano et al., 2001), that focus on why justice matters to people provides insight into the link between justice perceptions and need satisfaction. Two prominent content models of justice include the self-interest model (Thibaut & Walker, 1975) and the group-value and relational models (Lind & Tyler, 1988; Tyler & Lind, 1992). Initially, researchers focused on *self-interest* or *control* as the primary reason for why people care about justice (Thibaut & Walker, 1975). Following the self-interest/control movement was research on the group-value and relational models of justice (Lind & Tyler, 1988; Tyler & Lind, 1992), which were less concerned with self-interest or control and more focused on the *relational* information expressed by fair treatment. In other words, the group-value and relational models suggested that fair treatment matters to people because it indicates that they are a valued member of a

group. These two sets of theories sought to explain why people care about justice.

Recently, some scholars have made the observation that the self-interest/control and relational perspectives on why justice matters to people map neatly onto certain basic human needs that have been identified in the psychological literature (Cropanzano et al., 2001). Specifically, the multiple needs model of justice (MNM; Cropanzano et al., 2001) is one model that posits that justice is an important part of interpersonal relations because of the positive impact it can have on an individual's basic human needs (Cropanzano et al., 2001). More specifically, the model posits that injustice can threaten a number of basic human needs (e.g., control, belonging, self-esteem; Cropanzano et al., 2001) and similarly that fair treatment can help satisfy basic needs. Thus, the MNM proposes that fair treatment leads to having one's needs satisfied.

De Cremer and Tyler (2005) also focus on the integration of justice and basic human needs. For example, their self-based model of cooperation takes a similar approach to the MNM in that fair procedures are expected to influence one's sense of belongingness and certainty about one's self which are expected to drive job attitudes (i.e., trust) and behaviours (i.e., OCB). Further, De Cremer and Tyler highlight that needs and justice are closely linked, and that justice is critical for the satisfaction of many basic needs. It should be noted that, while the MNM and De Cremer and Tyler posit that needs are a consequence of fair treatment, needs can also serve to make justice more salient. In support of this notion is work by De Cremer and Blader (2006) demonstrating that the effects of procedural justice are stronger when one has a high need to belong. This research provides empirical evidence that justice and needs are linked, and that justice is particularly important for addressing individuals' basic needs.

The MNM suggests that people care about justice because it helps to satisfy their needs. For example, in terms of the need for *control*, which is related to the desire to predict events, fair processes help to establish a foreseeable pattern of events and create order in relationships, which, in turn, helps to satisfy an individual's need for control. Also, with respect to the relational perspective, the MNM suggests that because justice facilitates the creation of strong interpersonal bonds (Cropanzano & Byrne, 2000) and encourages cooperation, justice can help to satisfy an individual's need for *belonging*. Furthermore, the MNM suggests that injustice can harm an individual's *self-regard* (i.e., need for self-esteem) (Cropanzano et al., 2001). Thus, according to the MNM, justice is thought to be an important antecedent of a variety of basic human needs.

In addition to research on the MNM, the social psychological literature also examines the role of basic human needs. Arguably the most well-established needs-based theory of motivation is self-determination theory

(SDT; Deci & Ryan, 1985). SDT defines needs as “innate psychological nutriments that are essential for ongoing psychological growth, integrity and well-being” (Deci & Ryan, 2000, p. 229). Three needs are central to SDT: (1) *autonomy* (i.e., feeling in control of one’s environment), (2) *competence* (i.e., feeling confident and capable), and (3) *relatedness* (i.e., feeling connected to others). The primary hallmark of SDT is that the satisfaction of these needs is essential for a positive sense of subjective well-being, and an inability to satisfy these needs can lead to dysfunctional attitudes and behaviour.

Given the recent trend to integrate the literature on basic human needs and justice, a logical extension of the extant research is to explore whether SDT provides any insight into why people care about justice. Drawing on efforts to join basic human needs and organizational justice, the current study proposes an integration of SDT and organizational justice. As mentioned earlier, research on the MNM (Cropanzano et al., 2001) suggests that the motives underlying why justice matters to people neatly map onto three basic human needs—control, belonging, and positive self-regard. With this link between content models of justice and basic needs identified, it does not take much of an inferential leap to see how the three needs in SDT relate to justice. Indeed, the basic needs of autonomy, relatedness, and competence identified by SDT map neatly on to the basic human needs of control, belonging, and positive self-regard described by the MNM. Thus, it stands to reason that justice matters to people in part because it has implications for the satisfaction of their basic needs as defined by SDT. In what follows, we make predictions regarding the relationships between overall organizational justice and the satisfaction of the three SDT needs (e.g., autonomy, competence, relatedness).

*Autonomy.* An individual with his or her autonomy need satisfied feels in control of decisions that affect him or her. One way to help ensure that an individual has some level of control over important decisions that affect him or her is to pay attention to how fairly one is treated (Thibaut & Walker, 1975). For example, when an employee receives a reward in line with his or her effort, it suggests that he or she has some control over his or her outcomes. Similarly, when an employee is afforded an opportunity to voice his or her concerns (Thibaut & Walker, 1975) and consistent, ethical procedures (Leventhal, 1976) are in place to make decisions, organizational structures increase autonomy.

*Competence.* An individual who has his or her competence need met feels good about his or her growth, ability, and achievement. Such individuals are self-confident, have a positive self-regard, and have high self-esteem (Ryan & Deci, 2000). Fair treatment is one factor that may impact one’s competence needs. For example, when organizational rewards



are equitably distributed, the likelihood that an individual can be successful by exerting sufficient effort increases. Similarly, ethical decision-making procedures that are free from bias help ensure that the most qualified individuals will be adequately acknowledged. Also, fair interpersonal treatment and being privy to information from one's supervisor help to reinforce the notion that an individual is considered competent by his or her supervisor.

*Relatedness.* Individuals with their relatedness needs met often interact with others, feel close to others, and are treated well by others. Such individuals feel like they belong in their social world. Relational models of justice (Lind & Tyler, 1988; Tyler & Lind, 1992) suggest that fair treatment is useful in ensuring that one feels like a valued member of his or her social group. When an individual receives fair treatment, he or she is likely to feel like others care about him or her on a personal level. Fair treatment that communicates one's value to a group can be expressed in a variety of ways. For example, when an individual is rewarded for his or her effort and achievement, it suggests that the organization cares about him or her. In addition, when an individual is given the opportunity to voice his or her opinions before and after decisions are made, he or she is more likely to feel that the organization genuinely cares about his or her opinions. Most directly, when one's supervisor treats an employee with dignity and respect in interpersonal interactions and makes sure to provide all appropriate and relevant information to the employee, it suggests that the employee really matters to the supervisor. These examples provide a number of ways in which fair treatment can help satisfy relatedness needs.

Thus, given the aforementioned links between fair treatment and need satisfaction, we hypothesize that experiencing organizational justice will help to satisfy one's basic human needs as defined by SDT.

**Hypothesis 2:** Overall organizational justice perceptions will be positively related to overall need satisfaction.

## NEED SATISFACTION AND JOB SATISFACTION

At the core of a number of prominent theories of job satisfaction is the notion that the satisfaction of basic needs improves one's satisfaction with his or her job. For example, Herzberg et al.'s (1959) two-factor theory of job satisfaction suggests that there are two broad categories of factors that influence satisfaction (or dissatisfaction) with one's job. Herzberg et al. posit that job satisfaction is caused by motivators (e.g., achievement, recognition, advancement, responsibility), whereas job dissatisfaction is caused by hygiene factors (e.g., pay, working conditions, peer relations). Of particular



importance to the theory is the notion that motivation and hygiene factors influence job satisfaction because these factors influence the satisfaction of basic human needs such as competence, autonomy, and relatedness as described by SDT.

The job characteristics model (Hackman & Oldham, 1976) also emphasizes the link between basic human needs and job satisfaction. The job characteristics model posits that jobs are more intrinsically motivating for employees when they are high in skill variety (using many skills and talents), task identity (working on all aspects of a piece of work), task significance (impacting others' lives), autonomy (performing job duties freely), and feedback (receiving information about expectations and performance requirements). These job characteristics are expected to influence employee's fundamental human needs such as autonomy and competence, which ultimately influence motivation, and, more germane to the present research, job satisfaction. In support of the job characteristics model are meta-analyses linking the core job characteristics to job satisfaction (Fried & Ferris, 1987; Loher, Noe, Moeller, & Fitzgerald, 1985).

In sum, Herzberg et al.'s (1959) two-factor theory and Hackman and Oldham's (1976) job characteristics model both provide support for the important role of satisfying basic needs as a precursor to job satisfaction.

**Hypothesis 3:** Overall need satisfaction will be positively related to job satisfaction.

Implicit in the first three hypotheses, and in our theoretical model, is that servant-leadership relates to job satisfaction through two mediating variables—justice perceptions and need satisfaction. Thus, here we explicitly predict a fully mediated model.

**Hypothesis 4:** The relationship between servant-leadership and need satisfaction is fully mediated by overall justice perceptions and need satisfaction. Specifically, servant-leadership is expected to relate positively to justice perceptions, which in turn positively relates to need satisfaction, and ultimately eventuates in job satisfaction.

## METHODS

### Participants and procedure

A total of 187 business undergraduates at a south-eastern American university participated in the study. Of the 187 participants, 83% were currently employed with approximately 2 years of work experience, and the remaining 17% had been recently employed. In terms of their ethnicity, 63%

were White, 14% were Hispanic, 8% were Black, 5% were Asian, 3% were biracial, 4% were international, and 2% marked "other". In addition, the sample was 56% male and the average age of participants was 24 years old.

Participants seated in a classroom were asked to fill out a survey. They were asked to think about their current or most recent job and respond to a survey about their work experiences and attitudes. They provided assessments of servant-leadership, overall organizational justice, individual differences in need satisfaction at work (e.g., autonomy, competence, relatedness), job satisfaction, and demographics.

## Measures

*Servant-leadership.* Servant-leadership was assessed with a 14-item measure developed by Ehrhart (2004). Ehrhart conducted an extensive review of the conceptual literature on servant-leadership and identified seven categories of servant-leadership behaviours (e.g., forming relationships with subordinates, empowering subordinates, helping subordinates grow and succeed, behaving ethically, having conceptual skills, putting subordinates first, and creating value for those outside the organization). Two items for each of these seven categories were included for a total of 14 items. Ehrhart collected convergent and divergent validity data on the measure and a confirmatory factor analysis revealed it was distinct from other forms of leadership (i.e., LMX, transformational leadership). Thus, we deemed it appropriate to use Ehrhart's measure in this research.

Responses for all items were made on a 5-point scale, ranging from 1 = "strongly disagree" to 5 = "strongly agree." Sample items include, "My immediate supervisor makes me feel like I work with him/her, not for him/her" and "My immediate supervisor works hard at finding ways to help his/her employees be the best they can be." The alpha for the scale was .94.

*Organizational justice.* Overall organizational justice was assessed with a measure by Ambrose and Schminke (2006). Responses for all items were made on a 5-point scale, ranging from 1 = "strongly disagree" to 5 = "strongly agree". Sample items include, "Overall, I'm treated fairly by my organization" and "In general, the treatment I receive around here is fair." The alpha for the scale was .88.

*Need satisfaction.* To assess overall need satisfaction, all three needs specified by SDT were assessed with Gagné's (2003) measure of need satisfaction at work. Responses for all items were made on a 5-point scale, ranging from 1 = "strongly disagree" to 5 = "strongly agree". *Autonomy need satisfaction* was assessed with six items and included questions such as,

“I feel like I can make a lot of inputs to deciding how my job gets done” and “When I am at work, I have to do what I am told” (reverse scored). The alpha for the scale was .71. *Competence need satisfaction* was assessed with six items and included questions such as, “I do not feel very competent when I am at work” (reversed scored) and “People at work tell me I am good at what I do.” The alpha for the scale was .65. *Relatedness need satisfaction* was assessed with eight items and included questions such as, “People at work care about me” and “There are not many people at work that I am close to” (reverse scored). The alpha for the scale was .85. The alpha for the overall need satisfaction scale (e.g., including all of the need satisfaction items) was .87.

We conducted two confirmatory factor analyses (CFA) in LISREL 8.72 (Jöreskog & Sörbom, 1993) to assess the dimensionality of the need satisfaction measure. First, we specified the 20 need satisfaction items to load onto a single, latent need satisfaction factor. Results of this model did not provide an adequate fit to the data,  $\chi^2 = 541.05$ ,  $df = 170$ ,  $p < .001$ , CFI = .87, RMSEA = .12, SRMR = .09, so we ran a three-factor model in which the autonomy, competence, and relatedness items were specified to load onto their respective factors and we allowed the factors to correlate. A three-factor model provided an adequate fit,  $\chi^2 = 447.73$ ,  $df = 167$ ,  $p < .001$ , CFI = .90, RMSEA = .10, SRMR = .09. A change in  $\chi^2$  test indicated that the three-factor model represented a significantly better fit than the one-factor model,  $\chi^2$  difference = 93.32,  $df = 3$ ,  $p < .001$ .

*Job satisfaction.* We measured job satisfaction using the five-item version of Brayfield and Rothe’s (1951) Job Satisfaction Index (JSI). Employees rated the extent to which they agreed with statements such as, “I find real enjoyment in my work” and “I am disappointed I ever took this job” (reverse coded). Responses for all items were made on a 5-point scale, ranging from 1 = “strongly disagree” to 5 = “strongly agree”. The alpha for the scale was .89.

## Analytic procedures

We used structural equation modelling (SEM) to test our hypotheses. SEM allows for comparisons between the fit of a theoretical model and alternative models (Anderson & Gerbing, 1988). One limitation of SEM is that it does not indicate whether a model that fits the data is in fact the “true” model, because other models may fit the data equally well (MacCullum, Wegener, Uchino, & Leandre, 1993). We sought to address this limitation by specifying and testing alternative a priori models (Anderson & Gerbing, 1988). Therefore, we compared the fit of fully mediated and a number of partially mediated models to determine which model most accurately

represents the data. However, it should be noted that using model comparisons still does not provide evidence of a “true” model.

## RESULTS

### Descriptive statistics

The means, standard deviations, reliabilities, and intercorrelations among the key variables are presented in Table 1.

### Measurement model

Before testing the proposed mediated model, we tested to see if the measurement model had good fit. We tested a measurement model that had four latent factors (e.g., servant-leadership, overall organizational justice, overall need satisfaction, and job satisfaction) and 14 indicators (three parcels for servant-leadership, three parcels for overall organizational justice, three parcels for overall need satisfaction, and the five items used to assess job satisfaction). We allowed the three needs to be correlated when estimating the model. A minimum of three indicators is needed to identify a latent concept (Klein, 1998); for job satisfaction, this was not an issue as all five scale items were modelled as indicators. For the other latent variables, however, we followed the recommendations of Schaubroeck, Ganster, and Fox (1992) to create three parcels among items from the leadership, justice, and need satisfaction scales. In general, parcels tend to be more reliable than the individual items and allow for more accurate estimation of latent variable models than when using the individual items alone.

The 14 items that measured servant-leadership were randomly placed in three parcels, two consisting of five items each and one consisting of four items. The six items that were used to measure overall justice were randomly

TABLE 1  
Means, standard deviations, reliabilities, and intercorrelations among measures

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Servant-leadership	3.21	0.94	(.94)						
2 Overall organizational justice	3.97	0.86	.51*	(.88)					
3 Overall need satisfaction	3.90	0.55	.42*	.42*	(.87)				
4 Autonomy need satisfaction	3.57	0.65	.39*	.41*	.76*	(.71)			
5 Competence need satisfaction	3.99	0.64	.30*	.37*	.75*	.50*	(.65)		
6 Relatedness need satisfaction	4.00	0.75	.31*	.30*	.90*	.57*	.49*	(.85)	
7 Job satisfaction	1.40	0.60	.37*	.44*	.67*	.48*	.65*	.53*	(.89)

*n* = 187; \**p* < .05.

placed in three parcels consisting of two items each. The 20 items that measured need satisfaction were divided into three parcels that consisted of the scale scores for autonomy, competence, and relatedness need satisfaction. And the five items measuring job satisfaction were forced to load on the job satisfaction latent construct. The measurement model had good fit,  $\chi^2 = 150.81$ ,  $df = 71$ ,  $p < .01$ ,  $CFI = .95$ ,  $RMSEA = .08$ ,  $SRMR = .05$ , and all of the indicators had statistically significant ( $p < .01$ ) loadings on their intended constructs. All standardized loadings were greater than .70.

## Structural model

After identifying a well-fitting measurement model, we tested the proposed theoretical model. The theoretically specified model used for hypothesis testing is shown in Figure 1. To test for full versus partial mediation, we followed procedures recommended by MacKinnon, Lockwood, Hoffman, West, and Sheets (2002), and James, Muliak, and Brett (2006). Specifically, we tested the fully mediated model and six partially mediated models. Subsequently, we performed  $\chi^2$  difference tests to identify the best-fitting model. If two models did not significantly differ in terms of their model fit, the most parsimonious model was chosen.

The results of these model comparisons are provided in Table 2. Table 2 provides the fit statistics for the measurement model, the hypothesized fully mediated model, and a number of partially mediated models. The results of

TABLE 2  
Results of model comparisons

<i>Model</i>	$\chi^2$	<i>df</i>	<i>TLI</i>	<i>CFI</i>	<i>RMSEA</i>	<i>SRMR</i>
1. Measurement model	150.813	71	.94	.95	.08	.05
2. Fully mediated model (hypothesized)	158.692	74	.64	.95	.08	.06
3. Model includes direct path from servant-leadership to need satisfaction	151.519	73	.94	.95	.08	.05
4. Model includes direct path from justice to job satisfaction	158.058	73	.93	.95	.08	.06
5. Model includes direct path from servant-leadership to job satisfaction	157.800	73	.93	.95	.08	.06
6. Model includes direct paths from servant-leadership and justice to job satisfaction	157.643	72	.93	.95	.08	.06
7. Model includes direct paths from servant-leadership to need satisfaction and job satisfaction	151.488	72	.94	.95	.08	.05
8. Model includes direct paths from servant-leadership to justice and job satisfaction	150.813	71	.94	.95	.08	.05

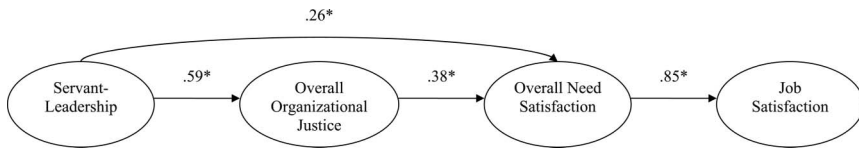


Figure 2. Best-fitting structural equation model.

$\chi^2$  difference tests revealed that the best fitting, most parsimonious model was Model 3 that included a direct path from servant-leadership to need satisfaction. Thus, while the hypothesized fully mediated model had good fit, the partially mediated model which included a direct path from servant-leadership to need satisfaction provided the best-fitting model. Figure 2 provides that standardized path coefficients for the best model. This finding suggests that the relationship between servant-leadership and need satisfaction is only partially mediated by justice perceptions.

To further examine mediation, we calculated the direct and indirect effects. We first examined the direct and indirect effects for justice as a mediator of the relationship between servant-leadership and need satisfaction. Results demonstrated that the direct effect,  $\beta = .25$ ,  $p < .05$ , and indirect effect,  $\beta = .22$ ,  $p < .05$ , were both significant, thus suggesting partial mediation. In contrast, in testing need satisfaction as a mediator of the relationship between justice and job satisfaction, the direct effect was not significant,  $\beta = .19$ , *ns*, whereas the indirect effect was significant,  $\beta = .28$ ,  $p < .05$ , thus suggesting full mediation.

## DISCUSSION

The purpose of this study was to empirically examine the relationship between servant-leadership and follower need and job satisfaction by examining organizational justice as a mediator of these relationships. Consistent with the proposed theoretical model, the relationship between servant-leadership and follower job satisfaction was mediated by justice perceptions and need satisfaction. The results of model comparisons revealed that the best-fitting, most parsimonious model also included a direct path from servant-leadership to need satisfaction, suggesting that, while justice does partially mediate the relationship, there is also a direct relationship between servant-leadership and follower need satisfaction. These empirical findings support theoretical work on servant-leadership which suggested that leaders play an important role in satisfying follower needs and ultimately improving job satisfaction. In what follows, we discuss the theoretical and practical implications of these findings.

## Theoretical implications

The findings from this research have implications for the servant-leadership literature. Specifically, the results of this study suggest that, as theorized, servant-leaders are more likely to help followers to have their needs satisfied at work. In addition, support was found for the mediating role of justice perceptions in this relationship. Thus, one mechanism by which servant-leaders are able to help satisfy follower needs is by improving their justice perceptions. Interestingly, while justice perceptions mediated the relationship between servant-leadership and need satisfaction, there was still a significant, direct relationship between servant-leadership and need satisfaction. This partially mediated relationship suggests that while justice helps explain the relationship between servant-leadership and need satisfaction, there are other processes that likely help explain this relationship. For example, servant-leaders may engender positive emotions from employees and subsequently they feel more satisfied at work. In sum, the findings from this research support the direct link from servant-leadership to need satisfaction, and also highlight that justice perceptions are one underlying mechanism for this relationship.

In addition to the implications for servant-leadership theory, there are also implications for the organizational justice literature. This study is to our knowledge the first to empirically examine the central tenets of the multiple needs model of justice (MNM; Cropanzano et al., 2001) by exploring the link between justice and need satisfaction, and how need satisfaction mediates the relationship between justice and job satisfaction. In support of the MNM, justice perceptions were positively related to the satisfaction of the basic needs identified in self-determination theory. While prior research on justice has generally focused on identity or social exchange processes to link justice perceptions to outcomes (Colquitt, Conlon, Wesson, Porter, & Ng, 2001), the present research suggests that need satisfaction is another explanatory mechanism for understanding the effects of justice.

## Practical implications

There are also a number of practical implications of the present research. One important implication is that leadership effects are realized through the fair treatment and the satisfaction of follower needs. Thus, managers should seek to develop fair reward systems, utilize fair procedures, and treat employees with appropriate interpersonal treatment. In addition, they also must be cognizant of the specific needs of followers and seek to act in ways to help followers grow and develop.

Given the importance of leadership in fostering the development of employees, it makes sense to try to select and/or train leaders who are able



to engender feelings of fair treatment and who are capable of addressing employee needs. The use of structured interview questions and integrity tests could be useful in selecting servant-leaders. Further, there is increasing support that training on organizational justice principles is effective for managers (Greenberg, 2006; Skarlicki & Latham, 1996).

A final practical implication is that given that HR systems are increasingly interested in utilizing human capital (Delery & Doty, 1996), fostering servant-leaders could be useful in developing a culture in which employee development is valued and encouraged. This explicit focus on employee development could serve an organization that strategy relies on its human capital.

### Limitations and future directions

The current research is not without limitations. A major limitation of the present research is that all data were collected from the same source. While it makes the most sense that the focal individual is the best equipped to rate their leader, and their own justice perceptions, and need and job satisfaction, response bias is still a concern. In addition, while there is strong theory supporting the theoretical model tested in this research, the data were cross-sectional and correlational so it is impossible to draw definitive causal conclusions from the results. Another limitation of this research is that a student sample was used. However, the student sample did report on their current (or most recent) job and over 80% of the participants were currently working at the time of the study. Future research should address these limitations by collecting data from multiple sources and employing a longitudinal design with working adults. In addition, studying the effects of servant-leadership in the lab is also a fruitful avenue for future research to better examine issues of causality.

Another drawback of the present research is that job satisfaction was the only outcome examined. While it made sense to examine job satisfaction because of the theory linking it to need satisfaction, it would be interesting in future research to examine additional outcomes of servant-leadership, justice, and need satisfaction. For example, additional job attitudes such as organizational commitment as well as performance would be interesting to examine. In addition, while we focused on broad outcomes of servant-leadership, future research should examine leader-referenced outcomes (e.g., interactional justice, satisfaction with leader). In a related vein, we focused largely on the need satisfaction literature to explain the relationship between servant-leadership and job satisfaction. In expanding the dependent variables examined, future work should also examine other psychological processes besides just need satisfaction. For example, social exchange and social learning processes could also provide an explanatory mechanism by

which servant-leaders influence their followers (Brown, Treviño, & Harrison, 2005). Finally, because SEM cannot provide a “true” model, future work that examines servant-leadership in lab settings to further examine causality should prove useful.

## CONCLUSIONS

The purpose of the present research was to empirically test a central tenet of servant-leadership theory—that servant-leaders help to satisfy follower needs. Results from a structural equation model provide general support for the study hypotheses, such that the effect of servant-leadership on job satisfaction was mediated by justice perceptions and need satisfaction. Hopefully this research spurs scholars to further empirically examine the effects of servant-leadership in organizations.

## REFERENCES

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–299). New York: Academic Press.
- Ambrose, M. L., & Arnaud, A. (2005). Distributive and procedural justice: Construct distinctiveness, construct interdependence, and overall justice. In J. Greenberg & J. Colquitt (Eds.), *The handbook of organizational justice* (pp. 59–84). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Ambrose, M. L., & Schminke, M. (2006, May). *An examination of overall justice*. Paper presented at the annual meeting of the Society of Industrial and Organizational Psychology, Dallas, TX.
- Anderson, J. G., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *107*, 238–246.
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *Leadership Quarterly*, *16*, 315–338.
- Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*, 2045–2068.
- Barbuto, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group and Organization Management*, *31*, 300–326.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Bies, R. J., & Moag, J. F. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazerman (Eds.), *Research on negotiations in organizations* (Vol. 1, pp. 43–55). Greenwich, CT: JAI Press.
- Brayfield, A., & Rothe, H. (1951). An index of job satisfaction. *Journal of Applied Psychology*, *35*, 307–311.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *Leadership Quarterly*, *17*, 595–616.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*, 117–134.

- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology, 86*, 386–400.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology, 86*, 425–445.
- Cropanzano, R., & Byrne, Z. S. (2000). Workplace justice and the dilemma of organizational citizenship. In M. van Vugt, T. Tyler, & A. Biel (Eds.), *Collective problems in modern society: Dilemmas and solutions* (pp. 142–161). London: Routledge.
- Cropanzano, R., Byrne, Z. S., Bobocel, D. R., & Rupp, D. E. (2001). Moral virtues, fairness heuristics, social entities, and other denizens of organizational justice. *Journal of Vocational Behavior, 58*, 164–209.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuit: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268.
- De Cremer, D., & Blader, S. (2006). Why do people care about procedural fairness? The importance of belongingness in responding and attending to procedures. *European Journal of Social Psychology, 36*, 211–228.
- De Cremer, D., & Tyler, T. R. (2005). Managing group behavior: The interplay between procedural fairness, self, and cooperation. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 151–218). New York: Academic Press.
- Delery, J. E., & Doty, D. H. (1996). Models of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal, 39*, 802–835.
- Ehrhart, M. G. (2004). Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology, 57*, 61–94.
- Fried, Y., & Ferris, G. R. (1987). The validity of the job characteristics model: A review and meta-analysis. *Personnel Psychology, 40*, 287–322.
- Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion, 27*, 199–223.
- Graham, J. W. (1991). Servant-leadership in organizations: Inspirational and moral. *Leadership Quarterly, 2*, 105–119.
- Greenberg, J. (1987). A taxonomy of organizational justice theories. *Academy of Management Review, 12*, 9–23.
- Greenberg, J. (1993). Stealing in the name of justice: Informational and interpersonal moderators of theft reactions to underpayment inequity. *Organizational Behavior and Human Decision Processes, 54*, 81–103.
- Greenberg, J. (2001). Setting the justice agenda: Seven unanswered questions about “what, why, and how”. *Journal of Vocational Behavior, 58*, 210–219.
- Greenberg, J. (2006). Losing sleep over injustice: Attenuating insomniac reactions to underpayment inequity with supervisory training in interactional justice. *Journal of Applied Psychology, 91*, 58–69.
- Greenleaf, R. K. (1970). *The servant as a leader*. Indianapolis, IN: Greenleaf Center.
- Greenleaf, R. K. (1977). *Servant leadership*. New York: Paulist Press.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250–279.
- Harrison, D., Newman, D., & Roth, P. (2006). How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. *Academy of Management Journal, 49*, 305–325.
- Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The motivation to work*. New York: Wiley.

- James, L. R., Mulaik, S. A., & Brett, J. M. (2006). A tale of two methods. *Organizational Research Methods*, 9, 233–244.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8 user's reference guide*. Chicago: Scientific Software.
- Klein, R. B. (1998). *Principles and practice of structural equation modeling* (pp. 91–131). New York: Guilford Press.
- Leventhal, G. S. (1976). The distribution of rewards and resources in groups and organizations. In L. Berkowitz & E. Walster (Eds.), *Advances in experimental social psychology* (Vol. 9). New York: Academic Press.
- Lind, E. A., & Tyler, T. R. (1988). *The social psychology of procedural justice*. New York: Plenum.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relation of job characteristics to job satisfaction. *Journal of Applied Psychology*, 70, 280–289.
- MacCullum, R. C., Wegener, D. T., Uchino, B. N., & Leandre, R. F. (1993). The problem of equivalent models in applications of covariance structure analysis. *Journal of Applied Psychology*, 114, 185–199.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83–104.
- Matteson, J. A., & Irving, J. A. (2006). Servant versus self-sacrificial leadership: A behavioral comparison of two follow-oriented leadership theories. *International Journal of Leadership Studies*, 2, 36–51.
- Northouse, P. G. (2001). *Leadership: Theory and practice*. Thousand Oaks, CA: Sage.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55, 68–78.
- Schaubroeck, J., Ganster, D. C., & Fox, M. L. (1992). Dispositional affect and work-related stress. *Journal of Applied Psychology*, 77, 322–335.
- Skarlicki, D. P., & Latham, G. P. (1997). Leadership training in organizational justice to increase citizenship behavior within a labor union: A replication. *Personnel Psychology*, 50, 617–634.
- Thibaut, J. W., & Walker, L. (1975). *Procedural justice: A psychological perspective*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 115–191). San Diego, CA: Academic Press.
- Van Knippenberg, D., De Cremer, D., & van Knippenberg, B. (2007). Leadership and fairness: The state of the art. *European Journal of Work and Organizational Psychology*, 16, 113–140.

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