Examining the Impact of Transformational Leadership, Organizational Citizenship Behaviors, and Organizational Performance: A Dual Perspective in the Public Sector

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The study utilizes a direct-indirect effects model to examine the connections among Transformational Leadership Behaviors (TLB), Organizational Citizenship Behaviors (OCB), and Organizational Performance (OP) within the public sector. TLB data were collected from leaders and followers, allowing for comparison between leader-perception and follower-perception models. A survey methodology involved 1,364 participants from U.S. county government executives and followers, analyzed using structural equation modeling. It aims to bridge gaps in the literature by integrating TLB, OCB, and organizational-level performance into one model, providing nuanced insights into their interactions. Findings support TLB’s positive impact on OCB and OP and OCB’s positive influence on OP. Differences in leader and follower perceptions highlight the need for comprehensive evaluation. The study addresses the limitations of prior research by considering both leader and follower perspectives, contributing to understanding leadership’s role in organizational performance. Practically, it suggests strategies for enhancing performance through TLB fostering, OCB encouragement, and creating supportive work environments. Its originality lies in its holistic examination of TLB, OCB, and OP, offering valuable insights into the public sector and organizational practices.

Keywords: transformational leadership behaviors, organizational citizenship behaviors, organizational performance, public sector, leader-follower perception
INTRODUCTION

Public administration researchers have recognized the importance of leader and follower behaviours that contribute to organizational performance (OP) for several decades (Podsakoff et al., 1990b). Transformational leadership behaviours (TLB) are particularly important in this regard, as they motivate followers to go beyond their personal agendas and contribute to organizational performance. Organizational citizenship behaviours (OCB), which are defined as behaviours that the formal job or organization does not specifically require, are also known to contribute to organizational performance (Organ, 1988).

Numerous studies have examined the relationship between TLB, OCB, and OP, albeit independently. For example, some scholars have focused on the relationship between leadership and OCB (Mackenzie et al., 2001; Podsakoff et al., 1996; Xiao, 2011), while others have examined the relationship between OCB and organizational performance (Ahearne, 2000; Kim, 2005; Podsakoff et al., 2000). Only one study has examined the relationship between TLB, OCB, and performance in a single model, although it was focused on individual or employee performance rather than organizational-level performance (Boerner et al., 2007). No study has linked TLB, OCB, and organizational-level performance in a single model. This lack of research means that little is known about how these constructs interact when modeled simultaneously.

Another important limitation in many prior studies is that they tend to use either the leader or follower perceptions of the leaders’ transformational leadership behaviours in isolation. This can lead to inconsistent results and conclusions since leader and follower perceptions of leadership quality can differ for various reasons, such as romanticizing leadership (Meindl et al., 1985) and the need for leadership (Felfe and Schyns, 2006). For example, individuals with a high tendency to romanticize leadership perceive leaders as more charismatic (Awamleh and Gardner, 1999), and followers with a high need for charismatic leadership tend to perceive their leaders as more transformational (De Vries et al., 2002). This implies that using either the leader or follower perceptions of the leaders’ TLB in isolation might lead to different results and conclusions, based on whose estimate of the leaders’ TLB is used.

Therefore, we collected TLB data from the chief executives (leaders) and one to three employees (followers) who reported directly to that chief executive. This enabled us to develop and compare two models: a leader-perception model examining the relationships among TLB, OCB, and OP using data on TLB from the leaders’ perception, and a follower-perception model examining the relationships among the same three constructs using TLB estimates from the followers. By comparing the two models, we were able to identify where differences occur depending on whose estimate of the leaders’ TLB is utilized.

Overall, this paper argues for the importance of considering both leader and follower perceptions of transformational leadership behaviors in the context of organizational citizenship behaviors and organizational performance. By doing so, we can better understand how these constructs interact and influence each other. This has theoretical and practical implications for understanding previous findings and future research in this area. By bridging the gap between theory and practice, this study contributes to the ongoing debate about the role of leadership in shaping organizational performance. (Podsakoff et al., 1990b; Organ, 1988; Mackenzie et al., 2001; Podsakoff et al., 1996; Xiao, 2011; Ahearne, 2000; Kim, 2005).

THEORETICAL MODEL AND BACKGROUND

Model Description

This study introduces a model assessing both direct and indirect relationships among transformational leadership behaviors (TLB), organizational citizenship behaviors (OCB), and organizational performance (OP), as illustrated in Figure 1. We hypothesize that TLB influences both OCB among employees and the organization’s overall performance. Furthermore, we propose that OCB directly affects OP and that TLB indirectly impacts OP, with OCB as a mediator in this relationship.
FIGURE 1
STRUCTURAL MODEL AND HYPOTHESES OF THE STACKED LEADER – AND FOLLOWER-PERCEPTION MODELS

TLB plays a crucial role in the model, positively influencing both OCB and OP as evidenced by Podsakoff et al. (1990b) and Bass and Avolio (2000). Defined by Bass (1985), TLB encompasses behaviours leaders employ to motivate followers to transcend their personal interests for the sake of organizational objectives. These behaviours are categorized into five distinct characteristics: idealized influence (attributed), idealized influence (behaviour), inspirational motivation, intellectual stimulation, and individualized consideration, as outlined by Bass and Avolio (2000).

OCB represents a critical element within the model, characterized by voluntary actions that extend beyond formal job duties, enhancing organizational effectiveness (Organ, 1988). These behaviours encompass aiding coworkers, volunteering for additional tasks, and proposing improvements. Research, including that by Kim (2005), indicates a positive correlation between OCB and several job-related outcomes, including job satisfaction, employee commitment, and overall performance.

Furthermore, research indicates that OCB may serve as a mediator between TLB and OP, suggesting that the positive impact of transformational leadership behaviours on organizational performance can be partially explained through employees’ voluntary, beyond-duty actions (Boerner et al., 2007). Employees exhibiting OCB enhance the organization’s success beyond their specified job roles, positively influencing overall performance. Consequently, the model posits OCB as a critical intermediary in linking TLB and OP.

Given that both leaders and followers provided assessments of the TLB construct, the study delineated two distinct models for analysis: the leader-perception model (LP) and the follower-perception model (FP). The LP model explores the interactions among TLB, OCB, and OP from the leaders’ viewpoint, while the FP model delves into these same dynamics but through the lens of the followers’ assessments of TLB. The primary objective of differentiating between these two models is to discern any variances in how TLB, OCB, and OP interrelate, contingent upon whether the leaders’ or followers’ perceptions of TLB are applied. Moreover, by juxtaposing the LP and FP models, the study endeavors to detect statistical distinctions or congruencies across all corresponding parameters (hypotheses) between the two models, thereby enriching our understanding of the nuanced influences of perception on organizational dynamics.

The model proposed in this research seeks to offer an in-depth analysis of the interconnections between TLB, OCB, and OP, particularly considering the variability in TLB assessments. By examining these relationships through different lenses, this study aspires to enhance the existing knowledge on TLB, OCB, and OP. Such insights are valuable for elucidating these constructs’ subtle aspects and interplay.
Furthermore, this investigation holds practical significance for organizations aiming to bolster their performance by fostering effective leadership behaviors.

**Theoretical Background**

**Transformational Leadership Behaviors (TLB)**

Initially conceptualized by Bass (1985), transformational leadership is identified as a leadership approach where leaders possess traits that inspire followers to transcend their own self-interests for the sake of organizational objectives, thereby enhancing overall performance. Bass & Avolio (2000) further refined TLB into five distinct characteristics: (1) Idealized Influence (Attributed) (IIA): This aspect pertains to the followers’ perceptions of the leader’s admirable qualities that cultivate trust, loyalty, and respect. (2) Idealized Influence (Behavior) (IIB): It involves the leader’s charismatic actions that foster a strong sense of purpose and motivate followers. (3) Inspirational Motivation (IM): This characteristic is related to the leader’s capability to motivate and inspire followers via compelling communication and emotional engagement. (4) Intellectual Stimulation (IS): It denotes the leader’s encouragement of innovative and critical thinking among followers by challenging conventional approaches to problem-solving in a non-critical manner. (5) Individualized Consideration (IC): It reflects the leader’s focus on recognizing and attending to the individual needs of followers and providing support.

Despite criticisms by Van Knippenberg and Sitkin (2013) regarding the definition, conceptualization, and its interactions with other variables in prior research on TLB, transformational leadership continues to be the most thoroughly researched and empirically validated leadership theory, as noted by Bass & Riggio (2006).

**Organizational Citizenship Behaviors (OCB)**

Organizational Citizenship Behaviors (OCB) refer to voluntary actions by employees that extend beyond their formal job duties, positively impacting the organization’s functionality (Organ, 1988; 1990a). These behaviors manifest at various organizational levels and encompass activities such as assisting colleagues, volunteering for extra tasks, demonstrating loyalty to the organization, and participating in activities outside their job roles.

Organ (1988; 1990a) outlines four key dimensions of OCB, providing a framework to categorize these voluntary behaviors that enhance organizational effectiveness. The first dimension, helping behavior, includes actions that aid co-workers in organizationally relevant tasks. This might involve providing guidance, sharing expertise, or offering support to improve overall performance, thereby fostering a collaborative and supportive work environment. Civic virtue’s second dimension reflects the employee’s active participation in and support for organizational activities that exceed their job duties. This includes attending meetings, volunteering for committees, engaging in organizational events, and showcasing a commitment to furthering the organization’s mission and goals. Sportsmanship, the third dimension, involves avoiding negative behaviors such as complaining, spreading rumors, or initiating conflicts. By maintaining an upbeat demeanor, employees contribute to a harmonious workplace, reducing stress and enhancing collegial relationships. The fourth dimension, conscientiousness, entails exceeding the minimal expectations of one’s role, such as taking the initiative to refine work processes, completing tasks ahead of schedule, and paying meticulous attention to quality and detail. These actions ensure tasks are performed efficiently and effectively and drive improved organizational outcomes.

In summary, OCB plays a crucial role in the overall functionality of organizations. By willingly engaging in actions that surpass their formal job requirements, employees significantly contribute to creating a positive work environment, fostering teamwork, and achieving organizational objectives.

**Organizational Performance**

Organizational performance is generally defined as the output or results of an organization about its intended outcomes (Richard et al., 2009). In government settings, where there are multiple stakeholders like citizens, political leaders, appointed officials, interest groups, and employees, each group may have distinct criteria for evaluating performance. This diversity of expectations can complicate the definition and
measurement of performance. Quinn and Rohrbaugh (1981; 1983) introduced the competing values framework to navigate these complexities. This framework is designed to measure organizational performance by incorporating multiple values, and it categorizes performance into four dimensions: Rational Goal (RG), Open System (OS), Internal Process (IP), and Human Relations (HR).

The Rational Goal (RG) dimension focuses on the organization’s ability to achieve its goals. It emphasizes setting clear objectives, devising appropriate strategies, and reaching desired outcomes. For instance, if a government organization aims to improve public satisfaction with its services by a certain percentage, the RG dimension would evaluate how successfully this goal was achieved and the efficacy of the strategies used.

The Open System (OS) dimension evaluates organizational performance by acquiring essential resources from the environment and adapting to external changes. For example, a government organization might engage with citizens to gather feedback and insights that influence decision-making processes, showcasing its adaptability and resourcefulness.

The Internal Process (IP) dimension examines how efficiently an organization manages its internal processes to ensure stability, control, and continuity. This could include enhancing processes like customer complaint resolution or internal communication regarding policy changes.

Lastly, the Human Relations (HR) dimension measures performance based on the organization’s capacity to foster an environment that supports employee development. This encompasses maintaining positive employee relationships, encouraging teamwork, and promoting personal and professional growth through training and collaborative projects.

In summary, the competing values framework offers a nuanced approach to assessing organizational performance across multiple dimensions. It allows for a holistic view that considers various stakeholder perspectives. Utilizing this framework helps organizations optimize their effectiveness and more successfully achieve their objectives.

Relationships Among Constructs

Understanding the interactions between transformational leadership behaviours (TLB), organizational citizenship behaviours (OCB), and organizational performance (OP) is essential for enhancing organizational effectiveness and fostering a positive work culture. Figure 1 depicts the dynamics of these constructs, highlighting how they interrelate.

**Hypothesis 1 (H1):** TLB positively influences OCB. Through their inspirational and motivational qualities, transformational leaders encourage followers to exceed their usual job responsibilities, fostering behaviours that contribute to organizational citizenship. Organ (1997) suggests that when leaders incite followers to exhibit behaviours surpassing standard job requirements, OCB positively affects. Several studies have empirically supported this relationship by demonstrating a positive correlation between TLB and OCB (Mackenzie et al., 2001; Podsakoff et al., 1996; Xiao, 2011). Thus, we hypothesize that TLB will have a favourable impact on OCB.

**Hypothesis 2 (H2):** TLB positively impacts OP. Transformational leaders are pivotal in fostering a conducive work environment, enhancing job satisfaction, and boosting employee motivation, all of which contribute to improved organizational performance. This link has been substantiated by research across various sectors including public administration and education (Avolio et al., 1988; Brewer and Selden, 2000; Elenkov, 2002; Geyer and Steyrer, 1998; Meier and O’Toole, 2002; Zhu et al., 2005). The influence of TLB on OP includes both a direct effect and an indirect effect mediated by OCB, where TLB promotes OCB, which, in turn, enhances organizational performance. Consequently, we hypothesize that TLB exerts a positive effect on OP.

**Hypothesis 3 (H3):** OCB positively impacts OP. According to Organ’s (1988) definition of OCB, these behaviors, which include helping colleagues and volunteering for extra tasks, enhance organizational performance. Empirical support for the positive relationship between OCB and OP has been established.
in previous studies (Ahearne, 2000; Kim, 2005; Podsakoff et al., 1997; Podsakoff et al., 2000). When employees perform beyond their basic job requirements, it contributes to the overall efficacy and productivity of the organization. Thus, we hypothesize that OCB exerts a favorable influence on OP.

Understanding the interplay between TLB, OCB, and OP enables organizations to craft strategies that promote effective leadership, encourage citizenship behaviors, and boost performance. For instance, organizations might implement leadership training initiatives to cultivate TLB, alongside systems to recognize and reward OCB. Additionally, fostering a supportive work environment can motivate employees to exhibit OCB. By nurturing a culture that values both TLB and OCB, organizations can effectively achieve their objectives and enhance overall effectiveness.

**METHOD**

**Participants and Setting**

This research sought to explore the dynamics between transformational leadership behaviors (TLB), organizational citizenship behaviors (OCB), and organizational performance (OP) among executives in U.S. county governments and their immediate subordinates, as detailed by Xiao et al. (2016). Employing a survey approach, 1,364 questionnaires were distributed to these executives, yielding 416 responses. Subsequently, the study extended invitations to three direct subordinates of each responding executive, amounting to 1,248 potential participant follow-ups, to gauge their perceptions of OCB and their leaders’ TLB. Out of these, 911 subordinate surveys were completed and returned. These responses were then paired with their corresponding executive to create a comprehensive dataset. Ultimately, the analysis focused on 372 matched data sets, ensuring at least one subordinate response was available for each leader, forming the basis for the study’s findings.

**Measurement of Transformational Leadership Behaviors**

This research measured the Transformational Leadership Behaviors (TLB) construct using 20 items from the Multifactor Leadership Questionnaire (MLQ) 5x Short, as developed by Bass and Avolio (1995). The MLQ is a widely recognized tool for assessing transformational leadership styles. The 5x Short version encompasses five dimensions: (1) Idealized Influence (Attributed) (IIA); (2) Idealized Influence (Behavior) (IIB); (3) Inspirational Motivation (IM); (4) Intellectual Stimulation (IS); and (5) Individualized Consideration (IC). Data were collected regarding TLB from the leaders, reflecting their self-assessment, and their followers, indicating their perception of the leader’s transformational behaviors.

To consolidate the responses from multiple followers per leader into a unified metric, follower assessments for each TLB dimension were averaged. Before this aggregation, the consistency of the followers’ assessments was verified to confirm the reliability of the composite score. The inter-follower agreement for TLB was notably high ($r = .93$, $p < .01$), demonstrating substantial unanimity in followers’ perceptions of their leaders’ transformational leadership behaviours. This methodological step ensured a robust and valid measurement of TLB for further analysis in the study.

**Measurement of Organizational Citizenship Behaviors (OCB)**

The OCB construct in this study was assessed using a four-component measure developed by Podsakoff et al. (1994b; 1990a), building upon the foundational work of Organ (1988; 1990b). This comprehensive measure includes four sub-categories: (1) Helping Behavior, (2) Sportsmanship, (3) Civic Virtue, and (4) Conscientiousness. To synthesize the data on followers’ OCB into a unified metric, the researchers averaged the responses across these dimensions. Before this aggregation, they verified a high consensus among the responses to ensure the reliability of the aggregated OCB measure. The Podsakoff et al. framework is widely recognized for its robust reliability and validity, having been employed effectively in a multitude of research studies.

In order to accurately reflect the collective OCB within the context of varying responses from followers per leader, the study aggregated these individual responses into a singular measure, offering a holistic view
of OCB within the organization. This step was crucial for maintaining the integrity of the data. The researchers also meticulously checked for consistency among follower responses before averaging, calculating the inter-follower correlation for the OCB construct. The resulting strong average inter-follower correlation (.93, p < .01) underscores a high level of uniformity in perceptions of OCB among followers, reinforcing the measurement’s accuracy and reliability in capturing OCB within the study.

**Measurement of Organizational Performance (OP)**

The study employed a 16-item questionnaire crafted by Quinn (1988) to evaluate the OP construct. This tool measures organizational performance through the lens of the competing values framework, distinguishing four key dimensions of organizational effectiveness: (1) rational goal, (2) open systems, (3) internal processes, and (4) human resources. Leaders were prompted to assess the frequency of each performance-related statement occurring within their organizations using a five-point Likert scale, from (1) ‘not at all’ to (5) ‘frequently, if not always.’ The competing values framework is a well-regarded model in organizational research, with its reliability and validity affirmed across diverse studies (Nguni et al., 2006; Rojas, 2000; Zammuto and Krakower, 1991).

Data collection was directed at leaders rather than followers to accurately capture the OP construct. Leaders are often better positioned to evaluate the organization’s performance comprehensively, given their overarching view of its functions. While followers might possess in-depth insights into specific departmental or unit performance, leaders can provide a macro perspective on the organization’s effectiveness. Consequently, sourcing information from leaders gave the researchers a more complete and precise portrayal of the organization’s overall performance.

**RESULTS**

In this study, three constructs were measured using a five-point Likert scale: transformational leadership behaviors (TLB), organizational citizenship behaviours (OCB), and organizational performance (OP). Table 1 presents the means and standard deviations of each measurement variable that makes up these constructs; for example, TLB was measured using five items (i.e., IIA, IIB, IM, IS, IC). One noteworthy aspect of the data was the comparison between the means estimated from the TLBs of the leaders as reported by both the leaders themselves and their followers. As shown in Table 1, in all cases and for all five measurement variables, the leaders estimated their TLB to be lower than the followers did (e.g., TLB-L, IIA-L $\bar{x} = 3.38$ vs. TLB-F, IIA-F $\bar{x} = 3.77$). Paired t-tests were conducted to examine these differences, and each was found to be significant (p < .01). These findings suggest that there may be a discrepancy between leaders’ perceptions of their own transformational leadership behaviors and the perceptions of their followers, highlighting the importance of collecting data from multiple sources in leadership research.

**TABLE 1**

**MEANS, CONSTRUCT RELIABILITY ESTIMATES, AND MEASUREMENT LOADINGS**

<table>
<thead>
<tr>
<th>Code</th>
<th>Construct / Item</th>
<th>Mean</th>
<th>SD</th>
<th>Std Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLB-L</td>
<td>Transformational Leadership Behaviours—Leaders (Reliability $\alpha = .95$)</td>
<td>3.57</td>
<td>0.73</td>
<td>.93*</td>
</tr>
<tr>
<td>IIA - L</td>
<td>Idealized Influence (Attributed)</td>
<td>3.38</td>
<td>0.64</td>
<td>.92*</td>
</tr>
<tr>
<td>IIB - L</td>
<td>Idealized Influence (Behavioral)</td>
<td>3.65</td>
<td>0.64</td>
<td>.91*</td>
</tr>
<tr>
<td>IM - L</td>
<td>Inspirational Motivation</td>
<td>3.53</td>
<td>0.50</td>
<td>.83*</td>
</tr>
<tr>
<td>IS - L</td>
<td>Intellectual Stimulation</td>
<td>3.50</td>
<td>0.66</td>
<td>.88*</td>
</tr>
<tr>
<td>IC – L</td>
<td>Individualized Consideration</td>
<td>3.57</td>
<td>0.73</td>
<td>.93*</td>
</tr>
<tr>
<td>Code</td>
<td>Construct / Item</td>
<td>Mean</td>
<td>SD</td>
<td>Std Loadings</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>--------------</td>
</tr>
<tr>
<td>TLB</td>
<td>Transformational Leadership Behaviours—Followers (Reliability α = .93)</td>
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<td>IIA - F</td>
<td>Idealized Influence (Attributed)</td>
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<td>0.59</td>
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<td>IIB - F</td>
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<td>.87*</td>
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<td>IM - F</td>
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<td>0.68</td>
<td>.83*</td>
</tr>
<tr>
<td>IS - F</td>
<td>Intellectual Stimulation</td>
<td>3.87</td>
<td>0.63</td>
<td>.92*</td>
</tr>
<tr>
<td>IC - F</td>
<td>Individualized Consideration</td>
<td>3.78</td>
<td>0.71</td>
<td>.85*</td>
</tr>
<tr>
<td>OCB</td>
<td>Organizational Citizenship Behaviour (Reliability α = .88)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HB</td>
<td>Helping Behaviour</td>
<td>3.81</td>
<td>0.81</td>
<td>.61*</td>
</tr>
<tr>
<td>CV</td>
<td>Civic Virtue</td>
<td>3.57</td>
<td>0.77</td>
<td>.70*</td>
</tr>
<tr>
<td>SMS</td>
<td>Sportsmanship</td>
<td>3.09</td>
<td>0.93</td>
<td>.91*</td>
</tr>
<tr>
<td>C</td>
<td>Conscientiousness</td>
<td>3.20</td>
<td>0.99</td>
<td>.89*</td>
</tr>
<tr>
<td>OP</td>
<td>Organizational Performance (Reliability α = .91)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OP RG</td>
<td>Rational Goal</td>
<td>3.48</td>
<td>0.63</td>
<td>.92*</td>
</tr>
<tr>
<td>OP OS</td>
<td>Open Systems</td>
<td>3.39</td>
<td>0.70</td>
<td>.93*</td>
</tr>
<tr>
<td>OP IP</td>
<td>Internal Process</td>
<td>3.52</td>
<td>0.63</td>
<td>.75*</td>
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<tr>
<td>OP HR</td>
<td>Human Resource</td>
<td>3.60</td>
<td>0.71</td>
<td>.82*</td>
</tr>
</tbody>
</table>

*All coefficients were significant p < .01

**Self-Estimates and Common Source Variance**

To address concerns about overestimating of self-reports and common source bias among variables, comparisons of estimates from the two different sources (leaders and followers) were undertaken. Concerning overestimation of leader’s TLB scales the averages of the overall scale as well as each of the four subscales were examined. The means of TLB for the leaders were as follows: IIA-L \( \bar{x} = 3.38 \), IIB-L \( \bar{x} = 3.65 \), IM-L \( \bar{x} = 3.53 \), IS-L \( \bar{x} = 3.50 \), IC-L \( \bar{x} = 3.57 \). The means for the TLB for the follower were as follows: IIA-F \( \bar{x} = 3.77 \), IIB-F \( \bar{x} = 3.87 \), IM-F \( \bar{x} = 3.83 \), IS-F \( \bar{x} = 3.87 \), IC-F \( \bar{x} = 3.78 \). A t-test was used to test differences in the means for each pair of subscales as well as the overall measure, and in each case the TLB estimates of the followers were significantly higher (p<.05) than the estimates provided by the leaders of their own TLB (e.g., IIA-L \( \bar{x} = 3.38 \) vs. IIA-F \( \bar{x} = 3.77 \)). Thus, overestimation of TLB by leaders does not seem to be an issue. To address concerns of common source bias (common variance error introduced by using a single source) we examined the correlation between the leader’s and the follower’s estimate of the leader’s TLB with the leader’s estimate of OP (if common source variance is a problem one would expect the leader bias in both estimates which would result in a higher correlation). The correlation between the leader’s estimate of their own TLB and OP was significant (r=.37, p<.05) and similarly the correlation between the follower’s perception of the leader’s TLB and OP was also significant (r=.40, p<.05). Since the magnitude of the correlation between TLB and OP for the leaders’ and follower’s estimation of TLB was essentially the same, common source bias does not appear to be a significant problem.

**Construct Validation**

To evaluate the theoretical model presented in Figure 1, the study first established the psychometric properties of the scales used to measure the three latent constructs (TLB, OCB, and OP). To accomplish this, several tests were conducted to establish the reliability, inter-item and inter-scale correlations, confirmatory factor analysis (Anderson and Gerbing 1988), and convergent validity. Multiple fit criteria were employed for the confirmatory factor analysis to assess the appropriateness of the measurement models tested (Bollen and Long 1993; Hair et al. 1995).

**Scale Reliability**

Scale reliability provides a measure of the internal consistency and homogeneity of the items comprising a scale (Churchill 1979) and was calculated using Cronbach’s alpha. As shown in Table 1, TLB
for the leaders had an $\alpha=.95$, while for the followers it was $\alpha = 0.93$. The OCB scale had an $\alpha=.85$ and the OP scale had an $\alpha=.91$. These values indicate a high level of internal consistency for all four scales, exceeding the recommended threshold of 0.70 (Churchill 1979), providing strong evidence of the reliability of the scales used in the study.

**Inter-Item, Inter-Scale, and Inter-Follower Correlations**

The inter-item and inter-scale correlations within each of the four constructs (TLB Leader, TLB Follower, OCB, and OP) were calculated, and all inter-items were found to be significantly correlated within their corresponding scales ($p < 0.01$). The average inter-item correlations for TLB Leader, TLB Follower, OCB, and OP were $r = .80$, $r = .72$, $r = .62$, and $r = .72$, respectively. These values indicate a strong inter-relationship among the measurement variables for each of the four constructs, with all inter-item correlations in this study being above the recommended threshold of $r = .3$ (Hair et al. 1998). Please refer to Table 2 for the detailed inter-item correlations.

Inter-scale correlations were calculated using the SEM x-measurement model between the pairs of constructs and their associated measurement variables. For leaders’ perception of their own TLB, both inter-scale correlations were significant ($p < 0.01$), with TLB-OCB at $r = .24$ and TLB-OP at $r = .37$. Similarly, for followers’ perception of their leaders’ TLB, both inter-scale correlations were significant ($p < 0.01$), with TLB-OCB at $r = .81$ and TLB-OP at $r = .40$. Finally, for the OCB-OP relationship, with OCB estimated by followers and OP estimated by leaders, the inter-scale correlation was $r = .48$. Please refer to Table 2 for the detailed inter-scale correlations.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>ASSESSMENT OF DISCRIMINANT VALIDITY OF THE CONSTRUCTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
</tr>
<tr>
<td>TLB Leader with:</td>
<td></td>
</tr>
<tr>
<td>Organizational citizenship</td>
<td>.24*</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>.37*</td>
</tr>
<tr>
<td>TLB Follower with:</td>
<td></td>
</tr>
<tr>
<td>Organizational citizenship</td>
<td>.81*</td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>.40*</td>
</tr>
<tr>
<td>Organizational citizenship with:</td>
<td></td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>.48*</td>
</tr>
</tbody>
</table>

Note: * Correlation is significant at the $\alpha = .05$ level (two-tailed)

**Convergent Validity - Confirmatory Factor Analysis**

Convergent validity is a crucial element of research, as it demonstrates the extent to which various measures accurately reflect the intended construct of interest (Churchill, 1979). To evaluate convergent validity, the researchers reviewed the significance level of the factor loadings. If each item’s factor loadings are significant, the indicators effectively measure the same construct (Anderson and Gerbing, 1988), indicating a unidimensional scale. Confirmatory Factor Analyses (CFAs) indicated that each of the three constructs demonstrated a good fit, with **TLB Leader**: $\chi^2 = 0.99$, $p = 0.61$, $df = 2$, RMSEA = 0.00, RMSR = 0.001, CFI = 1.00, GFI = 1.00, AGFI = 0.99. **TLB Follower**: $\chi^2 = 2.83$, $p = 0.24$, $df = 2$, RMSEA = 0.033, RMSR = 0.003, CFI = 1.00, GFI = 1.00, AGFI = 0.97. **OCB**: $\chi^2 = 3.24$, $df = 1$, $p = 0.72$, RMSEA = 0.078, RMSR = 0.005, CFI = 1.00, GFI = 1.00, AGFI = 0.96. **OP**: $\chi^2 = 0.51$, $df = 1$, $p = 0.47$, RMSEA = 0.00, RMSR = 0.002, CFI = 1.00, GFI = 1.00, AGFI = 0.99.

The fit indices for the CFA met or exceeded the recommended minimum levels ($p>=.05$, $\chi^2/df<3.0$, RMR<0.10, CFI>.90, GFI>.90, AGFI>.90). The standardized loadings for the indicators ranged from
lx=0.49 to lx=0.95, and all were statistically significant (t-values>2.576; p<.01). These results provide satisfactory evidence of convergent validity for the indicators used to measure the constructs in this study.

**Model and Hypotheses Testing**

In this study, two models were estimated--the LP model (Leader perception of their transformational leadership behaviors) and the FP model (Follower perception of the leader’s transformational leadership behaviors), as mentioned earlier. In the subsequent sections, we will delve into these two models and present the outcomes of the hypotheses tests conducted to examine them.

*Chief Executive Officer Perception of Leader’s TLB Model*

Prior to assessing the study’s hypotheses, the model’s overall fit had to be established (Bollen and Long 1993). The chi-square statistic was significant ($\chi^2 = 172.77, df = 60, p < 0.01$). With respect to the fit indices, the ratio $\chi^2/df$ (172.77/59) and RMSEA, with values of 2.93 and 0.072, respectively, were below the recommended maximum of 3.00 and 0.10 (Chau 1997). Similarly, the index RMSR was below the 0.10 minimum acceptable level, with a value of 0.015. The indices CFI, GFI, and AGFI were all above the minimum acceptable 0.90 level, with values of 0.98, 0.93, and 0.90, respectively (Chau 1997). The results of the structural model estimation are shown in Figure 2. Thus, the model appears to fit reasonably well.

**FIGURE 2**

**TLB AND OCB’S IMPACT ON OP: LEADER-PERCEPTION MODEL**

The test of the proposed hypotheses is based on the direct and indirect effects of the structural model presented in Figure 2. The coefficients between latent variables indicate the relative strength of each relationship (Jöreskog and Sörbom 1993). Each of the three hypotheses was tested at the significance level of $p < 0.05$. All 15 measurement variables loaded significantly ($p < 0.05$) on their respective constructs (TLB, OCB, and OP). Their loadings are presented in Figure 2.

The first hypothesis (H1-LP) proposes that transformational leadership behaviors positively impact organizational citizenship behavior. The results from the structural model estimation, as shown in Figure 2, indicate that the path linking these two constructs was significant and positive (standardized $\gamma$ coefficient = 0.22; $t$-value = 3.44, $p < 0.05$), providing robust evidence in support of hypothesis 1. This suggests that higher levels of transformational leadership behaviors are positively associated with higher levels of employee organizational citizenship behavior.

The second hypothesis (H2-LP composed of H2d-LP and H2i-LP) posits that transformational leadership behaviors positively impact organizational performance. As shown in Figure 2, this hypothesis’s total effect is composed of two paths, the direct (H2d-LP) (TLB on OP) and indirect (H2i-LP) (TLB on OP as mediated through OCB) effects. The direct effect of OCB on OP (H2d-LP) was positive and significant ($\gamma$ coefficient = 0.27, $t = 4.58, p < 0.05$). Additionally, the indirect effect (H2i-LP) of TLB
on OP as mediated through OCB was positive and significant ($\gamma_1 \beta_1$ coefficient = 0.09, $t = 2.98$, $p < 0.05$). The total effect between these two constructs was positive and significant (total standardized coefficient = 0.36, $t$-value = 6.12, $p < 0.05$), thus providing strong evidence supporting hypothesis 2. This indicates that higher levels of transformational leadership behaviors are associated with higher levels of organizational performance both directly and as mediated through organizational citizenship behavior.

The third hypothesis (H3-LP) posits that organizational citizenship behavior positively impacts organizational performance. As Figure 2 shows, the path relating these two constructs was positive and significant (standardized $\beta_1$ coefficient = 0.42, $t = 5.65$, $p < 0.05$), providing strong evidence supporting our third hypothesis. This suggests that higher levels of employee organizational citizenship behavior are associated with higher levels of organizational performance. Our findings provide strong support for the theoretical model (Figure 2) and the hypotheses presented in this study.

Followers’ Perception of Their Own TLB Model

The chi-square statistic for the follower-perception model (Figure 3) was found to be significant ($\chi^2 = 170.72$, $df = 59$, $p < 0.01$). The fit indices of the model, including the ratio $\chi^2/df$ (170.72/59) and RMSEA (0.071), were both below the recommended maximum of 3.00 and 0.10, respectively, indicating a reasonably good fit (Chau 1997). Similarly, the RMSR index value of 0.029 was below the minimum acceptable level of 0.10. In addition, the CFI, GFI, and AGFI indices exceeded the minimum acceptable level of 0.90, with values of 0.99, 0.94, and 0.90, respectively (Chau 1997). Thus, the model appears to fit reasonably well. The results of the structural model estimation for the follower-perception model can be seen in Figure 3.

The proposed hypotheses were tested based on the direct and indirect effects of the structural model illustrated in Figure 3. We tested each of the three hypotheses at the significance level $p < 0.05$. It is worth noting that all 15 measurement variables loaded significantly ($p < 0.05$) on their respective constructs (TLB, OCB, and OP). You can see their individual loadings in Figure 3.

The first hypothesis (H1-FP) posits that transformational leadership behaviors positively impact employee organizational citizenship behavior. The direct relationship between these two constructs was analyzed based on the structural model presented in Figure 3. The results indicate that the path between transformational leadership behaviors and employee organizational citizenship behavior was positive and significant (standardized $\gamma_1$ coefficient = 0.84; $t$-value = 11.49, $p < 0.05$), providing strong evidence supporting hypothesis 1. These findings suggest that higher levels of transformational leadership behaviors are associated with higher employee organizational citizenship behavior.

**FIGURE 3**

TLB AND OCB’S IMPACT ON OP: FOLLOWER-PERCEPTION MODEL
The second hypothesis (H2d-FP and H2i-FP) asserts that transformational leadership behaviours positively impact organizational performance. As shown in Figure 3, this hypothesis’s total effect is composed of two paths, the direct (H2d-FP) (TLB on OP) and indirect (H2i-FP) (TLB on OP as mediated through OCB) effects. The direct effect of TLB on OP (H2d-FP) was non-significant ($\gamma_2$ coefficient = .12, $t = 1.08, p > 0.05$). However, the indirect effect (H2i-FP) of TLB on OP as mediated through OCB was positive and significant ($\gamma_1\beta_1$ coefficient = 0.27, $t = 2.43, p < 0.05$). The total effect between these two constructs was positive and significant (total standardized coefficient = 0.39, $t$-value = 6.52, $p < 0.05$), thus providing strong evidence supporting our second hypothesis. This indicates that higher levels of transformational leadership behaviours are associated with higher levels of organizational performance, but the effect is mediated through organizational citizenship behaviour.

The third hypothesis (H3b-FP) asserts that employee organizational citizenship behaviour positively impacts organizational performance. As illustrated in Figure 3, the path linking these two constructs was found to be positive and significant (standardized $\beta_1$ coefficient = 0.32, $t = 2.35, p < 0.05$), providing strong evidence for hypothesis 3. This indicates that higher levels of employee organizational citizenship behaviour are associated with higher levels of organizational performance. Our study thus offers robust support for the theoretical model presented in Figure 1 and our proposed hypotheses.

Comparing the Leader-Perception and Follower-Perception Leadership Models

In assessing the leader-perception and follower-perception approaches, the initial stage involved establishing whether a connection existed between the transformational leadership estimations gathered from both the leader and their followers. A two-construct (TLB-L and TLB-F) SEM model was employed to ascertain the association between these two elements. The resulting correlation demonstrated a moderately significant link ($r = .31, t = 5.52$).

We next estimated both of the models simultaneously using the stacked model method (see Table 3). In the stacked model method the two models are first estimated (unconstrained). Next their chi-square value is obtained then re-estimated with the parameter of interest constrained to be equal between the two models. Similar to the chi-square difference test used earlier to determine discriminant analysis, the difference in the chi-squares of the constrained and unconstrained models is determined and the $p$-value calculated using the 1df obtained by constraining the two parameters of interest to be equal. If the $p$-value is significant it indicates that the two models’ parameters are significantly different. As we can see in Figure 2 and 3 and summarized in Table 3, the direct effect of TLB on OCB in the leader-perception model was significant ($\gamma_2 = .22$) whereas in the follower-perception model there was no significant effect ($\gamma_2 = .84$). This difference was significantly different ($\chi^2_{\text{diff}} = 63.35, 1\text{df}, p < .001$) indicating that the impact of TLB on OCB was much higher when using the followers’ perceptions of TLB than the leaders’ perception of their own TLB. As expected, the impacts in both the models of OCB on OP were very similar in magnitude ($\beta_1 = .42$ and $\beta_1 = .32$, respectively) and the chi-square difference test indicated that there was no significant difference. Naturally this was to be expected because the estimates of these two constructs are the same in both models. The direct effect of TLB on OP in the leader-perception model was significant ($\gamma_2 = .27$). In contrast, in the follower-perception model there was no significant effect ($\gamma_2 = .12$). Thus, however, the total effect (TE) of TLB on OP is very similar between the leader- and follower-perception models (TE = .36 and TE = .39, respectively) how it is reached in the two models is very different. When it comes to the leader-perception model, the total effect is divided between the direct effect of TLB on OCB and the indirect effect of TLB on OP mediated through OCB. By contrast, in the follower-perception model there is no significant direct effect of TLB on OP and the effect is almost totally indirect through TLB on OP mediated through OCB.
### TABLE 3
COMPARISON OF THE TWO MODELS

<table>
<thead>
<tr>
<th></th>
<th>Direct effect TLB → OCB (γ1)</th>
<th>Direct effect OCB → OP (β1)</th>
<th>Direct effect TLB → OP (γ2)</th>
<th>Indirect effect TLB→OCB→OP (γ1β1)</th>
<th>Total effect of TLB→OP (γ1β1 + γ2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader-perception model</td>
<td>0.22</td>
<td>0.42</td>
<td>.27</td>
<td>.09</td>
<td>.36</td>
</tr>
<tr>
<td>Follower-perception model</td>
<td>0.84</td>
<td>0.32</td>
<td>.12 (not significant)</td>
<td>.27</td>
<td>.39</td>
</tr>
<tr>
<td>χ² difference test</td>
<td>χ² diff = 63.35, 1 df</td>
<td>χ² diff = 0.22, 1 df</td>
<td>χ² diff = 55.29, 1 df</td>
<td>Composite value derived from γ1β1</td>
<td>Composite value derived from γ1β1 + γ2</td>
</tr>
<tr>
<td>p</td>
<td>&lt; .001 (significant)</td>
<td>p &gt; 0.05 (non-significant)</td>
<td>p &lt; .001 (significant)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DISCUSSION

The research analyzed and contrasted the perspectives of leaders and followers regarding leaders’ transformational leadership behavior (TLB) and its influence on organizational citizenship behaviors (OCB) and organizational performance (OP). After establishing the psychometric properties (reliability, inter-item and inter-scale correlations, and convergent validity) of the scales and subscales for the county government population, the investigation pursued a dual-pronged approach. Firstly, the aim was to identify and evaluate the relationships among the three constructs (hypotheses) within the two models. Secondly, the two models were statistically “stacked”, enabling the determination of any effects related to the perception (leader’s or follower’s) of transformational leadership and its impact on the constructs of interest. This study offers a unique addition to the existing literature by being the first to simultaneously estimate the direct and indirect effects among the three constructs and evaluate the consequences of employing either leader or follower perceptions to gauge the leader’s transformational leadership behaviors on the remaining constructs.

Concerning the first objective, the research offers robust backing for the models and two of the three proposed hypotheses. The investigation discovered that TLB significantly and positively influences OCB in both the leader- and follower-perception models. As for the impact of OCB on OP (H3), the outcomes of both leader- and follower-perception models indicate a notable positive connection between the constructs. When it comes to hypothesis 2 — the influence of TLB on OP — disparities were observed between the two models examined. In general, the total effect of TLB on OP is alike in both models, but the direct and indirect effects differ significantly (details elaborated in the following paragraph). The outcomes of the direct impact of TLB on OP align with findings from other researchers (e.g., Avolio et al. 1988; Deluga 1988; Elenkov 2002; Geyer and Steyrer 1998; Zhu et al. 2005), demonstrating that transformational leadership behaviors are positively correlated with organizational performance.

In contrast, within the follower-perception model, the majority of TLB’s influence on OP was mediated (indirect) by OCB, and the direct effect was non-significant. This implies that in the follower-perception model, TLB does not directly affect OP; rather, TLB’s effect on the employee’s OCB, which in turn directly impacts OP. The absence of support for the direct effect of TLB on OP in the follower-perception model was intriguing, considering the leader-perception model validated this relationship and literature corroborates it.

In regard to the second objective, an analysis of the leader-perception and follower-perception models reveals some noteworthy distinctions. Firstly, the influence of TLB on OCB (hypothesis 1) was
substantially greater in the follower-perception model. A plausible explanation for this observation is that, from the followers’ viewpoint, the degree of leader TLB has a more profound effect on their own organizational citizenship behavior levels (Failla and Stichler 2008). Concerning the third relationship, the impact of OCB on OP (hypothesis 3) was similar in both models—OCB exhibited a significant positive influence on OP. This outcome aligns with expectations, given that followers estimated OCB in both models and leaders estimated OP.

However, it is likely that what is happening is somewhere between the two models and that other variables combine to impact organizational performance. Additional research into determining a model that properly integrates both perspectives could provide the foundation for future research. Additionally, research into determining what other variables (other than employee citizenship behavior) ultimately impact performance would be of great importance for both researchers and practitioners.

IMPLICATIONS, LIMITATIONS, AND CONCLUSIONS

This study presents multiple theoretical advancements. Firstly, while organizational citizenship behaviour has been extensively explored, there is limited understanding of its relationship with transformational leadership behaviours and how these behaviours subsequently influence organizational performance. In this investigation, we utilized organizational citizenship behaviours to uncover the core dynamics connecting transformational leadership and organizational performance. As a result, this research introduces and advocates for a theoretical framework that unifies transformational leadership, organizational citizenship behaviours, and organizational performance.

Another key theoretical contribution of this paper lies in the convergence of data gathered from leaders (TLB and OP) and followers (OCB), demonstrating that these two datasets are independent yet interconnected, and collaboratively bolster the model hypothesized in Figure 1. This approach results in a model that visually and statistically consolidates the perspectives of both stakeholder groups, enhancing and corroborating the findings of previous single-informant studies (e.g., Sobel 1982).

Alongside its theoretical contributions, this study offers valuable insights for practitioners. Managers must recognize how their leadership style shapes and affects employee organizational citizenship behaviours, given their impact on organizational performance. For instance, a leader who communicates an inspiring vision for the future, fosters a shared sense of mission, and prioritizes the organization’s welfare over personal interests is more likely to boost organizational effectiveness. Moreover, a leader skilled in using symbols, imagery, emotional appeals, and effective communication to energize, motivate, inspire, and generate enthusiasm can encourage employees to engage in extra-role behaviors, such as voluntarily working extended hours to help the organization achieve its objectives. Consequently, cultivating transformational leadership in managers or executives within government organizations can yield significant organizational benefits.

Further, our findings suggest that organizations must select and develop supervisors and managers who have potential for active constructive leadership to facilitate OCB. This paper has shown that the overall organizational performance is affected by OCB. Other practical implications of OCB are the need to go beyond employees’ in-role performance to fulfil customers’ requirements and overall organizational goal achievement. OCB is crucial for management in service organizations by active participation, effective service delivery and enthusiasm to effectively function at a lesser cost, improve customer satisfaction, productivity, efficiency, and reduce turnover and absenteeism rates, among other benefits.

While the study offers numerous theoretical and practical implications, it also highlights several opportunities and areas for future research. Firstly, the research employed a cross-sectional and descriptive sample of the local government sector at a specific moment in time. Subsequent studies should explore longitudinal methodologies for analyzing these relationships and determining if they change over time. Secondly, this investigation concentrated on transformational leadership behaviours, omitting Bass’s (e.g., Sobel 1982) complete Full-Range Leadership Theory (FRLT), which also encompasses transactional and laissez-faire leadership. Future research could broaden the model in this study by integrating these
supplementary leadership behaviours. Lastly, the present study utilized a composite scale for transformational leadership.

Future research could examine how the individual components of TLB impact organizational commitment and each component of organizational performance. This could give a more prescriptive diagnostic tool that practitioners could utilize to identify specific areas of improvement in the workforce.

In conclusion, the study represents a unique effort that systematically examines and clarifies how organizational citizenship behaviors influence the relationship between transformational leadership and organizational performance.

REFERENCES


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