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# **How Can Servant Leaders Foster Public Employees' Service - Oriented Behaviors?**

## **A Multilevel Multisource Study in Canadian Libraries**

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# **How Can Servant Leaders Foster Public Employees' Service - Oriented Behaviors?**

## **A Multilevel Multisource Study in Canadian Libraries**

### **Abstract**

Servant leadership, a leadership style that focuses on leading by serving, is well suited to supporting front-line employees' service-oriented behaviors in the public sector.

However, we still know little about how servant leaders shape these behaviors in this specific context. Drawing on social learning theory, relational identity, and service linkage research, this article addresses this gap and tests a model in which servant leadership is related to service-oriented behaviors through customer orientation at the individual level and through service climate at the group level. The research hypotheses were tested, using a multilevel model, on a sample of 922 employees, 86 supervisors and 9,547 citizens nested in 86 Canadian libraries. Results show that servant leaders are associated with high service-oriented behaviors through the ability to strengthen individual customer orientation and service climate. Overall, this article highlights that developing servant leaders may help public organizations reach their goal of serving citizens better.

### **Keywords**

Servant leadership; service climate; customer orientation

## **Evidence for Practice**

- Public managers can spur service behaviors among their front-line public employees by adopting servant leader behaviors.
- Servant leaders were found to positively influence service performance (a) through their ability to build a collective perception that serving citizens is highly valued (service climate); and (b) through their ability to put citizens at the heart of employees' identity (customer orientation).
- Public organizations who want to improve service to citizens would benefit by promoting or hiring servant leaders into manager positions, and by training or coaching their current leaders to become servant leaders.
- Consistent with servant leadership philosophy, it would be advantageous for public organizations to develop or reinforce a 'servant culture', by facilitating relationship building between leaders and employees, by promoting skills development, by paying attention to autonomy levels, and by focusing on service and other-orientation values.

# **How Can Servant Leaders Foster Public Employees' Service-Oriented Behaviors?**

## **A Multilevel Multisource Study in Canadian Libraries**

In public organizations, service performance, or the service quality offered to citizens, represents a major type of performance (Kelly and Swindell 2002). Although service performance may be assessed in various ways, the evaluation of civil servants' service behaviors is especially salient for user- or customer-focused organizations such as public libraries (Weinstein and McFarlane 2017). In parallel with public organizations' quest to better *serve* citizens, scholars have started to build knowledge about the various factors contributing to service behaviors of front-line public employees. Notably, managers' leadership has been identified as essential to reach high levels of such behaviors (Paarlberg and Lavigna 2010). However, very few studies have explored whether and how servant leadership, a leadership style centered on the development and empowerment of followers (Greenleaf 1977), could be of value in promoting high levels of service-oriented behaviors in the public sector. This is quite surprising given the calls to explore servant leadership as a means of improving public organization performance (e.g., Hanson and Baker 2017). By definition, servant leadership focuses on leading by serving (Greenleaf 1977). Servant leaders' prioritization of followers' needs over organizational goals and their own needs can thus instill servant behaviors in their followers, who in turn are more likely to demonstrate servant leadership and high levels of service to citizens (Chen, Zhu, and Zhou 2015).

The main purpose of the current study is to answer the question of how servant leadership may foster employee service-oriented behaviors in public organizations. We

draw on the theoretical frameworks of social learning theory (Bandura 1977), relational identity theory (Sluss and Ashforth 2007), and service linkage research (Bowen and Schneider 2014) to develop and test a multilevel model in which a) civil servants' customer orientation mediates the relationship between individual perceptions of servant leadership and service-oriented performance behaviors rated by supervisors; and b) service climate mediates the relationship between groups' shared perceptions of servant leadership and service-oriented performance behaviors rated by citizens.

Our research contributes to the literature in three ways. First, we extend our knowledge regarding the importance of servant leadership in public organizations. Although the literature has recently shown an interest in servant leadership as an effective leadership style for public organizations, the evidence ensues mainly from follower motivational or attitudinal outcome variables such as public service motivation (e.g., Liu, Hu, and Cheng 2015; Liu et al. 2017; Shim and Park 2019), or organizational commitment (Miao et al. 2014), or from general employee performance behaviors such as organizational citizenship behaviors or knowledge sharing (Mostafa and El-Motalib 2019; Tuan 2017). As a result, we know that servant leadership is likely to foster civil servants' desire to serve the public service cause in general, but less attention has been paid to the behaviors public employees display while serving and helping citizens to address their needs and interests. This is unfortunate because these behaviors are a key element of service performance (Gwinner, Brown, and Kumar 2005): it is through these behaviors that frontline public employees translate their attitudes into reality and customize the service provided to citizens. The current study extends this literature by assessing the relationship between servant leadership and public' employees service-oriented behaviors.

Second, although service-oriented behaviors are observable and measurable actions, it is reasonable to expect a certain degree of subjectivity in their assessment (Andersen, Boesen, and Pedersen 2016). Indeed, in public service organizations, citizens come into direct contact with service production, and may perceive service-oriented behaviors differently than the employees' supervisors, who may or may not be aware of each step of the service delivery process. It thus seems important to examine both the supervisor-employee interface and the employee-customer/citizens interface if we want to measure service performance adequately. By measuring service-oriented behaviors evaluated both by supervisor and by citizens, our study expands the literature on service performance and offers additional insight into how to address the measurement of this volatile and intangible service process (Liao et al. 2009).

Third, we identify the mediating variables through which servant leadership affects service-oriented behaviors. Given that research on servant leadership in the public sector is still in its infancy, we lack the theoretical background on the processes through which servant leadership is likely to affect civil servants' performance behaviors. Another shortcoming of past studies is that they focused on the individual level of analysis and did not theorize about the effects of servant leadership at the group level. Our study is among the first to develop theoretical arguments explaining the individual and the group level mechanisms through which servant leadership is likely to affect service-oriented behaviors, and to test these individual and group level mechanisms conjointly in a multilevel model.

In order to achieve our research objective, we surveyed employees and supervisors of a network of libraries located in the Canadian province of Quebec, and the



citizens that use the libraries. Given that libraries are especially devoted to serving citizens, we believe that our research field is well suited to our research purpose. Quebec public libraries have undergone a spectacular transformation in recent years, as they are no longer content with simply building and distributing book collections, but now offer a hybrid of different services that come together to create the third place of reference and socialization for citizens -the place between home and work-. Public libraries are assuming roles and functions which cross over a myriad of different domains from the society, like improving online library experience, creating exclusive gaming evenings for teenagers, developing animation around a book on difficult subjects, teaching language laboratories, etc. As the public libraries' roles expand, library personnel must anticipate individual and community needs and connect people to available and pertinent resources, and library supervisors must support them to build this new library as a place of multiple services.

### **Servant Leadership and Service-Oriented Behaviors**

Because of the particularities of public service delivery, servant leadership can be regarded as a leadership style well suited to fostering service-oriented behaviors in public libraries. Indeed, given that the emphasis on service is one of the core tenets of servant leadership, it is likely that leaders who focus on others' needs, trusting relationships and serving others would effectively cultivate serving behaviors among civil servants in public libraries.

The essence of servant leadership can be found in the seminal essay by Greenleaf (1977), and is well translated in the definition by Eva et al. (2019): "Servant leadership is an (1) other-oriented approach to leadership (2) manifested through one-on-one

prioritizing of followers' individual needs and interests, (3) and outward reorienting of their concern for self towards concern for others within the organization and the larger community” (Eva et al. 2019, 114). This definition has three main features. First, the *motive* of servant leadership directly refers to an orientation towards others, a “natural feeling that one wants to serve, to serve first” (Greenleaf 1977, 14). Second, the *mode* of servant leadership is based on a one-on-one prioritizing of individual needs. This means that each leader-follower relationship can take different forms and servant leaders act as stewards to elevate each follower to his/her better self (Eva et al. 2019). Third, the *mindset* of servant leadership refers to the deliberate focus of maintaining follower development that encompasses concern for the larger community. By placing the needs of their followers at the center of their efforts, before their own needs, servant leaders are a ‘centrifugal force that move followers from self-serving towards other-serving orientation’ (Eva et al. 2019, 114), and instil in them the desire to become themselves servant leaders in the community (Greenleaf 1977). Congruent with this fundamental definition, but in a more operational way, Liden et al. (2008) identified seven dimensions that describe the essential *behavioral characteristics* of a servant leader: providing emotional healing, empowering, helping subordinates grow and succeed, putting subordinates first, creating value for the community, having conceptual skills, and behaving ethically. In the context of public libraries, a servant leader would, for example, be of assistance when employees are dealing with difficult citizens, help his/her employees develop new digital skills and increase their technology proficiency, or encourage them to see the library as a community builder and act with respect and integrity toward citizens.

Servant leadership shares similarities with other major leadership theories, as they all recognize the importance of positive interactions with employees. Yet the idea that serving followers should be the primary goal of leading is unique among leadership approaches (Eva et al. 2019). Recent meta-analytic investigations provided evidence of the utility of servant leadership as a unique approach in the leadership literature. A meta-analysis by Banks et al. (2018) showed that servant leadership has been associated with followers' in-role performance ( $\rho = .23$ ), unit performance ( $\rho = .44$ ), and organizational citizenship behaviors ( $\rho = .40$ ). Further, Hoch et al. (2018) provided meta-analytic support that servant leadership explains, on average, 12% of incremental variance, over and above transformational leadership, in both attitudinal measures (i.e., engagement, job satisfaction, commitment) and behavioral measures (i.e., job performance, OCB). Extending those previous meta-analyses, Lee et al. (2020) provided meta-analytic evidence that servant leadership has incremental predictive validity in a variety of individual and team-level behaviors (i.e., performance, OCB, counterproductive performance, creativity, voice) over transformational leadership, but also authentic and ethical leaderships. Examining boundary conditions of servant leadership, Lee and colleagues (2020) also found that SL is an effective approach in a variety of contexts, such as high- or low-power distance cultures, or high or low capital-intensive industries.

Although servant leadership is an approach that seems to naturally fit the public service context, it is only recently that some scholars have drawn attention to the potential benefits of servant leadership for public sector organizations (e.g., Bao, Li, and Zhao 2018; Shim, Park, and Eom 2016). Notably, research conducted in a wide range of Asian public organizations in different sectors (e.g. electricity, telephone, and water

industries) have demonstrated the effectiveness of servant leaders in helping to develop employees' public service motivation at both the individual and work group levels (Liu, Hu, and Cheng 2015; Liu et al. 2017; Schwarz, Newman, Cooper, and Eva 2016; Tuan 2016). Servant leadership has also been found to foster proactive behaviors among Egyptian hospital nurses (Mostafa and El-Motalib 2019).

Servant leaders are particularly important for public libraries, given their emphasis on serving all types of citizens, including aging population, immigrated persons, students that dropouts from school, etc. Interactions with a great variety of citizens implies that civil servants must have the ability to identify, understand and respond to citizens' different needs. By forming quality relationships with them and by offering assistance while employees try to attain work goals and master new skills, servant leaders enhance employees' abilities to deliver high-quality services and to adopt new ways to serve citizens. Moreover, over time, the altruistic and service-orientation values that emanate from servant leaders' behaviors, are transmitted and internalized by their employees, who then behave with the same benevolence towards the people they serve (Chen et al. 2015; Hunter et al. 2013). Therefore, a servant and other-oriented leader should leverage employees' service-oriented behaviors in the public libraries.

Implicit in many of the writings on servant leadership is the fact that servant leadership may operate as both an individual and a group phenomenon. *Individual level* servant leadership refers to the leadership behaviors experienced and perceived by an individual employee. Accordingly, servant leaders focus on their followers' individual needs, they develop one-on-one relationships with them, and each follower develops his/her own perception of servant leadership. *Group level* servant leadership refers to the

overall pattern of leadership behaviors displayed to the entire work group. It can be viewed as a shared perception of leader' servant leadership among group members. Following the recommendation to examine the impact of leadership approaches at multiple levels of analysis (Yammarino et al. 2005), we develop a multilevel model that explains how servant leadership affects service-oriented behaviors at both individual and group levels.

### **Servant Leadership, Employee Customer Orientation, and Service-Oriented Behaviors**

Servant leadership should be related to service-oriented behaviors at the individual level through its positive effect on employees' customer orientation. Employees' customer orientation can be defined as a "set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders" (Deshpandé, Farley, and Webster 1993, 27), or as an "affinity to be in contact with the customers and the understanding of the importance of customer orientation for both the individual and the company's performance" (Stock and Hoyer 2005, 538). Although the concept of customer orientation has its roots in the private sector literature, numerous scholars have stressed its particular relevance to the public service. Customer orientation has been introduced as a dimension of the more global concept of public service motivation (Andersen et al. 2011; Vandenabeele 2008) and has also been construed as a distinct form of prosocial motivation (Andersen and Kjeldsen 2013) under the term "user orientation". Employees who have a strong customer orientation not only believe in the importance of serving citizens' interests, but also enjoy interacting with citizens, and exhibit strong

concerns for understanding and responding to their needs, a role that they identify with and find personally meaningful.

Servant leaders should play an important role in the formation of their followers' customer orientation. According to social learning theory (Bandura 1977), individuals learn by observing and emulating not only behaviors, but also beliefs, values, and lasting attitudes of significant and credible role models, a process referred to as vicarious learning or role modeling. For effective role modeling to occur, individuals must pay attention to the models and be motivated to emulate them. Given that servant leaders possess the desirable attributes of being empowering, empathetic, and oriented toward the common good, they are likely to be perceived as attractive role models, and deemed a worthy source of emulation (Hunter et al. 2013; Liden et al. 2008, 2014). In fact, following the seminal work of Greenleaf (1977), Graham (1991) identified followers' emulation of the leader's orientation toward service as a key dimension of servant leadership. Servant leaders apparently have an inherent capacity to instill a service orientation in their followers.

Another aspect that makes servant leaders such salient models is the fact that, because of their orientation towards others, they have the capacity to foster relational identification among their followers (Yoshida et al. 2014). Identification is indeed considered pivotal in followers' social learning process, in that it amplifies the modeling power of the leader (Wang et al. 2019). Relational identification refers to the extent to which individuals define themselves in terms of a certain role relationship, such as a leader-subordinate relationship (Sluss and Ashforth 2007). The more positively individuals evaluate the person and the role relationship they have with that person, the

more they define themselves according to this relationship. Because servant leaders favor the interests of their followers over their own and have a genuine concern for helping others (Liden et al. 2008), they build and sustain serving relationships with their followers. Over time, followers who are involved and appreciate these role relationships come to integrate their serving nature into their own self-definition, and enact this relational dynamic with the citizens they serve. In line with these arguments, empirical research has shown that servant leadership is positively related to salespersons' customer orientation (Jaramillo et al. 2009) and prefecture-level government agency employees' public service motivation (Schwarz et al. 2016).

By developing their followers' customer orientation, servant leaders should in turn influence their service behaviors. Indeed, because citizen-oriented employees view serving the citizen in a positive manner, they should be more inclined to adopt service behaviors. The theory of reasoned action (Ajzen and Fishbein 1980) and the subsequent theory of planned behavior (Ajzen 1991) are useful frameworks to provide insight into the relationship between customer orientation and service behaviors. These theories suggest that attitudes about a behavior will predict both the intention to perform and the actual performance of that behavior. In the context of public service, these frameworks suggest that employees who have strong customer orientation will voluntarily engage in proactive service behaviors that respond to citizens' concerns and needs. This is consistent with the results of research studies from the private sector that show a positive relationship between customer orientation attitudes and customer service behaviors (Stock and Hoyer 2005). Hence the following hypothesis:

*Hypothesis 1.* Customer orientation mediates the relationship between servant leadership and individual service-oriented behaviors rated by supervisors (individual level).

### **Servant Leadership, Service Climate, and Service-Oriented Behaviors**

Servant leadership may also influence service behaviors by fostering a positive group service climate. At this level, servant leadership refers to the group members' aggregate perceptions of leadership behaviors, and can exercise its influence on performance by acting on the overall dynamics of the group, and more specifically on the service climate of the work unit (Hunter et al. 2013).

Service climate can be defined as the “employees’ shared perceptions of the policies, practices, and procedures that are rewarded, supported, and expected concerning customer (citizen) service” (Schneider, Salvaggio, and Subirats 2002, 222). It reflects the group’s shared norms and values regarding the importance given to service quality (Pugh et al. 2002). Although the vast majority of research on service climate has been conducted in the private sector, several studies have provided evidence of its relevance in the public sector (Nunes, Martins, and Mozzicafreddo 2018; Vashdi, Vigoda-Gadot, and Shlomi 2013; Vigoda-Gadot and Meiri 2008). For instance, Nunes et al. (2018) found that service climate was related to the performance of a Brazilian health sector organization and a Portuguese organization from the economy sector. Service climate was also found to be related to group-level citizenship behaviors of Israeli schoolteachers (Vashdi et al. 2013).

Due to the inherent other-oriented nature of servant leadership (Greenleaf 1977), servant leaders are well positioned to shape behavioral norms related to service in their



work unit. Scholars have identified different means by which this happens. In particular, it has been argued that servant leaders shape the service climate of their group by instilling service values in the group members, by drawing their followers' attention to the aspects of the organization's policies, practices, and procedures that reinforce the importance of service, and by role modeling service behaviors (Hunter et al. 2013; Liden et al. 2014). For instance, supervisors may remind employees of the role the library plays as a community builder, they may share strategies to make the library more welcoming and be an example by reaching out to citizens. By doing so, servant leaders mold the behaviors of their followers. When multiple followers engage in service behaviors, they create behavioral norms and expectations regarding service quality that transcend the work unit, resulting in a group service climate (Liden et al. 2014).

The service climate set up by the supervisor should in turn lead to higher levels of service behaviors in the library, as evaluated by citizens. A stream of literature known as service linkage research provides sustainable evidence of the relationship between group service climate and customers' positive service experience (Bowen and Schneider 2014). Service linkage research argues that what employees experience in their work environment is correlated with the experiences they provide for customers or citizens (Schneider et al. 2005). In other words, the service climate within a given unit leads employee efforts and behaviors toward the delivery of service performance, in that workers will act in keeping with the norms and expected behaviors of their workgroup (Pugh et al. 2002). A positive service climate in the library should thus be related to the performance of service-oriented behaviors by employees. As the main targets of these

behaviors, citizens should positively evaluate the service-oriented behaviors they receive. Overall, the arguments presented above lead us to propose the following hypothesis:

*Hypothesis 2.* Service climate mediates the relationship between servant leadership and group-level service-oriented behaviors rated by citizens (group level).

## **Method**

### **Sample and Research Design**

To collect our data, we built a partnership with the Quebec Public Library Association (QPLA), the main association representing public libraries in the Canadian province of Quebec. Its membership includes 305 autonomous libraries serving municipalities with populations over 5,000, thus covering more than 80% of the population of the province. Libraries located in smaller municipalities are part of another grouping. Among the library members, 158 agreed to participate in our study, representing a total of 2,037 civil servants and their 175 supervisors. We collected data among library employees using an online questionnaire measuring servant leadership, customer orientation, and service climate. We also sent questionnaires to library managers in which they evaluated the service behaviors of each of their team members. Finally, using an online survey available through the libraries' websites and a paper and pencil questionnaire directly available in the library, we asked citizens to evaluate the service-oriented behaviors of their library employees. Overall, we collected the questionnaires of 947 employees (return rate of 46%), 97 supervisors (return rate of 55%), and 10,017 citizens nested in 99 libraries. We retained only the questionnaires for which

we were able to match from the three sources (i.e., employees, supervisors and citizens), and we excluded the groups with less than three employees.

The final usable sample was composed of 922 employees, 86 supervisors and 9,547 citizens nested in 86 libraries. These 86 libraries have an average number of employees of 16.61. For each library, the average number of employee respondents is 10.72, and the average number of citizen respondents is 257.06. The final sample of 922 employees is composed of 78.6% women, with an average age of 43.86, an average tenure in the organization of 8.80 years, and an average tenure with the supervisor of 4.47 years. The final sample of 86 supervisors is composed of 79.17% women, with an average age of 46.18 years, and an average tenure in the organization of 12.41 years. The final sample of 9,547 citizens comprises 78.3 % women. In total, 16.1% of them were between the ages of 18 and 34, 22.6% between 35 and 44, 25% between 45 and 59, and 36.3% were over age 60.

## **Measures**

Quebec is predominantly a French-speaking province of Canada, so the original scales were translated into French and then back-translated into English (Schaffer and Riordan 2003). In some libraries, where citizens and employees were bilingual, both the English and the French versions of the questionnaire were used to collect the data. Unless otherwise specified, we used previously validated measures on a 7-point Likert-type scale (1 = *strongly disagree*; 7 = *strongly agree*).

***Servant Leadership.*** The 7-item measure (SL-7) from Liden et al. (2015) was used to assess servant leadership, where each item measures one of the seven behavioral dimensions of servant leadership. This scale is one of the three scales recommended for

its rigor by Eva et al. (2019). Liden et al. (2015) provided evidence of this scale's reliability and validity at both the individual level and group level, employing six independent samples. Sample items are: "My leader emphasizes the importance of giving back to the community" and "My leader puts my best interests ahead of his/her own." The Cronbach's alpha for this scale was .87.

***Customer Orientation.*** Customer orientation was measured with the 6-item scale developed by Stock and Hoyer (2005) regarding salespeople's customer-oriented attitude. We slightly adapted this scale given that our study targets civil servants, and not salespeople. Sample items are: "I enjoy interacting with citizens" and "Citizen orientation is one of my personal goals." The Cronbach's alpha for this scale was .91.

***Service Climate.*** The 7-item scale developed by Schneider, White, and Paul (1998) to assess general service climate was adapted to measure service climate in the library. To be consistent with our sample, items were modified to refer to their 'library' (instead of their 'business'). We also replaced the word 'customer' with 'citizen.' Sample items are: "We make an effort to measure and track the quality of the work and service in my library" and "Employees possess the job knowledge and skills in my library to deliver superior quality work and service." The Cronbach's alpha for this scale was .88.

***Service-Oriented Behaviors Rated by Manager.*** Library managers assessed their employees' service-oriented behaviors with 5 items that we extracted from the SOCO scale (Saxe and Weitz 1982). The original scale comprises 24 items and was designed to measure customer-related behaviors in the private sector. We selected five items that were relevant to the public sector reality and adapted them when necessary. For example, "I am willing to disagree with a customer in order to help him make a better decision"

was adapted to “I try to support citizens in order to help them make better choices” (reverse coded). The other items were excluded because they were too specific to the private sector (i.e., pressure on customers, push a sale, lie about product quality). The five selected items are listed as items 2, 8, 9, 15, and 23 in the original SOCO scale. The Cronbach’s alpha for this scale was .94.

***Service-Oriented Behaviors Rated by Citizens.*** Citizens evaluated the service-oriented behaviors of library employees using a seven-item measure. This measure has been validated by Liao and Chuang (2004) to assess service performance. As for the other scales, we changed ‘customers’ to ‘citizens.’ Sample items are “the library staff is able to help citizens when needed” and “the staff is friendly and helpful to citizens.” Citizens answered on a Likert scale going from 1 = not at all satisfied to 5 = very satisfied. The Cronbach’s alpha for this scale was .94.

***Control Variables.*** At the individual level, we controlled for the influence of age, gender, tenure with the supervisor, and interaction frequency with supervisor on service-oriented behaviors, because previous research on leadership has found that these variables may be related to employees’ work-related outcomes (e.g., Riordan, Griffith, and Weatherly 2003). At the group level, we controlled for team size, because size may influence the interactions and dynamics among team members and thus influence the climate among them (e.g., Wheelan 2009).

## **Analyses and Results**

### **Analytic Strategy**

Given the hierarchical data structure (employees, supervisors and citizens nested in libraries) and our multilevel theoretical model, hypotheses were tested with multilevel structural equation modeling (MSEM). We followed the recommendations by Preacher, Zhang and Zyphur (2011) for testing multilevel mediation.

Our hypothesized model is illustrated in Figure 1. Servant leadership, service climate, customer orientation and service-oriented behaviors rated by supervisor were assessed at the individual level (Level 1), whereas service-oriented behaviors rated by citizens were assessed at the group level (Level 2). To test our theoretical model, we decomposed the variance of servant leadership and service climate Level 1 variables into two orthogonal or uncorrelated latent components: the within-person component (individual level) and the between-person component (group level) (Asparouhov and Muthén 2006).

All our main analyses (e.g., CFAs, MSEM models) were run with the MPLUS package (Version 8.3 - Muthén and Muthén 1998-2017), and specific analyses (e.g., Cronbach's alpha, descriptive statistics, correlations, aggregation indices) with the R software and the multilevel package developed by Bliese (2013).

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### **Measurement Issues: Confirmatory Factor Analyses**

We conducted a series of confirmatory factor analyses (CFAs) to determine whether our measurement model at the individual level captured distinct constructs, because our cross-sectional design may pose a potential threat to discriminant validity.

We successively tested the hypothesized 4-factor model, in which servant leadership, service climate, customer orientation and service behaviors were four distinct factors; 6 alternative 3-factor models in which all variables were combined on a two-by-two basis; a 2-factor model with supervisor-rated service behaviors loading on one latent factor and employee-rated variables loading on another; and a 1-factor model in which all variables were combined.

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Table 1 shows the results of these analyses. As can be seen, the hypothesized 4-factor model yielded a good fit to the data,  $\chi^2(269) = 1068.79, p < .001$ , CFI = .94, TLI = .94, SRMR = .05, RMSEA = .06. Moreover, more parsimonious models resulted in significant decrements in fit ( $p < .001$ ). These results indicated that the measures used in the present study captured distinct constructs as expected.

### **Data Aggregation**

Given that servant leadership and service climate were measured at the individual level but introduced at both levels in our analyses, we calculated (1)  $r_{wg(j)}$  as a measure of agreement within teams, (2) intraclass correlations (ICC1), and (3) reliability of team means (ICC2) for these two variables.

For servant leadership, the average  $r_{wg(j)}$  was .64 and the median was .77. For service climate, the average  $r_{wg(j)}$  was .88 with a median of .90. Based on the  $r_{wg(j)}$  cut-off

values (Bliese, Halverson, and Schriesheim 2002; LeBreton and Senter 2008), the values we obtained indicate moderate to strong agreement within teams. The ICC1 values for servant leadership and service climate were respectively .16 and .24, indicating medium to large effects. Thus, team membership explained considerable variance in individual ratings of servant leadership and service climate. Moreover, the ICC2 values for servant leadership and service climate were respectively .66 and .77, indicating acceptable to good levels of reliability. Overall, these indices supported the decomposition of the variance into within- and between-components of servant leadership and service climate for further analyses.

### **Descriptive Statistics and Correlations**

Means, standard deviations, and intercorrelations between variables are displayed in Table 2. At the individual level, servant leadership was correlated with customer orientation, and service-oriented behaviors rated by supervisor; and customer orientation was correlated with service-oriented behaviors rated by supervisor. At the group level, servant leadership was correlated with service climate; and service climate was correlated with service-oriented behaviors rated by citizens.

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Table 2 here  
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### **Multilevel Analyses**

In order to test our hypotheses, we first specified the hypothesized MSEM model in which: 1) servant leadership is positively associated with service-oriented behaviors, rated by supervisor, through customer orientation at the individual level; 2) servant



leadership is positively associated with service-oriented behaviors, rated by citizens, through service climate at the group level. Then, we tested whether our control variables (gender, age, tenure with the supervisor, interaction frequency with supervisor, at the individual level; and team size at the group level) could affect the predicted relationships in our model. Finally, we tested two alternative models in which each additional direct path was specified. The first alternative model added a direct path from servant leadership at the individual level to service-oriented behaviors rated by supervisor, and the second alternative model added a direct path from servant leadership at the group level to service-oriented behaviors rated by citizens.

Table 3 shows the results of these analyses. It indicates that the hypothesized full mediation MSEM model yields a good fit to the data,  $\chi^2(459) = 1417.94, p < .001$ , CFI = .93, TLI = .93, SRMRW = .07, SRMRB = .11; RMSEA = .05. Second, we tested an alternative model that includes all control variables. This model yielded a moderate fit to the data,  $\chi^2(577) = 1969.03, p < .001$ , CFI = .91, TLI = .90, SRMRW = .09, SRMRB = .19; RMSEA = .05; and the paths from the control variables to service-oriented behavior variables were all non-significant, except for interaction frequency with supervisor, which has a significant effect on service-oriented behaviors rated by supervisor ( $b = .10, p < .01$ ). Consistent with Becker's recommendations (2005), we thus decided to include interaction frequency with supervisor as a control variable in our final model.

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Table 3 here

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The addition of the direct paths at the individual level and the group level did not improve model fit significantly over this full mediation model, with interaction frequency with supervisor as a control variable, ( $\Delta\chi^2(1) = 3.17, ns$ , and  $.11, ns$ , respectively); and the direct paths from servant leadership to service-oriented behaviors were non-significant at both the individual and group level. Based on these results, the full mediation model, with interaction frequency with supervisor as a control variable, was retained for hypotheses testing.

This retained final model yielded a satisfactory fit to the data,  $\chi^2(482) = 1652.09$ ,  $p < .001$ , CFI = .92, TLI = .91, SRMRW = .09, SRMRB = .13; RMSEA = .05. The MSEM results showed a significant indirect effect of servant leadership at the individual level on service-oriented behaviors rated by supervisor via customer orientation (estimate = .05, 95% CI [.03, .07]), providing support for Hypothesis 1, and a significant indirect effect of servant leadership at the group level on service-oriented behaviors rated by citizens via service climate (estimate = .52, 95% CI [.23, .80]), providing support for Hypothesis 2. Parameters for this final model are reported in Figure 2.

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Figure 2 here  
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## **Discussion**

The main purpose of the current study was to answer the question of how servant leadership leverages service-oriented behaviors in the public sector. Results demonstrate that, at the individual level, servant leadership is associated with employee oriented-service behaviors rated by the supervisor, through employee customer orientation,

whereas at the group level, servant leadership is associated with employee oriented-service behaviors rated by citizens, through the service climate of the library.

### **Theoretical Implications**

First, despite the recent calls for and interest in servant leadership as a particularly relevant leadership style to foster high levels of service behaviors in the public sector, very few empirical studies have tested whether servant leadership can enhance public service-oriented behaviors. Our study confirms that the theoretical central premise of servant leadership, namely that servant leaders develop a distinctive focus on serving by placing followers' needs over their own (Eva et al. 2019), applies in the public sector. Linking servant leadership to service-oriented behaviors distinguishes our research from previous empirical studies in the public sector in that we demonstrate that servant leadership is related not only to public employees' attitudes, such as public service motivation or commitment (e.g., Liu, Hu, and Cheng 2015; Liu et al. 2017; Shim and Park 2019; Tuan 2016; 2017), but also to their actual behaviors. This represents an important step to extend the potential contributions of servant leadership in the public service context. Our results are also consistent with the relationships previously found between servant leadership and service behaviors in the private sector (e.g., Chen et al. 2015; DeConinck and DeConinck 2017; Liden et al. 2014). We confirm, as expected, that in the public sector, where service is built into the 'raison d'être' of the organization, servant leadership is positively associated with service-oriented behaviors of civil servants who are in direct contact with citizens in public libraries. We thus extend the growing but still limited body of research on servant leadership in the public sector.

Second, contrary to research conducted in public organizations that measured service behaviors using a single source (Cheruyot and Maru 2013; Tuan 2019), we simultaneously examined the supervisor-employee interface and the employee-citizen interface in the production of service performance. As Andersen, Boesen, and Pedersen (2016) argue, the performance measurement criteria in the public sector are characterized by a varying degree of subjectivity. For instance, perceptions regarding service performance and the conceptual relevance of its facets may differ depending on whether one is an observer of the service delivery process or a direct recipient of the service. By integrating two complementary measures of service-oriented behaviors, we get a fuller picture of civil servants' service performance.

Lastly, the current study explored the mechanisms through which servant leadership affects service-oriented behaviors. As hypothesized, we found that servant leadership enhances employees' service behaviors by fostering employees' customer orientation at the individual level. This result extends those of previous studies linking this leadership style to civil servants' individual reactions (Liu, Hu, and Cheng 2015; Liu et al. 2017; Miao et al. 2014; Shim and Park 2019), by showing that servant leaders may not only act on civil servants' motivations and attitudes, but can also incorporate citizens' needs into their self-definition through role modeling and relational identification processes.

Further, we found that servant leadership enhances employee service-oriented behaviors by transforming service climate at the group level. This confirms that servant leaders operate not only at the individual level, but also act on the overall dynamics of the group, fostering a positive service climate in the group unit. This result is consistent with

service linkage research (Bowen and Schneider 2014) that has demonstrated that, through front-line employees' service behaviors, positive internal management practices transform into desirable external customer perceptions. It is important to highlight that our two mediators were examined concurrently in one multilevel model, and that they fully mediated the relationship between servant leadership and service-oriented behaviors at both levels, confirming their importance as explanatory mechanisms of the relationship between servant leadership and service behaviors. This finding is noteworthy because the underlying psychological mechanisms explaining the link between supervisor servant leadership behavior and followers' serving behaviors remain relatively untested (Wu et al. 2020).

### **Practical Implications**

As is the case for employees of other public services, library employees are not immune to the issue of "problem patrons" (Blessinger 2002). Indeed, encounters between front-line employees and citizens can sometimes be negative and stressful experiences (Smith, Bazalar, and Wheeler 2020). Our results show that, in public libraries, servant leadership might be an interesting remedy for negative service interactions in that it may create a profound orientation toward serving citizens and a service climate that supports public agents in addressing citizens' needs. Public libraries would thus benefit from promoting or hiring managers who are other-oriented, and from training leaders to become servant leaders. Another practical implication could be to develop and communicate at the group level a culture that values service quality and focuses on service and other-orientation corporate values. Promoting such a servant leadership-type culture might demand much time and tremendous effort by leaders, in that prioritizing the

needs of followers entails more than simply creating a pleasant work atmosphere. It thus requires complete buy-in from top management, who will need to lighten leaders' load to ensure that they can fully engage in this process. Nevertheless, we believe this is a worthy endeavor in that our study highlights the benefits of such an approach in the provision of quality public service.

### **Limitations and Future Research**

Our multilevel and multisource design represents an important strength of the current research. However, our study has limitations that could be overcome in future research.

First, the present study has been conducted in a variety of public libraries in the Canadian province of Quebec, which represents a very specific context: public libraries offer educational, cultural, and recreational services that might be more easily associated with pleasure and satisfaction for citizens than other public departments such as police, immigration or taxation. Future research in other public sector organizations in which a service relationship with an individual public agent is critical for service quality is needed to examine the generalizability of our results to other public service settings.

Second, although all citizens who visited libraries were approached to complete the questionnaire during the study period, we might not have obtained data from very dissatisfied citizens who stopped using public libraries. This situation might have increased the mean, but also reduced the variance of reported employees' service-oriented behaviors by customers. As it is harder to detect relationships when dealing with variables with low variance, our results provide a conservative estimate of the

relationships between servant leadership and service-oriented behaviors, particularly at the group level.

Third, servant leadership, service orientation, and service climate perceptions were all measured from a single source (i.e., employees' self-reports) at the same time, potentially inflating the observed relationships between these variables. Nonetheless, common-source bias was not a problem in the prediction of service behaviors because it was measured from different rating sources (supervisors and citizens), and has been modeled in a multilevel model. Future research might want to go further in this direction by measuring the variables not only from different sources but also at different time periods in a longitudinal design, before constructing the multilevel model.

Fourth, our study was conducted on a predominantly female population. Although we are not aware of any research that has assessed the differential influence of servant leadership on male versus female followers, evidence shows that teams who embrace traditionally feminine characteristics tend to be more prosocially motivated by servant leaders than teams who identify with traditionally masculine roles (Lemoine and Blum 2019). It would be interesting to replicate our study in predominantly male public contexts, such as fire or police departments.

Lastly, our study focused on service-oriented behaviors of front-line public employees, which represents only one dimension of their performance. As public servants' decisions and actions are bounded by constitutional, legal, political, and financial considerations (Denhardt and Denhardt, 2015), future research could examine how servant leaders can contribute to other performance dimensions.

Overall, our multilevel multisource study showed that servant leadership, through its ability to foster customer orientation and service climate, is of great value in promoting service-oriented behaviors of front-line public employees. We encourage researchers to pursue further exploration of this promising leadership style in the context of public service organizations.



## References

- Ajzen, Icek. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes* 50(2): 179-211.
- Ajzen, Icek, and Martin Fishbein. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- Andersen, Lotte Bøgh, Andreas Boesen, and Lene Holm Pedersen. 2016. Performance in public organizations: Clarifying the conceptual space. *Public Administration Review* 76(6): 852-862.
- Andersen, Lotte Bøgh, and Anne Mette Kjeldsen. 2013. Public service motivation, user orientation, and job satisfaction: A question of employment sector? *International Public Management Journal* 16(2): 252-274.
- Andersen, Lotte Bøgh, Thomas Pallesen, and Lene Holm Pedersen. 2011. Does ownership matter? Public service motivation among physiotherapists in the private and public sectors in Denmark. *Review of Public Personnel Administration* 31(1): 10-27.
- Asparouhov, Tihomir, and Bengt Muthen. 2006. Multilevel modeling of complex survey data. In *Proceedings of the joint statistical meeting in Seattle. ASA section on Survey Research Methods*, Seattle, August, 2006, 2718-2726.  
<https://www.statmodel.com/download/SurveyJSM1>
- Bandura, Albert. 1977. *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-hall.
- Banks, George C., Janaki Gooty, Roxanne L. Ross, Courtney E. Williams, and Nicole T. Harrington. 2018. Construct redundancy in leader behaviors: A review and agenda for the future. *The Leadership Quarterly* 29(1): 236-251.

- Bao, Yuanjie, Chaoping Li, and Hao Zhao. 2018. Servant leadership and engagement: a dual mediation model. *Journal of Managerial Psychology* 33(6): 406-417.
- Becker, Thomas E. 2005. Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods* 8(3): 274–289.
- Blessinger, Kelly D. 2002. Problem patrons: all shapes and sizes. *The reference librarian* 36(75-76): 3-10.
- Bliese, Paul. 2013. Multilevel Functions. R package version 2.5.
- Bliese, Paul D., Ronald R. Halverson, and Chester A. Schriesheim. 2002. Benchmarking multilevel methods in leadership: The articles, the model, and the data set. *The Leadership Quarterly* 13(1): 3-14.
- Bowen, David E., and Benjamin Schneider. 2014. A service climate synthesis and future research agenda. *Journal of Service Research* 17(1): 5-22.
- Chen, Zhijun, Jing Zhu, and Mingjian Zhou. 2015. How does a servant leader fuel the service fire? A multilevel model of servant leadership, individual self identity, group competition climate, and customer service performance. *Journal of Applied Psychology* 100(2): 511-521.
- Cheruiyot, Thomas K., and Loice C. Maru. 2013. Service quality and relative performance of public universities in East Africa. *The TQM Journal* 25(5): 533-546.
- DeConinck, Jim, and Mary Beth DeConinck. 2017. The relationship between servant leadership, perceived organizational support, performance, and turnover among business to business salespeople. *Archives of Business Research* 5(10): 57-71.

- Denhardt, Janet V., and Denhardt, Robert B. 2015. The new public service revisited. *Public Administration Review*, 75(5): 664-672.
- Deshpandé, Rohit, John U. Farley, and Frederick E. Webster Jr. 1993. Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing* 57(1): 23-37.
- Eva, Nathan, Mulyadi Robin, Sen Sendjaya, Dirk Van Dierendonck, and Robert C. Liden. 2019. Servant leadership: A systematic review and call for future research. *The Leadership Quarterly* 30(1): 111-132.
- Graham, Jill W. 1991. An essay on organizational citizenship behavior. *Employee Responsibilities and Rights Journal* 4(4): 249-270.
- Greenleaf, Robert K. 1977. *Servant Leadership: A Journey into the Nature of Legitimate Power and Greatness*. New York: Paulist Press.
- Gwinner, Kevin P., Mary Jo Bitner, Stephen W. Brown, and Ajith Kumar. 2005. Service customization through employee adaptiveness. *Journal of Service Research* 82(2): 131-148.
- Hanson, Lee, and David L. Baker. 2017. "Corporate Psychopaths" in Public Agencies?. *Journal of Public Management & Social Policy* 24(1): 21-41.
- Hoch, Julia E., William H. Bommer, James H. Dulebohn, and Dongyuan Wu. 2018. Do ethical, authentic, and servant leadership explain variance above and beyond transformational leadership? A meta-analysis. *Journal of Management* 44(2): 501-529.

- Hsiao, Chan, Yi-Hsuan Lee, and Wan-Jun Chen. 2015. The effect of servant leadership on customer value co-creation: A cross-level analysis of key mediating roles. *Tourism Management* 49: 45-57.
- Hunter, Emily M., Mitchell J. Neubert, Sara Jansen Perry, L.A. Witt, Lisa M. Penney, and Evan Weinberger. 2013. Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *The Leadership Quarterly* 24(2): 316-331.
- Jaramillo, Fernando, Douglas B. Grisaffe, Lawrence B. Chonko, and James A. Roberts. 2009. Examining the impact of servant leadership on salesperson's turnover intention. *Journal of Personal Selling & Sales Management* 29(4): 351-365.
- Kelly, Janet M., and David Swindell. 2002. A multiple-indicator approach to municipal service evaluation: Correlating performance measurement and citizen satisfaction across jurisdictions. *Public Administration Review* 62(5): 610-621.
- Lee, Allan, Joanne Lyubovnikova, Amy Wei Tian, and Caroline Knight. 2020. Servant leadership: A meta-analytic examination of incremental contribution, moderation, and mediation. *Journal of Occupational and Organizational Psychology* 93(1): 1-44.
- Liao, Hui, and Aichia Chuang. 2004. A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal* 47(1): 41-58.
- Liao, Hui, Keiko Toya, David P. Lepak, and Ying Hong. 2009. Do they see eye to eye? Management and employee perspectives of high-performance work systems and

influence processes on service quality. *Journal of Applied Psychology* 94(2): 371-391.

LeBreton, James M., and Jenell L. Senter. 2008. Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods* 11(4): 815-852.

Lemoine, G. James, and Terry C. Blum. 2019. Servant leadership, leader gender, and team gender role: Testing a female advantage in a cascading model of performance. *Personnel Psychology* : 1-26.

Liden, Robert C., Sandy J. Wayne, Chenwei Liao, and Jeremy D. Meuser. 2014. Servant leadership and serving culture: Influence on individual and unit performance. *Academy of Management Journal* 57(5): 1434-1452.

Liden, Robert C., Sandy J. Wayne, Jeremy D. Meuser, Jia Hu, Junfeng Wu, and Chenwei Liao. 2015. Servant leadership: Validation of a short form of the SL-28. *The Leadership Quarterly* 26(2): 254-269.

Liden, Robert C., Sandy J. Wayne, Hao Zhao, and David Henderson. 2008. Servant leadership: Development of a multidimensional measure and multi-level assessment. *The Leadership Quarterly* 19(2): 161-177.

Liu, Bangcheng, Wei Hu, and Yen-Chuan Cheng. 2015. From the West to the East: Validating servant leadership in the Chinese public sector. *Public Personnel Management* 44(1): 25-45.

Liu, Bangcheng, James L. Perry, Xinyu Tan, and Xiaohua Zhou. 2018. A cross-level Holistic model of public service motivation. *International Public Management Journal* 21(5): 703–728.

- Miao, Qing, Alexander Newman, Gary Schwarz, and Lin Xu. 2014. Servant leadership, trust, and the organizational commitment of public sector employees in china. *Public Administration* 92(3): 727–743.
- Mostafa, Ahmed Mohammed Sayed Mostafa, and Eman Aly Abed El-Motalib. 2019. Servant leadership, leader–member exchange and proactive behavior in the public health sector. *Public Personnel Management* 48(3): 309-324.
- Muthén, Linda K., and Bengt O. Muthén 1998-2017. *Mplus User's Guide*. Eighth Edition. Los Angeles, CA: Muthén & Muthén
- Nunes, Francisco Guilherme, Luis Manuel Martins, and Juan Mozzicafreddo. 2018. The influence of service climate, identity strength, and contextual ambidexterity upon the performance of public organizations, *Administratie Si Management Public* 31: 6-20.
- Paarlberg, Laurie E., and Bob Lavigna. 2010. Transformational leadership and public service motivation: Driving individual and organizational performance. *Public Administration Review* 70(5): 710-718.
- Preacher, Kristopher J., Zhen Zhang, and Michael J. Zyphur. 2011. Alternative methods for assessing mediation in multilevel data: The advantages of multilevel SEM. *Structural Equation Modeling* 18(2): 161-182.
- Pugh, S. Douglas, Joerg Dietz, Jack W. Wiley, and Scott M. Brooks. 2002. Driving service effectiveness through employee-customer linkages. *Academy of Management Perspectives* 16(4): 73-84.

- Riordan, Christine M., Rodger W. Griffith, and Elizabeth W. Weatherly. 2003. Age and work-related outcomes: The moderating effects of status characteristics. *Journal of Applied Social Psychology* 33(1): 37–57.
- Saxe, Robert, and Barton A. Weitz. 1982. The SOCO scale: A measure of the customer orientation of salespeople. *Journal of Marketing Research* 19(3): 343-351.
- Schaffer, Bryan S., and Christine M. Riordan. 2003. A review of cross-cultural methodologies for organizational research: A best-practices approach. *Organizational Research Methods* 6(2): 169-215.
- Schneider, Benjamin, Mark G. Ehrhart, David M. Mayer, Jessica L. Saltz, and Kathryn Niles-Jolly. 2005. Understanding organization-customer links in service settings. *Academy of Management Journal* 48(6): 1017-1032.
- Schneider, Benjamin, Amy Nicole Salvaggio, and Montse Subirats. 2002. Climate strength: A new direction for climate research. *Journal of Applied Psychology*, 87(2): 220-229.
- Schneider, Benjamin, Susan S. White, and Michelle C. Paul. 1998. Linking service climate and customer perceptions of service quality: Tests of a causal model. *Journal of applied Psychology* 83(2): 150-163.
- Schwarz, Gary, Alexander Newman, Brian Cooper, and Nathan Eva. 2016. Servant leadership and follower job performance: The mediating effect of public service motivation. *Public Administration* 94(4), 1025-1041.
- Shim, Dong Chul, and Hyun Hee Park. 2019. Public service motivation in a work group: Role of ethical climate and servant leadership. *Public Personnel Management* 48(2): 203-225.

- Shim, Dong Chul, Hyun Hee Park, and Tae Ho Eom. 2016. Public servant leadership: Myth or powerful reality?. *International Review of Public Administration* 21(1): 3-20.
- Sluss, David M., and Blake E. Ashforth. 2007. Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review* 32(1): 9-32.
- Smith, Daniella L., Bryan Bazalar, and Maurice Wheeler. 2020. Public librarian job stressors and burnout predictors. *Journal of Library Administration* 60(4): 412-429.
- Stock, Ruth Maria, and Wayne D. Hoyer. 2005. An attitude-behavior model of salespeople's customer orientation. *Journal of the Academy of Marketing Science* 33(4): 536-552.
- Tuan, Luu Trong. 2016. How servant leadership nurtures knowledge sharing: The mediating role of public service motivation. *International Journal of Public Sector Management* 29(1): 91-108.
- Tuan, Luu Trong. 2017. Knowledge sharing in public organizations: The roles of servant leadership and organizational citizenship behavior. *International Journal of Public Administration* 40(4): 361-373.
- Tuan, Luu Trong. 2019. Service-oriented high-performance work systems and service-oriented behaviours in public organizations: the mediating role of work engagement. *Public Management Review* 21(6): 789-816



- Vandenabeele, Wouter. 2008. Development of a public service motivation measurement scale: Corroborating and extending Perry's measurement instrument. *International public management journal* 11(1): 143-167.
- Vashdi, Dana R., Eran Vigoda-Gadot, and Dvir Shlomi. 2013. Assessing performance: The impact of organizational climates and politics on public schools' performance. *Public Administration* 91(1): 135-158.
- Vigoda-Gadot, Eran, and Sagie Meiri. 2008. New public management values and person-organization fit: A socio-psychological approach and empirical examination among public sector personnel. *Public administration* 86(1): 111-131.
- Wang, Zhen, Lu Xing, Haoying Xu, and Sean T. Hannah. 2019. Not all followers socially learn from ethical leaders: The roles of followers' moral identity and leader identification in the ethical leadership process. *Journal of Business Ethics* 163: 1-21.
- Weinstein, Art T., and Donovan A. McFarlane. 2017. How libraries can enhance customer service by implementing a customer value mindset. *International Journal of Nonprofit and Voluntary Sector Marketing* 22(1): e1571.
- Wheelan, Susan A. 2009. Group size, group development, and group productivity. *Small Group Research* 40(2): 247-262.
- Wu, Junfeng, Robert C. Liden, Chenwei Liao, and Sandy J. Wayne. 2020 in press. Does manager servant leadership lead to follower serving behaviors? It depends on follower self-interest. *Journal of Applied Psychology*. <https://doi.org/10.1037/ap10000500>

Yammarino, Francis J., Shelley D. Dionne, Jae Uk Chun, and Fred Dansereau. 2005.

Leadership and levels of analysis: A state-of-the-science review. *The Leadership Quarterly* 16(6): 879-919.

Yoshida, Diah Tuhfat, Sen Sendjaya, Giles Hirst, and Brian Cooper. 2014. Does servant leadership foster creativity and innovation? A multi-level mediation study of identification and prototypicality. *Journal of Business Research* 67(7): 1395-1404.

Table 1

## Confirmatory Factor Analyses of Measurement Model at Individual Level: Fit Indices

Model	$\chi^2$	df	CFI	TLI	SRMR	RMSEA	Comparison with Model 1 $\Delta\chi^2$ ( $\Delta$ df)
1. Four-factor Hypothesized model	1068.79***	269	.94	.94	.05	.06	
2. Three-factor Servant Leadership + Service Climate	2661.57***	272	.83	.81	.09	.10	1592,78*** (3)
3. Three-factor Servant Leadership + Customer Orientation	3084.19***	272	.80	.78	.14	.11	2015,40*** (3)
4. Three-factor Servant Leadership + Service Perf rated by Supervisor	3188.18***	272	.79	.77	.15	.11	2119,39*** (3)
5. Three-factor Service Climate + Customer Orientation	4113.64***	272	.72	.69	.12	.12	3044,85*** (3)
6. Three-factor Service Climate + Service Perf rated by Supervisor	5144.60***	272	.65	.61	.14	.14	4075,81*** (3)
7. Three-factor Customer Orientation + Service Perf rated by Supervisor	4397.18***	272	.70	.67	.15	.13	3328,39*** (3)
8. Two-factor Service Perf rated by Supervisor + All self-evaluated variables	5594.15***	274	.62	.58	.14	.15	4525,36*** (5)
9. One-factor All variables together	9548.25***	275	.33	.27	.18	.19	8479,46*** (6)

Note. N = 922. CFI = comparative fit index; TLI = Tucker and Lewis index; SRMR = standardized root mean square residual; RMSEA = root-mean-square error of approximation.

\*\*\* p < .001.

Table 2  
Descriptive Statistics and Correlations among Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
<b>Individual Level</b>									
1. Age (years)	43.86	12.95							
2. Tenure with Supervisor (years)	4.47	4.11	.29***						
3. Interactions Frequency with Supervisor	4.88	1.83	.05	.03					
4. Servant Leadership	4.72	1.33	-.08*	-.10**	.50***	<b>.87</b>			
5. Customer Orientation	6.03	.94	.11**	-.06	.14***	.26***	<b>.91</b>		
6. Service Climate	5.23	1.11	.11**	.04	.30***	.42***	.27***	<b>.88</b>	
7. Service Performance rated by Supervisor	5.84	1.12	-.02	-.09*	.20***	.20***	.17***	.12***	<b>.94</b>
<b>Group Level</b>									
1. Team Size	10.72	6.56							
2. Servant Leadership	4.62	.74	.22						
3. Service Climate	5.31	.65	-.25*	.53***					
4. Service Performance rated by Citizens	6.01	.80	-.11	.13	.47***	<b>.94</b>			

Note. *N* = 616 - 922 for individual-level variables. *N* = 76 – 86 for group-level variables

Alpha coefficients are reported in bold along the diagonal.

\**p* < .05 \*\**p* < .01 \*\*\**p* < .001

Table 3  
Multilevel SEM models: Fit Indices

Model	$\chi^2$	df	CFI	TLI	SRMR <sub>W</sub>	SRMR <sub>B</sub>	RMSEA
1. Full mediation model - Hypothesized model	1417.94	459	.93	.93	.07	.11	.05
2. Full mediation model + 5 control variables	1969.03	577	.91	.90	.09	.19	.05
3. Full mediation model + Interactions Frequency with Supervisor <sup>a</sup>	1652.09	482	.92	.91	.09	.13	.05
4. Partial mediation model W (+ direct effect at individual level) + Interactions Frequency with Supervisor	1655.26	481	.92	.91	.09	.13	.05
5. Partial mediation model B (+ direct effect at group level) + Interactions Frequency with Supervisor	1651.98	481	.92	.91	.09	.13	.05

Note. CFI = comparative fit index; TLI = Tucker and Lewis index; SRMR<sub>W</sub> and SRMR<sub>B</sub> = standardized root mean square residuals for the Within and the Between models, respectively; RMSEA = root-mean-square error of approximation.

<sup>a</sup> Retained final model

Figure 1

The Hypothesized Multilevel Structural Equation Model (MSEM): Test of Mediation at the Individual- and Group-Level

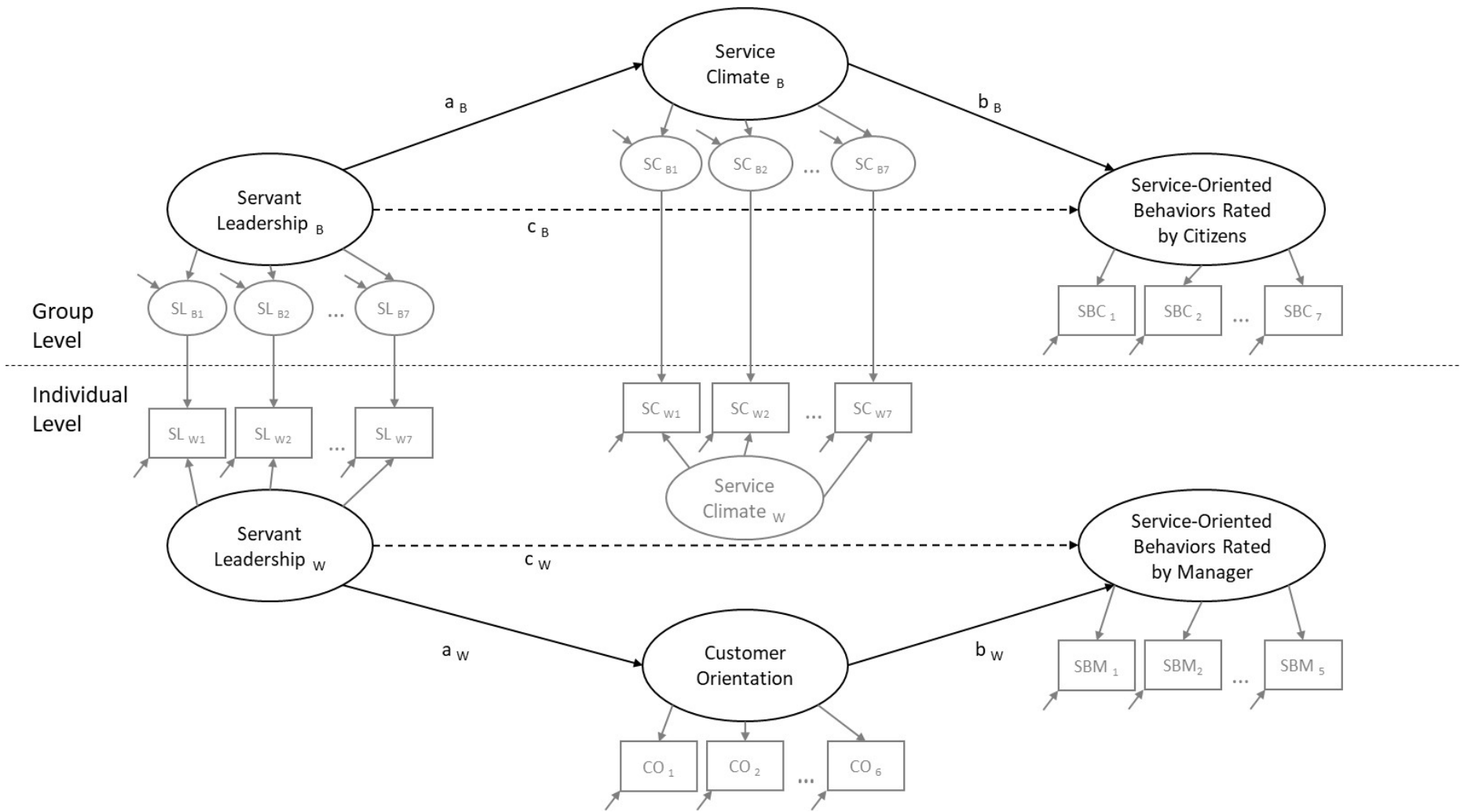
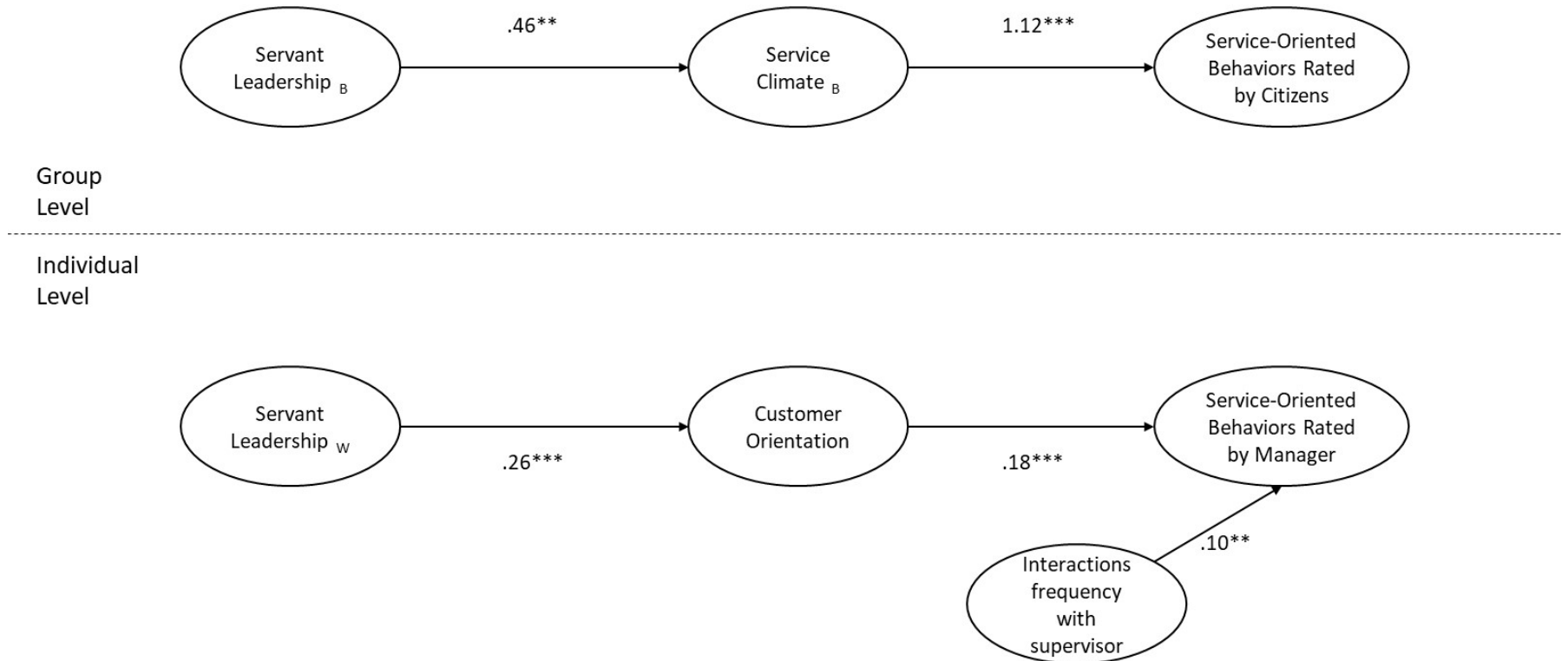


Figure 2

## Parameters of the Retained Multilevel Structural Equation Model (MSEM)



*Note.* Unstandardized parameter estimates are reported. Indicators and item residuals are not reported. Service climate within-component latent variable is not represented.

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$