Exploring the interplay of transformational leadership, job satisfaction, and organizational commitment in enhancing organizational citizenship behavior

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ABSTRACT

This study investigates the intricate relationships between transformational leadership behaviours (TLB), job satisfaction (JS), organizational commitment (OC), and organizational citizenship behaviours (OCB) within the context of county governments in the United States. Drawing on a theoretical model that hypothesizes both direct and indirect effects of TLB on OCB, mediated by JS and OC, this research employs structural equation modelling to analyze survey data collected from 372 matched leader-follower pairs across various county governments. The findings substantiate the hypothesized model, revealing that TLB indirectly influences OCB through the mediating effects of JS and OC. Specifically, the study underscores the pivotal role of job satisfaction and organizational commitment as conduits through which transformational leadership exerts its positive impact on organizational citizenship behaviours. This research contributes to the literature by empirically validating a comprehensive model within the public sector context, thereby extending our understanding of the mechanisms through which transformational leadership fosters a conducive work environment that promotes OCB. The study’s implications for leadership development and organizational policy within public sector organizations are discussed, alongside limitations and directions for future research.

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Introduction

The relationship between transformational leadership, job satisfaction, organizational commitment, and organizational citizenship behaviours constitutes a vital area of inquiry within organizational behaviour and management studies. The impetus for this study arises from the recognition of the profound impact leaders exert on the motivational landscape and performance standards of their organizations (Bass, 1985; Burns, 1978). Transformational leadership, characterized by its ability to inspire, intellectually stimulate, and consider the individualized needs of followers, has been identified as a key driver of positive organizational outcomes, including heightened job satisfaction and deeper organizational commitment. Despite the wealth of research underscoring the significance of transformational leadership in various sectors, gaps remain, particularly concerning its influence within the dynamics of local government settings.

Scholarly discussions on organizational citizenship behaviours (OCB) and transformational leadership behaviours (TLB) have evolved significantly, from Barnard's (1938) early distinctions between in-role and extra-role behaviours to contemporary...
conceptualizations that emphasize the multifaceted nature of these constructs (Organ, 1988; Smith et al., 1983). The literature has progressively moved towards a nuanced understanding of OCB, advocating for a more consolidated categorization to enhance practical application in organizational contexts (Podsakoff et al., 1997). Similarly, transformational leadership has been dissected into core components that encapsulate the essence of influential and motivational leadership practices (Bass, 1985; Bass & Avolio, 2000). These scholarly endeavours reflect ongoing debates and a vibrant dialogue among researchers aiming to refine and operationalize these constructs for empirical investigation and organizational practice.

This study aims to bridge these theoretical insights with empirical investigation, focusing on the interplay between TLB, job satisfaction, organizational commitment, and OCB within the context of county governments in the United States. By employing a comprehensive theoretical model, this research seeks to explain the direct and indirect effects of transformational leadership on job satisfaction, organizational commitment, and, subsequently, OCB. The research methodology involves a quantitative methods approach, incorporating surveys distributed to both leaders and followers within selected county governments. The data collected from these surveys, encompassing self-assessments and perceptions of leadership behaviours, job satisfaction, and organizational commitment, are analyzed using structural equation modelling to test the hypothesized relationships within the theoretical framework.

This paper is organized into several key sections to facilitate a coherent exploration of the study's objectives and findings. Following this introduction, the literature review section delves into the theoretical and empirical underpinnings of the main constructs under study, shedding light on the linkage between theory and practice. The subsequent section provides background information on the research methodology, detailing participant selection, measurement instruments, and the analytical strategies employed. The analysis and findings section presents the empirical results, followed by a discussion of the implications of these findings for both theory and practice. The paper concludes with a summary of the key points, recommendations for practitioners, directions for future research, and an acknowledgment of the study's limitations.

**Literature Review**

**Theoretical and Conceptual Background**

Organizational Citizenship Behaviours (OCB): Organizational citizenship is defined by the extent to which employees partake in actions that exceed their formal job duties (Appelbaum et al., 2004). Early on, Barnard (1938) distinguished between the obligatory behaviours tied to one's job (in-role behaviours) and those actions that surpass job requirements (extra-role behaviour), considering the latter as essential for organizational success (Barnard, 1938, p. 83). Expanding on this, Katz emphasized the necessity of employees engaging in beyond-duty behaviours for organizational stability, suggesting that reliance on merely prescribed duties renders an organization vulnerable (Katz & Kahn, 1966, p. 132).

The term organizational citizenship behavior (OCB) was formally introduced by Smith et al. (1983), describing it as voluntary conduct not formally compensated but crucial for an organization's efficient operation (Smith et al., 1983, p. 656). This concept has been explored through various lenses (e.g., Bateman & Organ, 1983; Organ, 1990a, 1990b; Smith et al., 1983; Van Dyne et al., 1994) with the five-dimensional framework of altruism, courtesy, civic virtue, sportsmanship, and conscientiousness developed by Organ (1988, 1990a) being particularly influential. These dimensions cover a range of supportive behaviours, from aiding colleagues to engaging in organizational activities and maintaining a positive attitude (Organ, 1988). Later additions by (Organ, 1990a) included peacekeeping and cheerleading, focusing on conflict resolution and encouragement within the workplace.

However, this multifaceted view of OCB faced critique for its complexity and the overlap among its dimensions, with some researchers (e.g., MacKenzie et al., 1991; Podsakoff & MacKenzie, 1994) advocating for a simpler categorization. Podsakoff et al. (1997) proposed consolidating these behaviours into broader categories, such as Helping Behavior (HB), Civic Virtue (CV), Sportsmanship (SMS), and Conscientiousness (C), which encompass various forms of supportive and constructive actions within an organizational context. This streamlined approach aims to clarify the understanding and application of OCB in practical settings.

Transformational Leadership Behaviours (TLB): Burns (1978) described transformational leadership as a process whereby leaders and followers uplift each other to achieve elevated levels of motivation and ethical standards. A transformational leader is characterized by their ability to inspire followers to transcend personal interests for the sake of organizational objectives, leading to performance beyond the expected norms (Bass, 1985). Bass (1985) along with Bass and Avolio (2000), delineated five key traits indicative of transformational leadership behaviour (TLB): idealized influence (attributed) (IIA), idealized influence (behaviour) (IIB), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration (IC). Idealized influence (attributed) (IIA) encompasses a leader's traits as perceived by followers, eliciting trust, admiration, and respect. Idealized influence (behaviour) (IIB) involves a leader's charismatic conduct that fosters a shared sense of purpose, surpassing personal interests for organizational benefit. Inspirational motivation (IM) is the leader's capability to invigorate and excite followers through symbolic actions, emotional appeals, and compelling communication. Intellectual stimulation (IS) highlights a leader's encouragement of innovation and critical thinking, fostering an environment where novel ideas are welcomed and not rebuffed. Individualized consideration (IC) points to a leader's attentive and supportive demeanour, catering to the unique needs and fostering the development of each follower.
Organizational Commitment (OC) is a multifaceted construct within the field of social science, characterized by diverse interpretations and measurements. Mowday et al. (1982) have identified a plethora of definitions, numbering up to ten, while Morrow (1983) expanded this further by pointing out over twenty-five commitment-related concepts and metrics in the scholarly literature. Despite this variety, the conceptualization of organizational commitment generally converges around three central themes: normative commitment, continuance commitment, and affective commitment, as categorized by Allen and Meyer (1990) and further discussed by Meyer and Allen (1991). Normative commitment is seen as an internal ethical obligation to remain employed within an organization (Allen & Meyer, 1990), suggesting that employees with a strong normative commitment feel that staying with their organization is a morally correct action. Continuance commitment arises from an employee's awareness of the potential losses incurred from leaving the organization (Allen & Meyer, 1990), implying commitment is driven by the perceived benefits of staying or the high costs of leaving. Affective commitment, on the other hand, is described as the depth of an individual's emotional connection, identification, and engagement with their organization (Mowday et al., 1982).

Among these forms of commitment, affective commitment stands out as the most prominent and extensively studied, particularly within the realm of public sector organizations (Allen & Meyer, 1996; Liou & Nyhan, 1994; Romzek, 1990). For instance, Kim (2005) observed that the commitment of public employees predominantly stems from their emotional bonds, identification with, and active participation in their respective public organizations. Echoing this sentiment, Romzek (1990) noted that committed employees in the public sector are driven not by the calculation of personal gains or losses but by the fulfillment and personal satisfaction derived from working for organizations that reflect their personal values. In essence, employees in the public sector are motivated to stay not out of necessity (continuance commitment) or obligation (normative commitment) but out of desire and personal fulfillment (affective commitment) (Allen & Meyer, 1996). Consequently, this study will primarily concentrate on exploring the affective dimension of organizational commitment.

Job satisfaction (JS)

Job satisfaction is one of the most frequently studied variables in organizational behaviour research. As a result, the construct has been conceptualized and defined in a variety of ways. For example, (Smith, 1969, p. 12) defined job satisfaction as “feelings a person has about his job”. Churchill Jr et al. (1974, p. 255) defined the domain of job satisfaction as “all characteristics of the job itself and work environment which [people] find rewarding, fulfilling, and satisfying, or frustrating and unsatisfying”. Locke (1976, p. 1300) defined job satisfaction as a “positive emotional state resulting from the appraisal of one’s job or job experiences”. A common theme among these definitions is that job satisfaction is mostly about how people feel about their jobs and the various aspects of their work. Job satisfaction can be characterized as the level of employees enjoying their daily job activities. Hackman (1980) showed that employees would be satisfied in their work if their jobs took more into account and encouraged skill variety, task identity, task significance, feedback, and autonomy. Each job, the author suggested, could be quantified according to its motivational potential and its likelihood of engendering satisfaction and performance (Hackman, 1980). Other research put it, “... job satisfaction can be conceptualized as a function of situational conditions, personal characteristics, and interactions between both groups of variables” (Cohrs et al., 2006, p. 363). According to Bianchi (2012), for decades, job satisfaction research has examined job redesign to increase or optimize satisfaction. The literature cites factors like recognition, advancement, and opportunities for personal growth for improving the job satisfaction level through a better fit between company policies and rewards.

Empirical Review and Hypothesis Development

Job satisfaction has been accepted as a significant predictor of citizenship behavior for many years. Indeed, Bateman and Organ (1983) conceived the construct of organizational citizenship behavior out of a belief that job satisfaction influences one’s work behaviors that were extra role in nature. Organ (1988) suggested that job satisfaction and citizenship behavior were inextricably linked in a robust bond. However, researchers quickly realized that this link may be more complex than originally expected as various measures of job satisfaction shared differential relationships with OCB (Moorman, 1993). It is now generally accepted that the differential relationships of job satisfaction and OCB are primarily a function of the type of job satisfaction measure that is used in the analysis.

Moorman (1993) found support for the “relative importance of cognitive job satisfaction (based on the rational evaluation of work conditions, opportunities and outcomes) over affective job satisfaction (based on overall positive emotional appraisal of the job) in the prediction of OCB. Spector (1997) found a significant correlation with job satisfaction and OCBs—a correlation that was highly influenced by the affective, cognitive, and attitudinal dimensions of job satisfaction in relation to OCBs’ attitudinal dimensions or antecedents. Significant work has been done on the extent to which job satisfaction taps more of an affective satisfaction or a cognitive satisfaction (Connolly & Viswesvaran, 2000). Organ and Konovsky (1989) suggested that cognitions are more important as indicators of OCB by examining the effects of job cognitions and affect as predictors of OCB. Similarly, Moorman (1993) has confirmed that job satisfaction measures of a more cognitive orientation tend to demonstrate more robust relationships with organizational citizenship behavior. Given these findings, the following hypothesis is posited:

H1: Job satisfaction will be significantly and positively related to organizational citizenship behavior.

As job satisfaction, Organizational commitment is among the variables that are the most commonly examined and presented as antecedent of OCB. OC has a significant Relationship to OCB (Podsakoff et al., 2000). Theoretical support for commitment-OCB
relationship models was provided by Scholl (1981) and Wiener (1982). According to Scholl (1981), organizational commitment is a likely determinant of OCBs because it influences and maintains employees’ behavioral direction even when there is little expectation of formal organizational rewards for performance. Wiener (1982) similarly suggested that organizational commitment do not depend on reinforcements or punishment. Thus, prosocial behaviors that indicate personal preoccupation with the organization or that reflect personal sacrifice for the sake of the organization are also presumed to be affected by commitment. Graham (1991) underlines the relationship between OC and OCB at the macrolevel. He introduces the employees as Citizens of the organization as being of a whole system. This is shown by a willingness to participate actively in its governance; to monitor its environment for threats and opportunities; and to look out for its best interests even at great personal cost. Other researchers (e.g., Bateman & Organ, 1983; Moorman et al., 1998; Organ, 1988, 1990a, 1990b; Smith et al., 1983) have also argued that organizational commitment is positively related to citizenship behaviors. Given these findings, the following hypothesis is posited:

**H2: Organizational commitment will be significantly and positively related to organizational citizenship behavior.**

Numerous research have studied the relationship between job satisfaction and organizational commitment. For example, study conducted by Williams and Hazer (1986) suggests that there was a direct relationship from job satisfaction to organizational commitment. That is, job satisfaction is an antecedent of organizational commitment. Reyes and Shin (1995) determined that teacher job satisfaction is a determinant of teacher commitment and urged that school administrator’s work on teacher job satisfaction before teachers develop a sense of commitment to the organization. Several studies have focused directly on testing the causal relationship between job satisfaction and organizational commitment (Bateman & Strasser, 1984; Curry et al., 1986; Dossett & Suszko, 1990; Farkas & Tetrick, 1989). Thus, the third hypothesis posits the following:

**H3: Job satisfaction and organizational commitment have a significant and positive relationship**

There is a broader consensus in the academic literature about the beneficial impact of transformational leadership on job satisfaction across various other sectors. This positive correlation has been consistently documented in diverse fields, indicating the potential universality of transformational leadership's effects.

In the local government sector, Muterera et al. (2018) found that higher levels of transformational leadership behaviors are associated with increased employee job satisfaction. This relationship is consistent across different perceptions, whether from the leaders or the followers, indicating a robust link between the leadership style characterized by inspirational motivation, intellectual stimulation, and individualized consideration, and the overall job satisfaction among employees.

In the banking sector, a study by Walumbwa et al. (2005) provided empirical evidence that transformational leadership practices contribute significantly to enhancing employee job satisfaction. This finding suggests that the inspirational, motivational, and visionary qualities of transformational leaders can foster a more fulfilling and engaging work environment for employees in the banking industry, potentially leading to higher levels of job satisfaction.

Similarly, the food sector has witnessed comparable outcomes, with research conducted by Charles and Emery (2007) affirming the positive influence of transformational leadership on job satisfaction. This indicates that even in industries with potentially diverse operational dynamics and workforce compositions, the effects of transformational leadership remain consistently positive, enhancing job satisfaction among employees by fostering a supportive and motivating work atmosphere.

The education sector, particularly among teachers, has also been a significant area of study. Bogler (2001) and Ngugi et al. (2006) have both highlighted the positive impact of transformational leadership in educational settings, showing that teachers who work under transformational leaders report higher levels of job satisfaction. This could be attributed to the fact that transformational leadership in education not only motivates and inspires teachers but also supports their professional development and recognizes their contributions, thereby increasing their job satisfaction.

Given the compelling evidence from these varied sectors, it is reasonable to hypothesize that the principles of transformational leadership that lead to increased job satisfaction in banking, food, and education would similarly apply within the context of local government. Therefore, the hypothesis is formulated as follows:

**H4: Transformational leadership behaviors will demonstrate a positive impact on job satisfaction within the local government context.**

A wealth of research underscores the profound impact that transformational leadership can exert on the affective dimension of organizational commitment, as evidenced by numerous studies across various sectors (Avolio et al., 2004; Bycio et al., 1995; Emery & Barker, 2007; Koh et al., 1995; Walumbwa et al., 2005). For instance, the study by Bycio et al. (1995), focusing on hospital registered nurses, is particularly illuminative. In the high-stress, high-stakes environment of healthcare, where the well-being and satisfaction of patients are directly impacted by the commitment and engagement of nursing staff, transformational leadership plays a critical role. This study found a strong positive relationship between transformational leadership and affective commitment among nurses, suggesting that when leaders in healthcare settings inspire, intellectually stimulate, and show genuine concern for the individual development of their nurses, it fosters a deeper emotional commitment to the organization. This commitment can lead to better patient care, lower turnover rates, and improved job satisfaction among nurses. Also, Koh et al. (1995) explored the influence of transformational leadership in educational settings, revealing that such leadership behaviors significantly impact the affective
commitment of educators. In schools and universities, where the motivation and engagement of teachers directly influence student outcomes and the overall learning environment, transformational leadership can be pivotal. By fostering a shared vision, encouraging innovative teaching methods, and providing individualized support, transformational leaders in education can enhance teachers’ sense of belonging and commitment to their institutions, leading to improved educational outcomes. These studies collectively underscore the universality of transformational leadership’s positive impact on affective organizational commitment across different sectors. By embodying the characteristics of transformational leadership, leaders can effectively foster an environment where employees are not only motivated to achieve organizational goals but are also emotionally invested in the success and values of the organization. Given these findings, the following hypothesis is posited:

H5: Transformational leadership behaviours have a positive impact on organizational commitment.

Transformational leadership has been found to have a positive relationship with employee organizational citizenship behaviors (MacKenzie et al., 2001; Podsakoff et al., 1996; Podsakoff et al., 1990). For example, Podsakoff et al. (1990) examined the relationship between transformational leadership and organizational citizenship behaviors and found that the relationship occurred in two ways. First, transformational leadership behaviors are directly related to organizational citizenship. Second, transformational leadership behaviors indirectly influenced organizational citizenship behaviors through follower trust. The significant support, however, was found for the indirect effect of transformational leadership on organizational citizenship behaviors. The authors found that the relationship between transformational leadership behaviors and organizational citizenship behaviors was mediated by trust in the supervisor (Podsakoff et al., 1990). Similarly, using a sample of 1,539 employees across a wide variety of organizations in different industries, Podsakoff et al. (1996) examined the relative contributions of each of the transformational leader behaviors to employees’ organizational citizenship behaviors and found that transformational leader behaviors were positively related to OCB. In particular, individualized consideration appeared to be the most important determinant of employee organizational citizenship behaviors. Likewise, further research, conducted by Banki (2006) involving 3,167 K-12 teachers across 117 schools in 32 districts within eight U.S. states, delved into the dynamics between civic virtue (an element of OCB) and transformational leadership. This study revealed a moderate but positive correlation between transformational leadership and the civic virtue aspect of OCB.

Collectively, these referenced studies consistently demonstrate that transformational leadership behaviors exhibit more substantial direct and indirect ties with OCB. Consequently, drawing from the body of existing research, the following hypothesis is proposed:

H6: Transformational leadership behaviors exert a positive influence on organizational citizenship behaviors.

Figure 1 presents a theoretical model structured around four main constructs: Transformational Leadership, Job Satisfaction, Organizational Commitment, and Organizational Citizenship Behaviors. The model hypothesizes that Transformational Leadership enhances Organizational Citizenship Behaviors both directly and through the mediating effects of Job Satisfaction and Organizational Commitment. The first hypothesized relationship (H1) suggests that Job Satisfaction positively affects Organizational Citizenship Behavior. The second relationship (H2) posits a link between Organizational Commitment and Organizational Citizenship Behaviors, as indicated by the arrow connecting OC and OCB. The third relationship (H3) indicates a connection between Job Satisfaction and Organizational Commitment, denoted by the arrow from JS to OC. The fourth hypothesized link (H4) is between Transformational Leadership and Job Satisfaction. The fifth (H5) connects Transformational Leadership with Organizational Commitment, while the sixth (H6) outlines the direct influence of Transformational Leadership on Organizational Citizenship Behaviors.

Figure 1: Theoretical Model of the Study; Source: Authors
Research and Methodology

Participant Selection and Research Setting

The study targeted county governments across the United States, disseminating 1,364 surveys to executive leaders within these governments, with a return of 416 completed surveys. Subsequently, 1,248 followers of these leaders were invited to contribute, providing insights into their OCB and perceptions of their leaders’ TLB. This process yielded 911 follower responses, of which 892 were deemed usable after data cleansing. This resulted in a final sample of 372 matched leader-follower pairs for analysis.

Measurement Instruments

Transformational Leadership: To evaluate TLB, the study employed the Multifactor Leadership Questionnaire (MLQ) 5x Short version by Bass and Avolio (2000), which includes 20 items rated on a five-point Likert scale. This instrument is widely recognized and used in leadership research (e.g., Antonakis et al., 2003; Gardner & Stough, 2002; Hemsworth et al., 2013; Muterera, 2012; Muterera et al., 2018) and served to collect data on leaders’ self-assessment of their leadership behaviors as well as followers’ perceptions of these behaviors. The follower responses were then averaged to create a composite measure of TLB from the followers’ perspective.

Job Satisfaction: JS was quantified using a six-item index adapted by Price and Mueller (1986) from the original eighteen-item scale developed by Brayfield and Rothe (1951), aimed at capturing overall job satisfaction facets. The validity and reliability of this scale have been supported by previous research (e.g., Muterera et al., 2018; Sorensen, 1985; Wakefield, 1982). Follower responses, collected on a five-point Likert scale, were averaged to establish a collective measure of JS.

Organizational Commitment: OC was measured using the Affective Commitment Scale (ACS) developed by Allen and Meyer (1990), a tool with demonstrated psychometric robustness in numerous studies. Followers rated their level of organizational commitment on a five-point Likert scale, with these responses averaged to yield a unified measure of OC.

Organizational Citizenship Behaviors: The measurement of OCB utilized a composite scale developed by Podsakoff and MacKenzie (1994), based on Organ’s (1988) conceptual framework. This scale, encompassing Helping Behavior, Sportsmanship, Civic Virtue, and Conscientiousness, was chosen despite ongoing debates regarding the multidimensionality of OCB (Law et al., 1998; LePine et al., 2002; Motowidlo, 2000). In alignment with the recommendations of LePine et al. (2002) OCB was treated as a unidimensional construct for this study.

Data Analysis Strategy

The initial processing of the collected data was conducted in Microsoft Excel, with subsequent statistical analyses performed using IBM SPSS Version 19 and confirmatory factor analyses (CFA) and structural equation modeling (SEM) conducted in Lisrel 8.8. The analyses were designed to test the relationships among the latent constructs, each represented by multiple scale items, utilizing SEM as the methodologically appropriate approach for examining the complex interactions posited in the model.

Structural Equation Modeling (SEM) was chosen as the primary analytical tool for this study due to its robust capability to assess multiple dependent relationships simultaneously and its effectiveness in handling complex variable interactions, which is essential for testing our theoretical model. SEM is particularly adept at analyzing the mediating effects of job satisfaction and organizational commitment in the relationship between transformational leadership and OCB. This method also allows for the assessment of model fit, which is crucial for validating our hypothesized relationships. The assumptions underlying SEM, including multivariate normality, linearity, and the absence of multicollinearity among the predictors, were carefully tested. Addressing these assumptions ensures the accuracy and reliability of the results, providing a solid foundation for the conclusions drawn from our data.

Findings and Discussions

Findings

Demographics: Demographic data were gathered relative to both the leaders (n=372) and each corresponding respondent (n=892) to determine their profile characteristics (i.e., gender, position, tenure in current position, and level of education). The majority of leader respondents for this study were male (leaders: 316 males; followers: 495 males). The majority of leader respondents for this study were appointed county executives (n=204, 55%); and the majority of follower respondents for this study were directors and department heads (n=874, 98%) who reported directly to the identified leaders. The majority of leader respondents had been working in their current position anywhere from six to ten years (n=115, 31%); the majority of follower respondents had been working in their current position anywhere from one to five years (n=277, 31%); this is closely followed by one to five years (n=120, 32%); this is closely followed by six to ten years (n=258, 29%); Finally, the majority of leaders (bachelors: n=153, 41%; masters: n=144, 39%) and followers (bachelors: n=384, 43%; masters: n=294, 33%) had earned a bachelor’s degree or higher.

Construct Validation: To test the theoretical model presented in Figure 1, we first established the psychometric properties of the scales used to measure the three latent constructs of the study: Transformational Leadership Behaviour (TLB), job satisfaction (JS), organizational commitment (OC), and organizational citizenship behaviour (OCB). In order to accomplish this, we performed inter-
item and inter-scale correlations, tests of reliability, confirmatory factor analysis (Anderson & Gerbing, 1988), and tests of convergent and discriminant validity. With respect to the confirmatory factor analysis and modeling, multiple fit criteria were used to assess the appropriateness of the measurement models tested (Bollen & Long, 1993; Hair et al., 1995).

i. **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 Chronbach’s alpha. The reliability of Transformational leadership behaviours for the leaders had an α = 0.95; for the followers, it was α = 0.93. JS was α = 0.92, OC was α = 0.94, and OCB had an α=0.85, indicating a high level of internal consistency for all three scales. All three scales displayed composite reliability values in excess of the 0.70 recommended threshold (Churchill, 1979), providing strong evidence of the reliability of the scales used.

ii. **Inter-item Inter-scale Correlations**: The inter-item scale and inter-scale correlations were calculated for each set of items within each of the three scales. With respect to the OC and JS scales, all inter-items were significantly correlated within their corresponding scales (p<.05). With respect to OCB and its 4 subscales (HB, CV, SMS, C), all the inter-subscale correlations were significant (p<.05) . The average inter-item correlation for the three scales were: TLB leader at \( r = .80 \), TLB follower \( r = .72 \), JS at \( r = .68 \), OC at \( r = .74 \), and OCB (inter-subscale) at \( r = .62 \) which was above the recommended value of \( r = .3 \) (Hair et al., 1998), indicating a strong inter-relationship among the measurement variables for each of the three constructs. The average inter-scale correlation for the three scales was \( r = .88 \). All three inter-scale correlations were significant (p<.01) with JS-OCB at \( r = .88 \), JS-OC at \( r = .89 \), and OC-OCB at \( r = .87 \).

iii. **Convergent Validity - Confirmatory Factor Analysis**: Convergent validity is demonstrated when a set of alternative measures accurately represents the construct of interest (Churchill, 1979). For this study, convergent validity was assessed by reviewing the level of significance for the factor loadings. If all the individual item’s factor loadings are significant, then the indicators are effectively measuring the same construct (Anderson & Gerbing, 1988).

For each of the four constructs, the CFAs indicated a good fit; Specifically; TLB Follower: \( \chi^2 = 2.83, df = 2, \text{NFI}=1.00, \text{NNFI}=1.00, \text{CFI} = 1.00, \text{IFI}=1.00, \text{RFI}=1.00. \text{JS} \quad - \chi^2=11.14, \text{df}=7, \ p=0.13, \text{RMSEA}=0.04, \text{RMSR}=0.01, \text{CFI}=1.00, \text{GFI}=0.99. \text{OC} \quad - \chi^2=11.24, \text{df}=5, \ p=0.05, \text{RMSEA}=0.06, \text{RMSR}=0.01, \text{CFI}=1.00, \text{GFI}=0.99. \text{OCB} \quad - \chi^2=3.24, \text{df}=1, \ p=0.072, \text{RMSR}=0.078, \text{CFI}=1.0, \text{GFI}=1.0. \text{The fits indices for the CFA showed values above or equal to the recommended minimum levels (RMSEA<.10, RMSR<0.10, CFI>.90, GFI>.90. The loadings for the indicators where all above lx=0.56 and all were highly significant (t-values>2.576; p<.01). These results provide satisfactory evidence of convergent validity of the indicators used to measure the constructs in this study.

i. **Discriminant Validity**: To establish that each of the three constructs is measuring something distinct, unique and independent, a series of discriminant analyses were conducted using a CFA. Discriminant validity among the latent variables and their associated measurement variables can be assessed by fixing the correlation between pairs of constructs to 1.0 and then re-estimating the modified model (Segars & Grover, 1993). By constraining the correlation between the two constructs to 1.0 we are essentially converting a two-construct model into a single-construct model. The condition of discriminant validity is met if the difference of the chi-square statistics between the constrained and standard models is significant (1 df). With respect to the JS-OC construct pair, they were determined to be significantly different (\( \chi^2\text{difference}=78.47, df=1, p<.001 \)). Similarly, the OC-OCB constructs were determined to be significantly different (\( \chi^2\text{difference}=52.06, df=1, p<.001 \)). Also, the JS-OCB constructs were determined to be significantly different (\( \chi^2\text{difference}=15.86, df=1, p<.001 \)). In conclusion, with the chi-square difference tests all being significant there is strong evidence supporting the discriminant validity among the four constructs.

Model and Hypotheses Testing: Prior to assessing the study’s hypotheses, the model’s overall fit must be established (Bollen & Long, 1993). As recommended by many researchers (Bollen & Long, 1993; Hair et al., 1995) multiple fit criteria are presented to evaluate the measurement model of the four constructs under investigation. The model’s chi-square statistic was significant (\( \chi^2=6.36, df=2, p<.04 \)). However, the chi-square estimate has been shown to be over-sensitive to sample size 200 (Bagoozi & Yi, 1988; Byrne, 1994; Hair et al., 1995). With respect to this oversensitivity, Hair et al. (1995) suggests using the whole data set to estimate the correlation structure and using a sample size >200 to estimate the significance \( \chi^2 \) (this is achieved in LISREL by setting the “N=” portion of the “Data” line to 200). Utilizing this procedure, yielded a non-significant \( \chi^2=3.41, df=2, p = .18 \), which indicates a reasonable model fit. Thus, the next step was to examine the model fit indices which were as follows: RMSEA=0.077, RMSR=0.005, CFI=1.00, NFI=0.99, GFI=0.99. The fit indices for the CFA showed values above equal to the recommended minimum levels (RMSEA<0.10, RMSR<0.10, CFI>.90, NFI>.90 and GFI>.90). The CN was greater than recommended 539.43. The results of the structural model estimation are shown in Figure 2. Thus, the model appears to fit reasonably well. The test of the proposed hypotheses is based on the direct and indirect effects of the structural model presented in Figure 2. The LISREL coefficients between latent variables give an indication of the relative strength of each relationship (Jöreskog & Sörbom, 1993). Each of the three hypotheses was tested at the significance level p=.04.
The first hypothesis asserts that job satisfaction will have a positive impact on organizational citizenship behavior. As shown in Figure 2, the path relating these two constructs was positive and significant (H1 total effect=0.43, t-value=5.56, p<.05), thus providing strong evidence supporting hypothesis one. This indicates that high levels of job satisfaction result in high levels of organizational citizenship behavior.

The second hypothesis states that organizational commitment will have a positive impact on organizational citizenship behavior. As shown in Figure 2, the path between these two constructs was positive and significant (H2 total effect=0.47, t-value=7.53, p<.05).

The third hypothesis asserts that job satisfaction will have a positive impact on organizational commitment. As shown in Figure 2, the path relating these two constructs was positive and significant (H3 total effect=0.72, t=9.62, p<.05), thus, providing strong evidence supporting hypothesis three. This result indicates that when we increase employee job satisfaction, the level of organizational commitment is also expected to improve.

The fourth hypothesis asserts that transformational leadership behavior will have a positive impact on job satisfaction. As shown in Figure 2, the path relating these two constructs was positive and significant (H4 total effect=0.73, t=5.56, p<.05), thus, providing strong evidence supporting hypothesis three. This result indicates that when we increase the level of leadership behavior, the level of employee job satisfaction is also expected to improve.

The fifth hypothesis asserts that transformational leadership behavior will have a positive impact on organizational commitment. As shown in Figure 2, the direct effect path relating these two constructs was positive and significant (H5 total effect=0.22, t=3.29, p<.05). Similarly, the indirect effect of TLB on OCB (as mediated through JS) was also significant (indirect effect =0.53, t=4.59). Thus, the total effect of TLB on OC was significant (0.75, t=5.51, p<.05). Thus, providing strong evidence supporting the direct, indirect and total effects of TLB on OC. This result indicates that when we increase the level of leadership behavior, the level of employee organizational commitment is also expected to improve.

The sixth hypothesis asserts that transformational leadership behavior will have a positive impact on organizational citizenship behavior. As shown in Figure 2, the direct effects of TLB to OCB is not significant (H6 direct effects=0.02, t=0.43, p>.05). However, with respect of the indirect effects TLB had a significant impact on OCB (as mediated through JS and OC) (H6 indirect effects = 0.67, t=5.36, p<.05). The total standardized effects are significant (total effects =0.51, t=5.48, p<.05). Thus, TLB has an impact on OCB but only indirectly as mediated through JS and OC.

Therefore, this research supports the theoretical model (Figure 1) and hypotheses presented in this paper.

Discussion

This study models the leader and follower perceptions of the leaders’ transformational leadership behavior (TLB) and its impact directly and indirectly on organizational citizenship behavior (OCB), job satisfaction and organizational commitment. Our study is unique in several ways: first and potentially most significantly, it utilizes SEM to simultaneously estimate the relationships among the four constructs (TLB, OC, JS and OCB). Second, it combines both leader and follower perceptions of the leader’s transformational leadership behaviors into a single model which is unique in the public sector research (rare in general literature), third it examines leadership within the public sector at the CEO level (most research is at the middle manager level). Finally, it utilizes a large sample size that includes both constituents of the leader-follower dyad (combined n = 1264).

With respect to the hypotheses, the study’s results provide support for the proposed model (Figure 1) and all six hypotheses.
Our study found that job satisfaction is related to organizational citizenship behaviour (H1) as supported by other researchers. This study also confirms the relationship between Organizational Commitment and Organizational Citizenship Behaviour (H2). With regard to how transformational leadership behaviour is indirectly related to organizational citizenship behaviours through job satisfaction (H4) and organizational commitment (H5), the results of the study are also consistent with those of other researchers (e.g., Ahearne, 2000; Kim, 2005; Podsakoff et al., 1997; Podsakoff & MacKenzie, 1994; Podsakoff et al., 2000). This result is similar to those gained in prior empirical studies (e.g., MacKenzie et al., 2001; Podsakoff et al., 1996; Podsakoff et al., 1990). With respect to H6, there was no direct effect of transformational leadership's impact on organizational citizenship behaviour, however, there was a significant indirect effect as mediated through job satisfaction and organizational commitment. This means that transformational leadership's impact is not direct but indirect on employee's organizational commitment. This is in contradiction to studies that only seek to determine the relationship between the two constructs and do not take into consideration the mechanisms that are involved in a larger and more complex system of constructs.

In addition to providing theoretical contributions, our findings also have implications for practitioners. Based on the results of the study, we argue that transformational leadership is a determinant of job satisfaction and commitment to the organization and urge that public administrators work on employee job satisfaction before employees develop a sense of commitment to the organization, which will encourage them to engage in organizational citizenship behaviors.

**Conclusions**

The exploration of the dynamic interplay between transformational leadership behaviors, job satisfaction, organizational commitment, and organizational citizenship behaviors within the setting of county governments has yielded insightful findings that contribute to both academic scholarship and practical managerial strategies. The working hypothesis, positing that transformational leadership would have a direct and indirect positive impact on organizational citizenship behaviors through the mediating roles of job satisfaction and organizational commitment, was largely supported by the results. These findings not only corroborate the existing literature that underscores the pivotal role of transformational leadership in fostering a conducive work environment but also extend our understanding of its influence within the specific context of local government operations.

A notable contribution of this research to the scientific community is the empirical validation of the model that encapsulates the complex relationships among the constructs under study. The study's results underscore the indirect yet significant influence of transformational leadership on organizational citizenship behaviors, mediated through job satisfaction and organizational commitment. This adds a new dimension to the discourse on leadership and organizational behavior by highlighting the importance of fostering job satisfaction and commitment as intermediary steps towards enhancing organizational citizenship behaviors among employees.

While this study provides valuable insights into the dynamics of transformational leadership within U.S. county governments, it also recognizes certain limitations that should be addressed. Firstly, the findings are context-specific to the public sector and may not directly translate to private sector entities or public administrations in different geopolitical environments. It is crucial for future research to explore these relationships across diverse cultural and organizational contexts to assess the universality of the findings and to understand how cultural and institutional nuances may influence the dynamics of transformational leadership. Additionally, expanding the scope of research to include various public and private sector roles at different hierarchical levels could shed further light on the generalizability of these relationships across a broader occupational and organizational spectrum.

Secondly, the reliance on self-report measures in this study may introduce response bias, potentially affecting the accuracy of the data. To enhance the robustness of the findings, future studies should consider employing mixed-method approaches or triangulating data with objective measures.

Thirdly, the cross-sectional design of this study limits our ability to infer causal or long-term relationships. Longitudinal research would provide deeper insights into how these relationships evolve or change over time in response to evolving organizational or external conditions.

Fourthly, while our study focused on job satisfaction and organizational commitment as mediators between transformational leadership and organizational citizenship behavior, additional mediating variables warrant investigation. Future research endeavors could explore the roles of employee empowerment and psychological safety, potentially enriching our understanding of the pathways through which leadership behaviors impact organizational outcomes.

Finally, this study did not exhaustively analyze the potential influences of demographic characteristics on these relationships. Demographic variables such as age, gender, educational background, and tenure could significantly affect perceptions of leadership and its outcomes. These factors were not deeply examined in the current analysis, which may limit the depth of understanding concerning how different groups perceive and react to transformational leadership. Future research should consider a detailed demographic breakdown to explore how these factors influence the key constructs of transformational leadership, job satisfaction, organizational commitment, and OCB. For example, preliminary data suggest that perceptions of leadership could vary significantly across different age groups and educational levels. Investigating these potential moderating effects could provide a more nuanced understanding of the dynamics at play and enhance the generalizability of the findings. Such an analysis would not only enrich our
comprehension of these relationships but also highlight potential areas for targeted interventions in leadership training and development.

From an institutional and systemic perspective, the findings of this research have significant implications for the development of leadership training and development programs within public sector organizations. By emphasizing the critical role of transformational leadership in enhancing job satisfaction, organizational commitment, and citizenship behaviors, policymakers and organizational leaders are equipped with empirical evidence to advocate for and implement leadership development initiatives. These initiatives could focus on cultivating the key behaviors associated with transformational leadership, such as inspirational motivation and individualized consideration, to foster a more engaged and committed workforce. Additionally, the study’s results could inform the design of organizational policies and practices that support the expression of citizenship behaviors, contributing to a more cohesive and productive organizational culture.

In conclusion, this study not only reaffirms the vital role of transformational leadership in shaping positive organizational outcomes but also illuminates the mediating roles of job satisfaction and organizational commitment in this process. The insights derived from this research offer a valuable foundation for future scholarly inquiries and practical interventions aimed at enhancing the efficacy of leadership practices and, ultimately, the performance of public sector organizations.

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