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# Servant leadership and job satisfaction: The mediating role of trust and leader-member exchange

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**Objective:** The study aimed to examine the role of trust mediation and leader-member exchange in the influence of servant leadership on job satisfaction.

**Background:** Research on the relationship between servant leadership and academic job satisfaction is rare. The study of servant leadership in Christian higher education is dominated by non-research (conceptual), literature review, and church ministry, instrument development, verification, and validation, quantitative (pre- and post-test), quantitative (descriptive), and qualitative studies. Thus, there have been no studies that test and measure complex variables simultaneously in one model that includes servant leadership, trust (job-related outcomes + mediator), leader-member exchange (behavioral outcome), and job satisfaction (well-being + outcome) in the context of Christian higher education in Indonesia. Servant leadership still needs to be done in work-related outcomes such as trust variables. Research on academic job satisfaction in non-European and non-Western contexts is still dominant in Palestine. Finally, the placement of trust as a mediation variable needs to be more consistent because trust also has a role as a predictor of servant leadership.

**Method:** This study used quantitative methods with a sample of 160 lecturers from 26 Christian higher education in Indonesia. This study used the partial least square (PLS-SEM) approach to verify the proposed hypothesis.

**Results:** The results showed that servant leadership has a significant positive effect on job satisfaction and trust, and LMX mediate the influence of servant leadership on job satisfaction. Finally, trust and LMX are complementary mediation effects of servant leadership on job satisfaction.

**Conclusion:** Servant leadership increases trust, LMX and job satisfaction. Trust and LMX increase job satisfaction. Trust and LMX have a mediating role in the effect of servant leadership on job satisfaction.

**Implications:** Rectors/chairmen who engage in high-level interactions with lecturers will influence trust, reduce losses, and maximize gains in their interactional relationships. In addition, based on the theory of leader-member exchange, high-quality, trustworthy, and satisfactory leader-member

exchange relationships positively affect the personal growth, work attitudes, and performance of lecturers. The Private Higher Education Organizing Body (BPPTS) needs to prepare for leadership regeneration by preparing future service leaders through training that directly supports the improvement of servant leadership behavior. This is important because servant leadership behavior becomes essential to increase trust, LMX and lecturer job satisfaction and achieve Christian higher education goals. Finally, Power distances, short-term orientation cultures, and paternalistic are not found to be obstacles to servant leadership practices in Indonesian Christian higher education.

#### KEYWORDS

**servant leadership, trust, job satisfaction, leader-member exchange, complementary mediation, Christian higher education**

## Introduction

In higher education, job satisfaction is considered the backbone of academic work (Byrne et al., 2012; Htun, 2022) since dissatisfied academics are more likely to quit their jobs (Strawser et al., 2000). Albert et al. (2018) argue that the high turnover of academic personnel, caused by dissatisfaction, may be dangerous for higher education institutions because it contributes to the transfer of valuable educational capital with very expensive staff substitutions. Satisfied academic staff perform better and help improve the performance and build the reputation of academic institutions by influencing student learning outcomes (de Lourdes Machado-Taylor et al., 2014).

Furthermore, previous studies have found several factors that determine the job satisfaction of academic staff. Among such factors are the work environment (Ghasemy et al., 2020; Mgaiwa, 2021), job security (Cerci and Dumludag, 2019), expectations of research support (Ababneh, 2020), research productivity (Albert et al., 2018), salary perceptions (Bozeman and Gaughan, 2011), procedural and distributive justice (Park, 2018), work-life balance (Dorenkamp and Ruhle, 2019), the support of the head of the study program and the dean, promotion and tenure, scholarship, and collegiality (Szromek and Wolniak, 2020). Additionally, leadership is an important catalyst in encouraging academic staff satisfaction (Alonderiene and Majauskaite, 2016). Leader support is key for faculty because it conveys a positive message that leads to more productivity and satisfaction (Park, 2018).

Servant leadership is necessary for mastering the challenges of the 21st century (Parris and Peachey, 2012). Outside of academia, other professionals such as theologians and practitioners have adopted servant leadership (Langhof and Guldberg, 2020). The results show that 21st-century leadership is servant leadership because it is the main determinant of organizational success (Claar et al., 2014; Rao et al., 2019) and positively influences organizational functioning (Hashim et al., 2019; Lee et al., 2020). Servant leadership is perceived as an important organizational variable that has a

significant impact on follower behavior (Al-Asadi, 2019), and inspires followers in helping achieve organizational goals (Liden et al., 2008; Senjaya and Pekerti, 2010; Mustapha, 2019). The servant leadership style differs from other value-based styles in giving priority to developing and empowering followers (Choudhary et al., 2013; Brown and Bryant, 2015). Based on this perspective, servant leadership is a viable leadership theory and is considered an important field of research because it has the potential for success that will in turn impact organizations and improve followers' welfare (Harrison, 2017; Eva et al., 2019).

Servant leadership has a unique philosophy of 'serving others' and is an important organizational factor that influences employee behavior and attitudes (Liden et al., 2008; Parris and Peachey, 2013; Eva et al., 2019). As a result, servant leadership has received increased interest in studying its impact on academic staff in higher education (Aboramadan et al., 2020b). Alonderiene and Majauskaite (2016) state that servant leadership has the most significant positive influence on job satisfaction among all leadership styles. The results show that most studies have analyzed the effect of servant leadership on job satisfaction in universities in countries such as Oman, Turkey, and Italy (Singh and Ryhal, 2021). Nevertheless, there is a lack of research on leadership in higher education (Esen et al., 2018). More specifically, with a few exceptions (Latif and Marimon, 2019; Aboramadan et al., 2020a; Dahleez et al., 2021), research on servant leadership in higher education is limited and requires more attention. Research on the relation between servant leadership and academic job satisfaction is rare (Latif et al., 2021).

Servant leadership studies in the context of higher education have been carried out in various countries, such as Palestine (Aboramadan et al., 2020a,b), Germany (Moll and Kretzschmar, 2017), America (Sahawneh and Benuto, 2018; Gooch et al., 2021), Turkey (Erkutlu and Chafra, 2015), Pakistan (Amin et al., 2019; Haider et al., 2020; Saleem et al., 2020), Ethiopia (Gedifew and Bitew, 2019; Bitew and Gedifew, 2020), the Philippines (Ramos, 2020), Arab (Shafai, 2018), Kuwait (Alshammari et al., 2019), and Spain and China (Latif and Marimon, 2019; Latif,

2020). In Indonesia, servant leadership research in higher education is related to measuring, verifying, and validating the dimensions of servant leadership (Handoyo, 2010; Melinda et al., 2020), the influence of servant leadership on lecturer performance through trust in leaders (Filatrovi et al., 2018; Keradjaan et al., 2020), the analysis of the dimensions of servant leadership and the differences between public and private universities in this regard (Melinda et al., 2019), servant leadership and university performance (Melinda et al., 2018; Quddus et al., 2020), the analysis of the character of servant leadership in public and private universities in the city of Palu (Adda and Buntuang, 2018) and the characteristics of servant leadership and their implications for higher education (Jondar, 2021). Meanwhile, servant leadership studies in Christian higher education are dominated by non-research (conceptual), literature reviews, and church ministry (Adda and Buntuang, 2018; Hancock, 2019; Prajogo, 2019; Apriano, 2020; Siburian, 2020; Silalahi, 2020; Hartono et al., 2021; Jondar, 2021), development, verification and validation of instruments (Ingram, 2003), quantitative (pre- and post-tests) (Huyen and Willian, 2020), quantitative (descriptive) (Burch et al., 2015), and qualitative studies (Ricky, 2017; Jagela, 2019). Thus, no studies have tested and measured complex variables simultaneously in one model that includes servant leadership, trust (job-related outcomes + mediator), leader-member exchange (LMX) (behavioral outcome), and job satisfaction (well-being + outcome) in the context of Christian higher education in Indonesia. Servant leadership is still little done in job-related outcomes such as trust variables (Mcquade et al., 2020). Therefore, the current research uses trust as a mediator variable, which is found as a knowledge gap.

Yukl (2017) emphasized the need to conduct more servant leadership research in universities and other organizations in the higher education sector because of its potential positive role in individual and organizational outcomes. In relation to job satisfaction, recently, Mgaiwa (2021) points out the lack of research on academic job satisfaction in a non-European context, and non-Western is still dominated in Palestine (Palestinian Ministry Higher Education, [PMHESR], 2019; Dahleez and Aboramadan, 2022). Therefore, current research explores the influence of two less-studied variables in Christian higher education in this context, particularly Indonesia.

The current research contributes to the literature on predictors of job satisfaction, since it has been argued that this area of research requires more exploration (Jiang et al., 2016). Finally, two mediators, trust and LMX, were discussed in the influence of servant leadership on job satisfaction. Servant leadership influences trust in the leader and the effect of servant leadership through trust in the leader as a mediation variable (Keradjaan et al., 2020). Differently, Du Plessis et al. (2015) found trust as a predictor of servant leadership, not as a mediation variable. Here is found evidence gap, where the placement of trust as a mediation variable is not consistent

because trust also has a role as a predictor servant leadership. In addition, LMX has an important role in mediating the relation between servant leadership and work satisfaction (Wu et al., 2013). In business, LMX is a mediator variable in the relation between servant leadership and job satisfaction (Akdol and Sebnem Arikboga, 2017). This research was conducted in the context of Christian higher education.

This research was conducted at the Indonesian Christian Religious College (PTKKI) east Java Region, Indonesia, especially Christian higher education. The place of this study was chosen because the results of the study showed the low quality of management because of the low leadership style—traditional leadership (Lumintang, 2019). The leadership style in Christian higher education is more exclusive (Hope, 2010). This style is more appropriate for the leadership of church institutions, not educational institutions. About leadership issues, furthermore, Lumintang (2019) asserts that the problems of leaders and leadership in Christian higher education environments include (1). The pattern of appointment of undemocratic leaders by the Organizing Board of Private Universities (BPPTS) and the appointed leaders are people who become seniors in the institution, without considering leadership and management competencies; (2). The competence of leaders is evangelists and teachers; (3). The managerial competence of the leader does not become a qualification of the leader and is not a provision and demand of BPPTS because the main requirement is regarding the main call as a preacher and teacher of the people; (4). The performance of leadership is seen in the attention and energy of leaders who are distracted from the service, not its primary task, such as seeking the operational and development costs of the institution; (5). There is no open and planned effort on the part of BPPTS to prepare leaders, so there is no planned and sustainable regeneration.

To solve this problem, Lumintang (2019) offers a contemporary model of leadership and leadership (servant leadership) because this model is relevant for quality management, which will improve the quality of Christian universities until they reach national and even international standards. Servant leadership is relevant to apply at the Christian college level because the term “servant” is already very familiar to Christian college lecturers. Servant leadership is an important component of academic excellence, channeling any Christian higher education community member’s academic, physical, social, spiritual, and talents to a greater need for the world (Espy, 2006).

Based on the knowledge gap, evidence gap, and empirical phenomena, this study aims to examine the effect of servant leadership on job satisfaction through trust and LMX. This study made a significant key contribution to empirical literature and supporting theories through the role of trust and LMX as mediating variables between servant leadership and job satisfaction. In addition, this study provides universities with a practical means to identify early potential service leaders in

leading the college because it significantly impacts lecturers' trustworthiness, LMX and job satisfaction.

## Theoretical foundation

### Social exchange theory

This theory defines how social interaction is determined by the benefits of the exchange of services. In addition, SET proposes that the orientation of individual exchanges is an influential factor in social exchange relations (Jahan and Kim, 2021). The influence between servant leadership and trust on job satisfaction can be explained through the social exchange theory. The main idea in the theory of social exchange is that the parties go inside and maintain exchange relations with others in the hope that doing so will be beneficial (Blau, 1968). According to Stafford (2014), a social exchange involves relationships with others, involves beliefs that conflict with legal obligations, is more flexible, and rarely involves bargaining explicitly. The theory of social exchange also shows the desire to reduce losses and maximize profits by individuals in the interactional relationship between them (Thibaut and Kelley, 1959). In servant leadership, the process of interaction and exchange (explicit or implicit) between the servant leader and subordinates is central to the relationship (Liden et al., 2008). In serving the followers, the leader is involved in a high level of interaction with them which will affect the level of trust and relationships (Schwarz et al., 2016). Using the theory of social exchange (Blau, 1964), servant leadership in subordinate attitudes can be explained in which trust in the leader is a mediator (Mayer et al., 1995; Rousseau et al., 1998).

### The theory of leader-member exchange

The main premise of this theory is that leadership behavior contributes to the development and maintenance of strong interpersonal relationships between leaders and followers and plays an important role in helping employees reach their full potential (Manz and Sims, 1987; Liden and Maslyn, 1998). Servant leadership emphasizes employee development and growth in the context of moral and social care (Rodríguez-Carvajal et al., 2014). Servant leaders will empower followers; they support and encourage and facilitate the growth and development of their followers (van Dierendonck, 2011; Liden et al., 2015). The serving leader will help subordinates to grow and succeed by showing a sincere interest in their career development and allowing subordinates to improve their skills (Chiniara and Bentein, 2016). van Dierendonck (2011), in his literature review of servant leadership, found that several studies show that high-quality LMX relationships, trust, satisfaction and fairness positively affect personal growth, work attitudes, and follower performance.

## Literature review and hypotheses development

### Servant leadership and job satisfaction

Researchers in several fields have found that the higher an employee's perception of servant leadership in an organization, the higher their job satisfaction (Mccann et al., 2014). Ndoria (2004) uses LMX theory to explain the influence of servant leadership on job satisfaction—success is found to arise from the formation of high-quality relationships and interactions between leaders and followers. Servant leaders committed to paying attention to followers' well-being will lead to job satisfaction and higher job motivation (Thompson, 2002).

Thompson (2002) reports a significant positive relationship between servant leadership and job satisfaction in educational settings. Empirical research in public and private universities revealed a significant positive impact of leadership style on job satisfaction from faculty where the servant leadership style was found to have the highest positive significant impact on faculty job satisfaction compared to the leadership style of coaches, human relations specialists, controlling autocrats, transformational visionaries, and transactional exchanges (Alonderiene and Majauskaite, 2016). Servant leadership is often compared to charismatic and transformational leadership; after all, serving others by favoring positive behaviors at the macro and micro levels can result in high levels of job satisfaction (Boone and Makhani, 2012). The biggest difference in servant leadership can be the capacity to build faculty confidence, emphasize the importance of integrity, and focus on long-term relationships with the organization. At a time when servant leadership maintains self-efficacy, individual motivation, and communal engagement, faculty will intrinsically become committed to the organization's mission, realize greater job satisfaction and a willingness to maintain a high level of performance, and will be more likely to model the behavior and interests of leaders and organizational processes (Liden et al., 2008).

H1: There is a significant positive effect of servant leadership on job satisfaction

### Servant leadership and trust

Greenleaf (1977) states that trust is a building block for servant leaders, which fosters an environment of trust. Servant leadership is a significant predictor of trust with covenant relationships, responsible morality and changing the influence of servant leadership behavior as a key that significantly contributes to followers' trust in their leaders. Followers who feel high servant leadership behavior in their leaders have a much higher level of trust compared to those who feel low servant leadership behavior in their leaders (Senjaya and Pekerti, 2010).

Philosophically, Lowe (1998) asserts that servant leadership as the basis of trusting relationships in organizations and a

culture of high trust among employees provides organizations with the ability to respond to an ever-changing business environment without having to struggle with constant internal resistance to change. On a more individual level, [Lowe \(1998\)](#) proposes that there are two ways servant leaders build relationships with new individuals, namely (1) treating subordinates with suspicion until they prove themselves trustworthy; and (2) having the assumption that subordinates can be trusted until they prove that they are trustworthy. The visible manifestation of the trust of the servant leaders toward others is the same in a second way, based on the leader's willingness to delegate responsibilities and share authority with their subordinates ([Wilkes, 1998](#)). [Saleem et al. \(2020\)](#) found that servant leadership can predict affective trust.

H2: There is a significant positive effect of servant leadership on trust

### Servant leadership and leader-member exchange

Servant leadership effectively generates high-quality exchanges between a leader and a follower in the workplace. According to [Ng et al. \(2008\)](#), the theory of social exchange is a fundamental relationship-based approach to understanding the relational dynamics between servant leaders and followers. Previous research has adopted this perception of social exchange ([Blau, 1964](#)) to explain the influence of servant leadership on outcomes related to leaders, including LMX and leader effectiveness. One of the characteristics of servant leadership in organizations is that leaders seem friendly and approachable and initiate a high LMX when interacting with employees ([Ling et al., 2016](#)). Other studies have found that followers' perceptions of leaders who have attributes of servant-oriented behavior give rise to favorable perceptions of leaders, which is an important antecedent of followers' perceptions of the effectiveness of servant leadership ([Han and Kim, 2012](#)).

Servant leadership can improve LMX for three reasons: First, by focusing on the development of followers and providing opportunities to learn new skills ([Smith et al., 2004](#)), servant leaders facilitate the development of strong interpersonal relationships with their followers ([Ehrhart, 2004](#); [Liden et al., 2008](#)). Second, by soliciting ideas or ideas from followers and encouraging them to engage in decision-making ([Hunter et al., 2013](#)), servant leaders can build high-quality LMX relationships with followers that go beyond certain economic exchanges. Third, servant leaders are seen as principled decision-makers who care about others by emphasizing the importance of contributing to society and following up on agreements ([Walumbwa et al., 2010](#)), servant leaders are seen as principled decision makers, who care about others. This will make followers understand that those leaders act in their best

interests, resulting in increased LMX from a higher level of loyalty and emotional connectedness.

H3: There is a significant positive effect of servant leadership on LMX

### Trust and job satisfaction

Trust is important in fostering relationships between colleagues ([McAllister, 1995](#)), and it is necessary to build a strong support network, which helps in managing work demands positively. Trust not only increases support between colleagues, but the sharing of prominent work information is also enhanced, which can help a person become more productive and successful at work ([Robertson et al., 2013](#)). In addition, trust in colleagues can lead to positive results, allowing greater connection to work, being more satisfied, and seeing the organization in a more positive context ([Lambert et al., 2020](#)).

According to [Rhee \(2010\)](#), trust in others at work is an indicator of human relationships among members of the workplace. [Cook and Wall \(1980\)](#) concluded that trust between individuals and groups in organizations is a very important variable in an organization's long-term stability and its members' well-being. Interpersonal trust helps create a more positive attitude in the workplace, including job satisfaction and commitment in the workplace ([Dirks and Ferrin, 2002](#); [Mooradian et al., 2006](#)). Trust produces a direct (primary) influence on various outcomes. The leader-subordinate relationship also found that trust has a direct effect on job satisfaction, both colleagues' trust, organization, and management ([Brashear et al., 2003](#); [Maryance, 2020](#); [Amini and Kemal, 2021](#)). [Mooradian et al. \(2006\)](#) report that trust in co-workers and superiors is a strong driver of job satisfaction.

H4: There is a significant positive effect of trust on job satisfaction

### Leader-member exchange and job satisfaction

[Epitropaki and Martin \(2005\)](#) found that LMX is an important factor influencing job satisfaction. LMX shows that leaders who have different relationships with various subordinates can strongly influence subordinates' performance and satisfaction ([Greenberg, 2011](#)). Meanwhile, subordinates with high-quality LMX work positively influence job satisfaction ([Parker and Ohly, 2008](#)).

Leader-member exchange literature suggests that a high-quality LMX can affect job satisfaction ([Sparrowe, 1994](#)). According to [Stringer's \(2006\)](#) findings, high-quality LMX is not only positive for follower job satisfaction but organizational outcomes as well. Many side effects may arise for leader-member relationships characterized by low quality. Low-quality LMX is relatively associated with low levels of job

satisfaction (Birgit Schyns, 2008; Coglisier et al., 2009; Le Blanc and González-Romá, 2012).

H5: There is a significant positive effect of LMX on job satisfaction

### Trust mediates servant leadership and job satisfaction

Using the theory of social exchange (Blau, 1964), the process of servant leadership in subordinate attitudes can be explained in which trust in the leader acts as a mediator (Mayer et al., 1995; McAllister and Bigley, 2002). The social exchange perspective explains how servant leadership influences subordinate relationships to build trust with their leaders (Greenleaf, 1977). Servant leadership focuses on self-interest for the betterment of their subordinates. In return, subordinates retaliate by trusting their leader. A servant leader encourages subordinates to plan future opportunities, generously sharing and building trust with subordinates. When subordinates feel they are receiving benefits from the servant leader, they are motivated to trust their leader (Whitener et al., 1998).

The transformational model of servant leadership finds that vision, influence, credibility, trustworthiness, and service are consequences of servant leadership (Farling et al., 1999). Subordinates are motivated to increase their job satisfaction when relationships are based on trust in their leader (Spreitzer and Mishra, 2016). Joseph and Winston (2005) found that servant leadership correlates with trust in the leader. Trust in the leader is defined as the intention to accept vulnerabilities based on the expectation of the leader's positive intentions or behaviors (Dirks and Ferrin, 2002). Senjaya and Pekerti (2010), using a sample of 555 employees, found that servant leadership is associated with trust in their leaders. A high level of servant leadership behavior has a greater impact on trust in their leaders. Servant leadership is associated with high-quality social exchange relationships (Dirks and Ferrin, 2002; Joseph and Winston, 2005; Senjaya and Pekerti, 2010), which in turn affects the trust of subordinates in the leader and increases job satisfaction.

H6: Trust mediates the effect of servant leadership on job satisfaction

### Leader-member exchange mediates servant leadership and job satisfaction

Statistical studies have shown that being a group member and having a high-quality LMX relationship is a useful and desirable position in an organization. The leader delegates many decisions to members within the group, and the group receiving many rewards will increase the job satisfaction of the group (Epitropaki and Martin, 2005).

Leader-member exchange can be used as a framework to explain the relationship between the servant leader and

the follower. Through mutual trust and respect, servant leadership builds high LMX qualities between servant leaders and followers. Servant leadership convinces followers and builds consensus within the group through reasoning, factual evidence, interesting inspiration, and consultation. In addition, the servant leader strengthens and develops the follower with the correct mixture of hints and autonomy. All these efforts are beneficial to establishing the quality of the LMX between the servant leader and the follower (van Dierendonck, 2011). Akdol and Sebnem Arikboga (2017) found an influence of LMX partial mediators on the relationship between servant leadership and job satisfaction.

H7: Leader member exchange mediates the effect of servant leadership on job satisfaction

## Materials and methods

### Research design

This type of study is hypothesis testing to explain the understanding of the effects between variables. Data was collected from lecturers in Christian higher education in the province of East Java, Indonesia, and one response was taken from each lecturer individually. The data is collected once and represents a portrait from a single point in time. Therefore, this study is represented as a cross-sectional study in which respondents were surveyed from June–August 2022.

### Samples and procedures

Data were collected for over 1 month, a pre-test and pilot study from June 8, 2022–July 6, 2022, and a real study from July 8, 2022–August 10, 2022. The initial contact was made via WhatsApp with the general secretary of *Badan Musyawarah Perguruan Tinggi Keagamaan Kristen Indonesia* (BMPTKKI) and the head of *Persatuan Perguruan Tinggi Teologi* (PPTT) in East Java province, Indonesia who explained the purpose of the research and requested a research permit. After approval, we held meetings via Zoom meeting twice to determine the target of Christian higher education distribution based on real data and data from the Higher Education Database (PDDikti), Directorate General of Higher Education, Ministry of Education and Culture, Republic of Indonesia. It found 26 of the 33 Christian higher education (Private universities) participated in the study. After that, the general secretary of BMPTKKI and the head of the East Java PPTT communicated with the leaders and lecturers of Christian higher education in East Java to distribute questionnaires. Online questionnaires are distributed to lecturers through google forms.

The number of lecturers from 26 Christian higher education who were the population in this study was 450 respondents.

After that, the criteria for the number of research samples based on the SEM model analysis (Albright and Park, 2009) were determined by 5 to 10 times the number of manifest variables/indicators of the overall latent variables. This study used four latent variables with 20 manifest variables/indicators; thus, the minimum number of samples used in this study according to the criteria for the number of samples for SEM analysis was  $20 \times 8 = 160$  samples. The sampling technique used in this study was cluster sampling (multistage sampling), which was classified into two stages. The first stage determines a sample of Christian higher education, and the second stage determines a random sample of eligible Christian colleges. Furthermore, the number of sample members in each Christian higher education was calculated using a proportional allocation formula (Yamin and Kurniawan, 2011; Riduwan, 2012), as reported in Table 1.

$$n_i = \frac{N_i}{N} n$$

Information:

$n_i$  = Number of sample members by area;

$n$  = Total sample members;

$N_i$  = Number of population members by area;

$N$  = Total population members.

In this study, 160 questionnaires were successfully collected when the questionnaires were distributed. So, the 160 respondents who participated answered all the questions in full. Of the 160 respondents, it was found to be dominant lecturers (65.56%), vice-rectors/chairmen (12.78%), heads of study programs (7.78%), heads of quality assurance agencies (4.44%), deans (2.22%), bureau heads (1.67%), and others (0.56%). Furthermore, the number of sample members in each area is calculated using the proportional allocation formula (Yamin and Kurniawan, 2011; Riduwan, 2012), and found the highest number of samples of 27 and the lowest two samples for each Christian higher education.

## Instruments

The study's theoretical framework consists of four constructs, each of which is measured through various items. The 5-point Likert scale is used to measure items ranging from strongly disagreeing (1) to strongly agreeing (5). To improve the accuracy of the results, pre-testing was carried out to ensure the validity of the content, readability, and in short, the instrument using expert evaluation consisting of two research methodology (quantitative) experts, two education management experts and one Christian leadership expert. The degree of agreement of the five experts in this study was measured using Aiken's V formula to calculate the content-validity coefficient, with the criteria of Aiken's V coefficient  $\geq 0.30$  can be declared a valid question item (Azwar, 2012). Based on Aiken's coefficient, the results of the expert evaluation of 4 ( $>0.30$ ) items were

TABLE 1 Sample by area of Christian higher education.

| Institution                     | Proportional allocation formula | Number of samples |
|---------------------------------|---------------------------------|-------------------|
| Christian Higher Education (1)  | $\frac{16}{450} \times 160$     | 6                 |
| Christian Higher Education (2)  | $\frac{8}{450} \times 160$      | 3                 |
| Christian Higher Education (3)  | $\frac{20}{450} \times 160$     | 8                 |
| Christian Higher Education (4)  | $\frac{29}{450} \times 160$     | 10                |
| Christian Higher Education (5)  | $\frac{18}{450} \times 160$     | 7                 |
| Christian Higher Education (6)  | $\frac{5}{450} \times 160$      | 2                 |
| Christian Higher Education (7)  | $\frac{6}{450} \times 160$      | 2                 |
| Christian Higher Education (8)  | $\frac{15}{450} \times 160$     | 5                 |
| Christian Higher Education (9)  | $\frac{21}{450} \times 160$     | 8                 |
| Christian Higher Education (10) | $\frac{16}{450} \times 160$     | 6                 |
| Christian Higher Education (11) | $\frac{10}{450} \times 160$     | 3                 |
| Christian Higher Education (12) | $\frac{14}{450} \times 160$     | 5                 |
| Christian Higher Education (13) | $\frac{12}{450} \times 160$     | 4                 |
| Christian Higher Education (14) | $\frac{22}{450} \times 160$     | 8                 |
| Christian Higher Education (15) | $\frac{12}{450} \times 160$     | 4                 |
| Christian Higher Education (16) | $\frac{30}{450} \times 160$     | 11                |
| Christian Higher Education (17) | $\frac{6}{450} \times 160$      | 2                 |
| Christian Higher Education (18) | $\frac{13}{450} \times 160$     | 5                 |
| Christian Higher Education (19) | $\frac{14}{450} \times 160$     | 5                 |
| Christian Higher Education (20) | $\frac{15}{450} \times 160$     | 5                 |
| Christian Higher Education (21) | $\frac{49}{450} \times 160$     | 18                |
| Christian Higher Education (22) | $\frac{18}{450} \times 160$     | 7                 |
| Christian Higher Education (23) | $\frac{6}{450} \times 160$      | 2                 |
| Christian Higher Education (24) | $\frac{53}{450} \times 160$     | 19                |
| Christian Higher Education (25) | $\frac{8}{450} \times 160$      | 3                 |
| Christian Higher Education (26) | $\frac{5}{450} \times 160$      | 2                 |
| <b>Total</b>                    |                                 | <b>160</b>        |

Source (s): Pangkalan Data Pendidikan Tinggi (PDDikti), Sekretariat Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, Indonesia, 2022.

used, and 54 ( $<0.30$ ) items were removed from a total of 103 items because they were not representative, unimportant, and unclear. Furthermore, the pilot test was carried out using the confirmatory factor Analysis (CFA) test. The pilot test sample was determined based on guidance from Hair et al. (2014) with 60 lecturers taken by random sampling in the population area but not included in the real study sample.

The CFA results show that the factor loading  $>0.70$  for sample size 60 (SL = 0.835–0.935, T = 0.737–0.880, JS = 0.714–0.887, and LMX = 0.816–0.903); Communality  $> 0.50$  (SL = 0.698–0.875, T = 0.529–0.774, JS = 0.541–0.787, and LMX = 0.666–0.834); Keiser-Meyer-Olkin (KMO)  $> 0.50$  (SL = 11.733, T = 0.860, JS = 0.895, and LMX = 0.885); Eigenvalue  $> 1$  (SL = 11.733, T = 4.221, JS = 7.264, and LMX = 5.930); % Variance explained  $>50\%$  (SL = 78.220, T = 60.298, JS = 66.034, and LMX = 74.128); and Cronbach's Alpha  $> 0.70$  (SL = 0.980, T = 0.885, JS = 0.944, and LMX = 0.946). In the end, the CFA test results showed

that SL, T, JS, and LMX had sufficient construct validity. All subscales include enough items to provide a credible estimate of all variables. Reliability analysis confirms that instruments can be used in Indonesian contexts, especially in Christian universities. The CFA test results state that the data is reasonably conformed to the model.

All items in the designed survey were measured according to the 5-point Likert scale that ranged from (1) strongly disagree to strongly agree (5). First, 15 items used to measure servant leadership were developed by [Latif and Marimon \(2019\)](#) and adapted to measure SL, which consists of eight dimensions, including behaving ethically (2 items), development (2 items), emotional healing (1 item), empowerment (2 items), pioneering (2 items), relationship building (1 item), and wisdom (1 item). The other two dimensions of SL adapted from [Sendjaya et al. \(2017\)](#) include transcendental spirituality (2 items) and [Ukeni et al. \(2019\)](#), namely motivation to serve (2 items). An example of the items for servant leadership is “Rector/chairman rejects manipulation.” Trust is measured using instruments developed by [McAllister \(1995\)](#), which include cognitive (4 items) and affective (3 items). An example of the selected items includes “I and rector/Chairman can freely share ideas together.” Job satisfaction is adapted from [Weiss et al. \(1967\)](#), which includes intrinsic dimensions (5 items), extrinsic (5 items) and general (1 item). An example of the selected items includes “I am very satisfied with my current salary.” Finally, LMX is measured using four dimensions developed by [Liden and Maslyn \(1998\)](#), including affective (2 items), loyalty (2 items), contributions (2 items) and professional respect (2 items). An example of the selected items includes “Rector/Chairman will defend me before others if I confess honestly to the mistakes I have made.”

## Data analysis

This study used partial least squares structural equation modeling (PLS-SEM) for data analysis, as recommended by previous researchers ([Hair et al., 2020](#); [Zeng et al., 2021](#)). This technique is used for multivariate analysis because it can estimate theoretically established models of cause-effect relationships ([Shah et al., 2022](#)). This study used SmartPLS version 4 to test the measurement and structural models ([Hair et al., 2017](#); [Sarstedt and Cheah, 2019](#)). In particular, the measurement model was assessed to ensure internal consistency (Cronbach’s alpha and composite reliability), convergent validity (outer loading and average variance extract/AVE), and discriminant validity (Heterotrait-Monotrait ratio of correction) met the recommended threshold quality. Then, structural models are analyzed for hypothesis testing—the relationship between latent variables. Structural models show the relationship between constructs assessed using bootstrapping with 5000 resamples to produce the value of the path coefficient and its significance ( $p < 0.05$ , one-tailed).

This research adopted the concept of mediation provided by [Baron and Kenny \(1986\)](#). When analyzing the mediation relationship, the guidelines from [Baron and Kenny \(1986\)](#) were the most used method by previous researchers. As for decision-making related to the type of mediation ([Memon et al., 2018](#)), this study adopts an understanding of the types of mediation and non-mediation from [Zhao et al. \(2010\)](#). Regarding the application of mediation analysts, this study uses bootstrapping because it has been recognized as one of the more rigorous and robust methods for testing the effects of mediation ([Hayes, 2009](#); [Zhao et al., 2010](#)).

## Results

### Demographic profile

The respondents to this study were lecturers at 26 Christian universities in the East Java province of Indonesia (Private universities). [Table 2](#) showed that the dominant respondents were male (71.25%) and female (only 28.75%). The majority of respondents were over 46 years old (54.38%), and the age groups were 41–45 (20.63%) and 36–40 (20%). The academic qualifications of respondents were dominated by Masters (60.63%) and doctorates (36.25%). For academic grades, participants were dominated by lecturers (38.13%) and then tutors (35.63%) and senior lecturers (24.38%). The respondents with the most teaching experience were more than 5 years (69.38%) and the years of experience at the college were more than 5 years (75.00%).

### Assessment of measurement model

#### Descriptive statistics, convergent validity, internal consistency and discriminant validity

After testing the CFA, descriptive statistics of variables (*mean* and standard deviation) and correlations were analyzed. As shown in [Table 3](#), SL has a positive correlation with T ( $r = 0.682, p < 0.01$ ), JS ( $r = 0.818, p < 0.01$ ), and LMX ( $r = 0.683, p < 0.01$ ). It also shows that JS has a positive correlation with T ( $r = 0.814, p < 0.01$ ). Furthermore, the analysis also showed that LMX and T are positively related ( $r = 0.435, p < 0.01$ ) and JS ( $r = 0.701, p < 0.01$ ). In total, these findings provide preliminary support for the main hypothesis. The statistical values of *mean* and standard deviation for variables are also found as follows: SL ( $59.21 \pm 10.976$ ), T ( $27.32 \pm 5.632$ ), JS ( $41.14 \pm 8.261$ ), and LMX ( $27.26 \pm 6.975$ ).

Before testing the hypothesis, the measurement of validity and reliability is evaluated based on the measurement model. The measurement model assessment in [Table 4](#) and [Figure 1](#) shows that all outer loadings exceed the threshold value of 0.6 after removing 1 item (SL7) because it has a singular



TABLE 2 Demographic profile of participants ( $n = 160$ ).

| Variables                                 | Frequency | Percentage |
|---|-----------|------------|
| <b>Gender</b>                             |           |            |
| Male                                      | 130       | 71.25%     |
| Female                                    | 50        | 28.75%     |
| <b>Age (years)</b>                        |           |            |
| 26–30                                     | 2         | 1.25%      |
| 31–35                                     | 7         | 3.75%      |
| 36–40                                     | 36        | 20.00%     |
| 41–45                                     | 37        | 20.63%     |
| More than 46 years                        | 98        | 54.38%     |
| <b>Qualification</b>                      |           |            |
| Bachelor                                  | 7         | 3.13%      |
| Master                                    | 107       | 60.63%     |
| Doctor                                    | 66        | 36.25%     |
| <b>Academic grade</b>                     |           |            |
| Tutor                                     | 63        | 35.63%     |
| Lecturer                                  | 72        | 38.13%     |
| Senior lecturer                           | 42        | 24.38%     |
| Associate professor                       | 2         | 1.25%      |
| Professor                                 | 1         | 0.63%      |
| <b>Teaching experience</b>                |           |            |
| Less than 2 years                         | 17        | 10.00%     |
| Between 2–5 years                         | 36        | 20.63%     |
| More than 5 years                         | 127       | 69.38%     |
| <b>Years of experience at the college</b> |           |            |
| Less than 2 years                         | 15        | 8.75%      |
| Between 2–5 years                         | 29        | 16.25%     |
| More than 5 years                         | 136       | 75.00%     |

matrix problem (occurrence of extreme collinearity levels) and 1 item (JS10 = 0.527) because this item has an outer loadings value smaller than 0.6, as suggested by Dash and Paul (2021), Loading factors listed at 0.6 or higher are considered significant; therefore loadings contribute significantly to each construct. In addition, the average variance extracted (AVE) is higher than the cut-off value of 0.5 (Hair et al., 2011). Therefore, the AVE value generated through the measurement model is acceptable. Based on these results, it can be said that the scale does not indicate any problems with convergent validity. All composite reliability values (Hair et al., 2011) and Cronbach's alpha (Hair

et al., 2010) are above 0.7, thus establishing internal consistency reliability. The validity of the discriminant was assessed using the Heterotrait-Monotrait Ratio of Correlation (HTMT). This approach can overcome the limitations in the previous steps and should be less than 0.90 (Henseler et al., 2015). Table 5 shows that all HTMT values are less than the threshold value of 0.90 after removing T7 because the HTMT between T and JS = 0.901. Thus, when deleting one item (T7), there is no problem with discriminant validity for this measurement model. In conclusion, all the identified constructs and indicators are suitable for evaluating the model and testing hypotheses.

## Assessment of structural model

Before the hypothesis test, Common Methods Variance (CMV) could be applied in this study due to a single informant data source (Podsakoff et al., 2003), which could affect the relationships among variables measured using the same method (MacKenzie and Podsakoff, 2012). According to Kline (2011), the presence of CMV in a model is indicated by the inability of the model to achieve discriminant validity. Poor discriminant validity indicates that all manifest variables measure only one domain. This study assessed CMV using the technique suggested by Kock (2015). As discussed by Kock (2015), a Variance Inflation Factor (VIF) value greater than 3.3 projects a sign of pathological collinearity, and as a symptom that the model may be affected by CMV. Assessment using SmartPLS 4 showed that the study was free of CMV problems because all VIF values were less than 3.3 (Table 6).

After achieving the assumption of reliability and validity through a measurement model using PLS-SEM, the structural model has been verified. The hypothesis is accepted if the  $t$ -value is greater than or equal to 1.645, then the relationship is significant at  $\alpha < 0.05$ . The hypothesis testing results presented in Table 7 show that the effect of SL on JS ( $\beta = 0.286$ ,  $t$ -value = 4.907,  $p < 0.05$ ), T ( $\beta = 0.655$ ,  $t$ -value = 14.647,  $p < 0.05$ ), and LMX ( $\beta = 0.728$ ,  $t$ -value = 22.939,  $p < 0.05$ ) were positive and significant, thus H1, H2 and H3 were accepted. Furthermore, T has a positive and significant effect on JS ( $\beta = 0.500$ ,  $t$ -value = 9.160,  $p < 0.05$ ) and LMX has a significant positive effect on JS ( $\beta = 0.280$ ,  $t$ -value = 5.589,  $p < 0.05$ ), thus H4 and H5 are accepted.

TABLE 3 Mean, standard deviation, and correlation.

| Construct | Mean  | SD     | 1       | 2       | 3       | 4 |
|-----------|-------|--------|---------|---------|---------|---|
| SL        | 59.21 | 10.976 | 1       |         |         |   |
| T         | 27.32 | 5.632  | 0.682** | 1       |         |   |
| JS        | 41.14 | 8.261  | 0.818** | 0.814** | 1       |   |
| LMX       | 27.26 | 6.975  | 0.683** | 0.435** | 0.701** | 1 |

\*\* $p < 0.01$  (1-tailed).

SL, servant leadership; T, trust; LMX, leader-member exchange; JS, job satisfaction.

TABLE 4 Convergent validity and internal consistency.

| Construct | Item code | Items  | Outer loadings   | Cronbach's alpha | CR    | AVE   |
|-----------|-----------|--|--|------------------|-------|-------|
| SL        | SL1       | Rector/Chairman never abuses power for personal gain   | 0.680  | 0.945            | 0.952 | 0.585 |
|           | SL2       | Rector/Chairman rejects manipulation   | 0.780  |                  |       |       |
|           | SL3       | Rector/Chairman improves the academic qualifications of lecturers both through formal education and non-formal education in a planned manner | 0.816  |                  |       |       |
|           | SL4       | Rector/Chairman develops the spirit of leadership that serves (servant leadership) of lecturers  | 0.768  |                  |       |       |
|           | SL5       | Rector/Chairman cares about the personal welfare of the lecturers  | 0.820  |                  |       |       |
|           | SL6       | Rector/Chairman receives input from fellow lecturers in deciding a policy  | 0.735  |                  |       |       |
|           | SL8       | Rector/Chairman encourages lecturers to convey new ideas   | 0.738  |                  |       |       |
|           | SL9       | Rector/Chairman is adept at adopting innovative management policies.   | 0.732  |                  |       |       |
|           | SL10      | Rector/Chairman collaborates with the lecturers.   | 0.680  |                  |       |       |
|           | SL11      | Rector/Chairman can anticipate the consequences of a decision  | 0.778  |                  |       |       |
|           | SL12      | Rector/Chairman leads the lecturers because a call from God drives them  | 0.817  |                  |       |       |
|           | SL13      | Rector/Chairman helps lecturers to be able to find clarity on their goals and life direction   | 0.771  |                  |       |       |
|           | SL14      | Rector/Chairman promotes the career of my co-workers (lecturers)   | 0.821  |                  |       |       |
|           | SL15      | Rector/Chairman trains my colleagues (lecturers) in carrying out their work  | 0.750  |                  |       |       |
|           | T         | T1   | Rector/Chairman performs their duties and responsibilities professionally. |                  |       |       |
| T2        |           | Given Rector/Chairman's track record, I have no reason to doubt his or her competence  | 0.837  |                  |       |       |
| T3        |           | My other co-workers, who interacted with Rector/Chairman considered him or her trustworthy   | 0.810  |                  |       |       |
| T4        |           | I and Rector/Chairman can freely share ideas together  | 0.804  |                  |       |       |
| T5        |           | I and Rector/Chairman will feel lost if one of us is moved and we can no longer cooperate  | 0.902  |                  |       |       |
| T6        |           | Most people, even those who are not close friends of the Rector/Chairman, respect him or her as a co-worker.                                 | 0.637  |                  |       |       |
| LMX       | LMX1      | I really like Rector/Chairman for being present as a person  | 0.720  | 0.911            | 0.923 | 0.600 |
|           | LMX2      | I am impressed by Rector/Chairman's knowledge of his or her work   | 0.778  |                  |       |       |
|           | LMX3      | I admire the Rector/Chairman's attitude in the workplace   | 0.755  |                  |       |       |
|           | LMX4      | Rector/Chairman will come to my defense if I am "attacked" by others   | 0.750  |                  |       |       |
|           | LMX5      | Rector/Chairman defended my work performance before the college leadership, even without complete knowledge of the intended problem          | 0.737  |                  |       |       |
|           | LMX6      | Rector/Chairman will defend me before others if I confess honestly to the mistakes I have made.  | 0.839  |                  |       |       |
|           | LMX7      | I work beyond what has been specified in my job description  | 0.848  |                  |       |       |
|           | LMX8      | I actively conduct research at an independent cost to increase college publications.   | 0.759  |                  |       |       |
| JS        | JS1       | I have the opportunity to do different things over time  | 0.824  | 0.926            | 0.938 | 0.604 |
|           | JS2       | I have the opportunity to be someone meaningful in the work environment  | 0.856  |                  |       |       |
|           | JS3       | I had the opportunity to tell others what to do  | 0.862  |                  |       |       |
|           | JS4       | I had the opportunity to do something that required the ability I had  | 0.830  |                  |       |       |
|           | JS5       | I have a feeling of being very satisfied in completing a certain work  | 0.659  |                  |       |       |
|           | JS6       | I am very satisfied with how the Rector/Chairman helped the lecturers.   | 0.759  |                  |       |       |
|           | JS7       | I am very satisfied with the Rector/Chairman's policy that has been implemented  | 0.764  |                  |       |       |
|           | JS8       | I am very satisfied with my current salary.  | 0.711  |                  |       |       |
|           | JS9       | I had the opportunity to develop my work career  | 0.683  |                  |       |       |
|           | JS11      | I am very satisfied with the current working conditions  | 0.796  |                  |       |       |

*N* = 160. CR, composite reliability; AVE, average variance extracted; SL, servant leadership; T, trust; LMX, leader-member exchange; JS, job satisfaction.

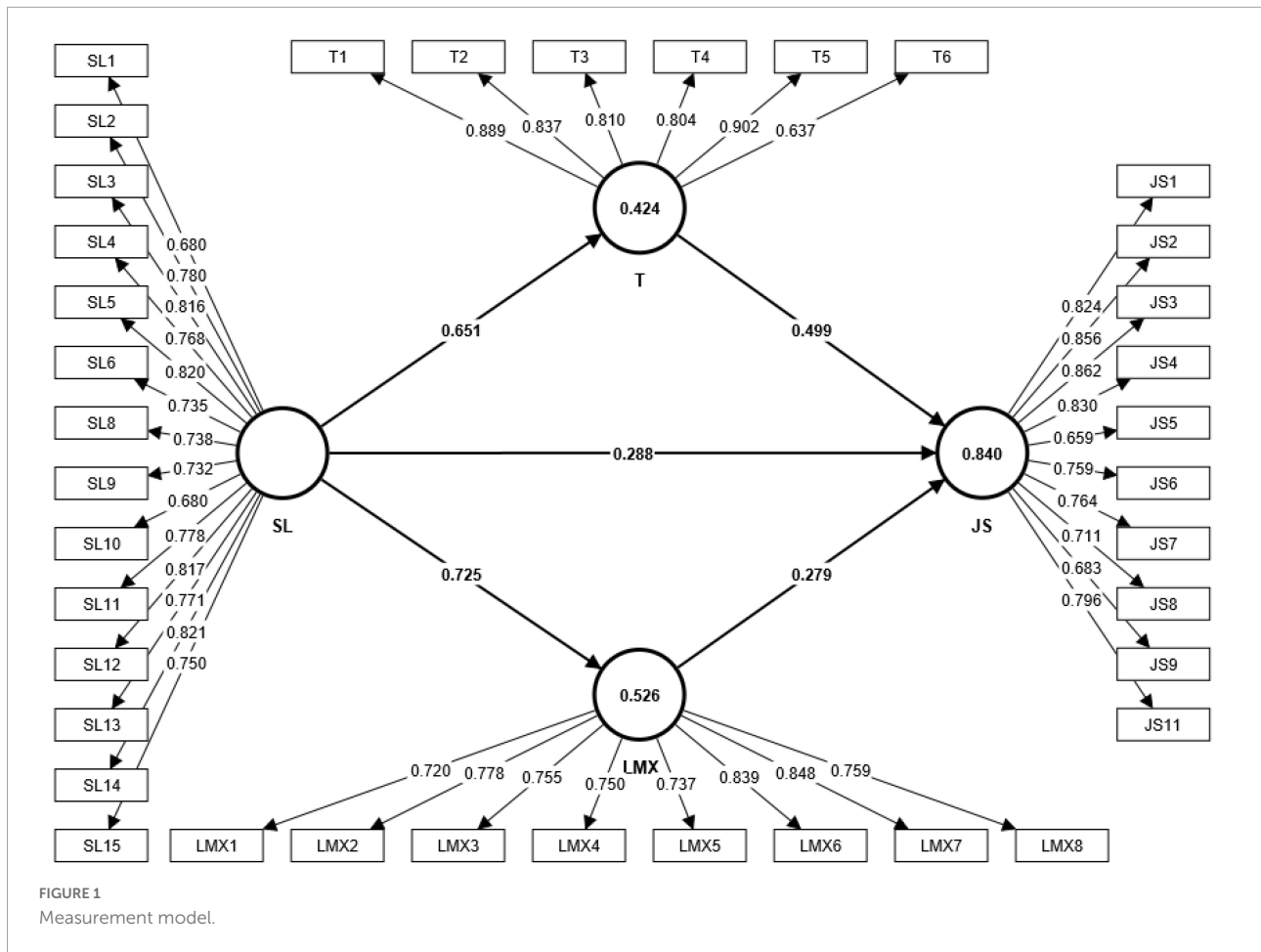


TABLE 5 Discriminant validity: heterotrait-monotrait ratio.

|     | JS    | LMX   | SL    | T |
|-----|-------|-------|-------|---|
| JS  |       |       |       |   |
| LMX | 0.702 |       |       |   |
| SL  | 0.851 | 0.700 |       |   |
| T   | 0.885 | 0.438 | 0.674 |   |

TABLE 6 Collinearity statistics: variance inflation factor.

|     | JS    | LMX   | T     |
|-----|-------|-------|-------|
| LMX | 2.111 |       |       |
| SL  | 2.895 | 1.000 | 1.000 |
| T   | 1.738 |       |       |

After reporting the direct effect results, the results of the indirect effect are reported. **Table 7** shows that the indirect effect, SL on JS *via* T ( $\beta = 0.327, t\text{-value} = 8.008, p < 0.05$ ) and LMX ( $\beta = 0.204, t\text{-value} = 5.615, p < 0.05$ ) are significant positive, consequently H6 and H7 are accepted.

After establishing the importance of the effects between the constructs, the study evaluated the model's predictive accuracy through  $R^2$ . It can be seen as a combined effect of exogenous variables on endogenous variables. In other words, it represents the amount of variance in the endogenous construct described by all the associated exogenous variables. As the rule of thumb stated by [Hair et al. \(2017\)](#), the values of  $R^2 = 0.75, 0.50,$  and  $0.25$  reflect the substantial, moderate, and weak contributions of exogenous variables to endogenous variables, respectively. The  $R^2$  value of JS is 0.840 (substantial). Therefore, 84.0% of variants in JS are determined by SL, T, and LMX. The  $R^2$  value of T is 0.424 (weak) or 42.4% of the variant in T is determined by SL and the  $R^2$  value of LMX is 0.526 (moderate) or 52.6% of the variant in LMX is determined by SL.

Then, the  $f^2$  effect size is calculated to evaluate the  $R^2$  value of all endogenous constructs, the change in the value of  $R^2$  when a particular exogenous construct is removed from the model can be used to evaluate whether the omitted construct has a substantive impact on the endogenous construct (**Table 8**). [Cohen \(1988\)](#) provides guidelines for interpreting  $f^2$ ; the values of 0.02, 0.15, and 0.35, represent small, medium, and large effects, respectively. SL has a medium effect against

TABLE 7 Summary of hypotheses testing.

| Hypotheses             | Path            | Std. Beta | Std. Error | t-value | P-value | Bias   | Confidence interval bias corrected |        | Decisions |
|------------------------|-----------------|-----------|------------|---------|---------|--------|------------------------------------|--------|-----------|
|                        |                 |           |            |         |         |        | 5.00%                              | 95.00% |           |
| <b>Direct effect</b>   |                 |           |            |         |         |        |                                    |        |           |
| H1                     | SL- > JS        | 0.286     | 0.059      | 4.907   | 0.000   | -0.002 | 0.195                              | 0.388  | Accepted  |
| H2                     | SL- > T         | 0.655     | 0.044      | 14.647  | 0.000   | 0.003  | 0.561                              | 0.713  | Accepted  |
| H3                     | SL- > LMX       | 0.728     | 0.032      | 22.939  | 0.000   | 0.003  | 0.665                              | 0.770  | Accepted  |
| H4                     | T- > JS         | 0.500     | 0.054      | 9.160   | 0.000   | 0.001  | 0.408                              | 0.587  | Accepted  |
| H5                     | LMX- > JS       | 0.280     | 0.050      | 5.589   | 0.000   | 0.000  | 0.191                              | 0.358  | Accepted  |
| <b>Indirect effect</b> |                 |           |            |         |         |        |                                    |        |           |
| H6                     | SL- > T- > JS   | 0.327     | 0.041      | 8.008   | 0.000   | 0.002  | 0.258                              | 0.39   | Accepted  |
| H7                     | SL- > LMX- > JS | 0.204     | 0.036      | 5.615   | 0.000   | 0.001  | 0.139                              | 0.258  | Accepted  |

p ≤ 0.05 (one-tailed test).

TABLE 8 Effect size (f<sup>2</sup>).

| Exogenous variable | Endogenous variable |       |       |
|--------------------|---------------------|-------|-------|
|                    | JS                  | LMX   | T     |
| LMX                | 0.232               |       |       |
| SL                 | 0.179               | 1.110 | 0.736 |
| T                  | 0.896               |       |       |

JS (f<sup>2</sup> = 0.179), a large effect against LMX (f<sup>2</sup> = 1.110) and a large effect against T (f<sup>2</sup> = 0.736). In addition, the size of the effect f<sup>2</sup> of the relationship between T and JS indicates the size of the large effect (f<sup>2</sup> = 0.896). Finally, LMX has a medium effect against JS (f<sup>2</sup> = 0.232).

## Discussion

In this study, the primary purpose was to identify the outcomes of SL and establish direct and indirect effects. First, the model confirms the direct influence of SL on T. These findings are in line with the results of previous studies (Keradjaan et al., 2020; Saleem et al., 2020; Hai and Van, 2021). The results of this study confirm that trust is the outcome of SL, not a predictor of SL. Second, the effect of SL on LMX was confirmed in this study (Henderson et al., 2009; Wu et al., 2013; Ling et al., 2016). Servant leadership can improve LMX for three reasons: (1) by focusing on the development of followers and providing opportunities to learn new skills (Smith et al., 2004), servant leaders facilitate the development of strong interpersonal relationships with their followers (Ehrhart, 2004; Liden et al., 2008). (2) By proposing ideas from followers and encouraging them to engage in decision-making (Hunter et al., 2013), servant leaders can build high-quality LMX relationships with followers that go beyond certain economic exchanges. (3) Servant leaders

are seen as principled decision-makers who care about others by emphasizing their followers, the importance of contributing to society and following up on agreements (Walumbwa et al., 2010). This will make followers understand that those leaders act in their best interests, resulting in increased LMX from a higher level of loyalty and emotional connectedness. Thirdly, statistically, these findings suggest that SL has a significant positive effect on JS and is in line with previous literature (Thompson, 2002; Boone and Makhani, 2012). Empirical research in public and private universities revealed a significant positive impact of leadership style on job satisfaction from faculty, where the servant leadership style was found to have the highest positive significant impact on faculty job satisfaction compared to the leadership style of coaches, human relations specialists, controlling autocrats, transformational visionaries, and transactional exchanges (Alonderiene and Majauskaite, 2016). Fourth, the direct effect shows that LMX positively and significantly affects JS. Studies from Wang et al. (2005), Bhal (2006), Stringer (2006), Birgit Schyns (2008), Cogliser et al. (2009), Le Blanc and González-Romá (2012), Anand et al. (2018) confirmed this influence. Khan and Malik (2017) state that the relationship that the leader performs to his subordinates in the context of LMX will make subordinates do work outside of the contract that has been determined at the beginning, even high-quality LMX relationships will receive more support, discretionary work and trust from the leader, and satisfaction increases, as Miner (2005) asserts that LMX is the best predictor for job satisfaction. Fifth, these findings provide an endorsement that T has a significant positive effect on JS, in line with previous studies (Brashear et al., 2003; Mooradian et al., 2006; Wong et al., 2012; Miao et al., 2014; Newman et al., 2014; Maryance, 2020; Amini and Kemal, 2021). Perry and Mankin (2007) and Lambert et al. (2020) concluded that trust is positively related to job satisfaction, suggesting that when colleges, management and co-workers are given a higher level of trust, job satisfaction tends to be higher and vice versa.

This study could determine the mediation effect (indirect effect) based on the model evaluation results. First, the effect of SL on JS is mediated by T. These findings are consistent with previous research (Dirks and Ferrin, 2002; Joseph and Winston, 2005; Senjaya and Pekerti, 2010). Chan and Mak (2014) found that trust in leaders mediates the relationship between servant leadership and subordinate job satisfaction. The positive influence of servant leadership on subordinates' trust in leaders and job satisfaction is increased for subordinates. This study found the effect of complementary mediation T mediation on SL and JS because the direct and indirect effects were significant and positive. Second, these findings differ from previous studies by Akdol and Sebnem Arikboga (2017), which found LMX as a partial mediator against SL and JS. The current findings state that the type of LMX mediation on SL and JS is complementary mediation because the direct and indirect effects are significant and positive. Therefore, a servant leader who delegates many decisions to the lecturers within the group and receives many rewards will increase the job satisfaction of the group (Epitropaki and Martin, 2005).

## Theoretical and practical implications

### Theoretical implications

The study contributed to the theory of servant leadership in two ways. First, this is the first study in Christian higher education that examines servant leadership as a predictor of lecturer job satisfaction using quantitative methods with structural equation modeling analysis. In particular, the indirect influence of servant leadership on job satisfaction through trust and leader-member exchange provides empirical support for the theoretical belief that the rector/chairman involved in a high level of interaction with lecturers will affect trust, reduce losses, and maximize profits in interactional relationships between them. In addition, based on the theory of leader-member exchange, high-quality LMX relationships, trust, and satisfaction positively affect personal growth, work attitudes, and lecturer performance. Thus, this study confirms a proposition based on social exchange theory (Thibaut and Kelley, 1959; Blau, 1968; Mayer et al., 1995; Rousseau et al., 1998; Liden et al., 2008; Schwarz et al., 2016) and the theory of Leader-Member Exchange (Manz and Sims, 1987; Liden and Maslyn, 1998; van Dierendonck, 2011; Liden et al., 2015; Chiniara and Bentein, 2016). Second, the results of this study confirm the results of previous research that servant leadership can be applied in Indonesian culture (Pekerti and Sendjaya, 2010; Dami et al., 2022), which emphasize the character of sociability and maintaining a friendship with everyone and holding a high distance of power, collectivism, low uncertainty avoidance, and short-term orientation (Rajiani and Pyplacz, 2018). In other words, power distance, short-term orientation culture, and paternalistic are not found to be obstacles to the

practice of servant leadership in Christian higher education in Indonesia.

### Practical implications

The results of the current study highlight the beneficial potential in improving the servant leadership behavior of the rector/chairman in Christian higher education. Our findings suggest a desire to support the promotion of servant leaders so that the appointment of rector/chairman in Christian colleges is not based on seniority within the institution but considers the servant leadership competencies of the leaders. In addition, the Organizing Board of Private Universities (BPPTS) needs to prepare for leadership regeneration by preparing future service leaders through training that directly supports the improvement of servant leadership behavior. This is important because the leadership behavior of servants becomes an essential leadership style for lecturer job satisfaction and the achievement of college goals.

## Conclusion

The current study examines the role of mediation from trusts and leader-member exchanges in the effect of SL on JS in Indonesian Christian higher education. These findings reveal that SL is directly an important factor for JS lecturers at Indonesian Christian universities. SL also influences JS through T and LMX; the type of mediation is complementary mediation. Thus, JS predictors are SL, JS and LMX. In addition, T and LMX mediate the influence of SL on JS. Based on these findings, Christian higher education's servant leader (rector/chairman) needs to improve LMX and T to improve the JS of Christian higher education lecturers in Indonesia.

## Limitations and future research

Similar to previous studies, this study has some limitations that need to be considered in future research. First, only one leadership style was tested in this study. Therefore, future research needs to consider using other leadership styles (transformational, transactional, entrepreneurial, charismatic and e-leadership) so that there is a comparison. Second, demographic data in this study was not used in hypothesis analysis. Future research could use some demographic data as moderator variables. Third, data collection is only taken from the individual level. We propose that the data be taken from both the individual and organizational levels.

Fourth, Hannay (2008) stated that Indonesia has a cultural fusion that can facilitate and not facilitate servant leadership. Collectivism, femininity, and low uncertainty avoidance are cultural characteristics that are in line with

servant leadership, while high power distance and short-term orientation culture in Indonesia are unfavorable to servant leadership. Therefore, future studies should consider the role of organizational culture by using contingency theory. Fifth, the data were analyzed using the partial least squares technique (PLS-SEM) to test hypotheses and draw conclusions. We suggest that longitudinal examinations should be directed in the future to gain a superior understanding of the possible influence of the servant leadership style on OCB Individuals and organizations. Fifth, this research only uses one leadership style, it is hoped that future research will use charismatic leadership, transformational leadership, transactional leadership, entrepreneurial leadership and e-leadership styles.

## Data availability statement

The original contributions presented in this study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## Ethics statement

This study provides universities with a practical means to identify early potential service leaders in leading the

college because it significantly impacts trust, LMX and job satisfaction of lecturers.

## Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work, and approved it for publication.

## Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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## References

- Ababneh, K. I. (2020). Effects of met expectations, trust, job satisfaction, and commitment on faculty turnover intentions in the United Arab Emirates (UAE). *Int. J. Hum. Resource. Manage.* 31, 303–334. doi: 10.1080/09585192.2016.1255904
- Aboramadan, M., Dahleez, K., and Hamad, M. H. (2020a). Servant leadership and academics' engagement in higher education: Mediation analysis. *J. High. Educ. Policy Manage.* 42, 1–17. doi: 10.1080/1360080X.2020.1774036
- Aboramadan, M., Dahleez, K., and Hamad, M. H. (2020b). Servant leadership and academics outcomes in higher education: The role of job satisfaction. *Int. J. Organ. Anal.* 29, 562–584. doi: 10.1108/IJOA-11-2019-1923/FULL/PDF
- Adda, H. W., and Buntuang, P. C. D. (2018). Persepsi Servant Leadership Perguruan Tinggi Di Kota Palu. *J. Ilmu Manajemen Universitas Tadulako* 4, 81–90. doi: 10.22487/jimut.v4i1.108
- Akdol, B., and Sebnem Arikboga, F. (2017). Leader member exchange as a mediator of the relationship between servant leadership and job satisfaction: A research on Turkish ICT companies. *Int. J. Organ. Leadersh.* 6, 525–535. doi: 10.33844/ijol.2017.60226
- Al-Asadi, R. (2019). Impact of servant leadership on intrinsic and extrinsic job satisfaction. *Leadersh. Organ. Dev. J.* 40, 472–484. doi: 10.1108/LODJ-09-2018-0337
- Albert, C., Davia, M. A., and Legazpe, N. (2018). Job satisfaction amongst academics: The role of research productivity. *Stud. High. Educ.* 43, 1362–1377. doi: 10.1080/03075079.2016.1255937
- Albright, J. J., and Park, M. H. (2009). *Confirmatory Factor Analysis Using AMOS, LISREL, Mplus, SAS/STAT CALIS*. Indiana University: University Information Technology Services.
- Alonderiene, R., and Majauskaitė, M. (2016). Leadership style and job satisfaction in higher education institutions. *Int. J. Educ. Manag.* 30, 140–164. doi: 10.1108/IJEM-08-2014-0106
- Alshammari, I., Halimi, F., Daniel, C., and Alhusaini, M. M. (2019). Servant-Leadership In Higher Education: A Look Through Students' Eyes. *Int J. Servant Leadersh.* 13, 257–285.
- Amin, H., Ahmed, F., and Soomro, R. H. (2019). Servant Leadership Improves the Knowledge Sharing Behavior of Employees: A Case of Higher Education Sector in Pakistan. *Etikonomi* 18, 83–92. doi: 10.15408/etk.v18i1.6190
- Amini, A., and Kemal, I. (2021). The Effect of Trust and Job Satisfaction on Citizenship Organizational Behavior in High school. *AL-ISHLAH J. Pendidikan* 13, 1348–1357. doi: 10.35445/ALISHLAH.V13I2.655
- Anand, S., Vidyarthi, P., and Rolnicki, S. (2018). Leader-member exchange and organizational citizenship behaviors: Contextual effects of leader power distance and group task interdependence. *Leadersh. Q.* 29, 489–500. doi: 10.1016/J.LEAQUA.2017.11.002
- Apriano, A. (2020). Model Kepemimpinan Kristiani Berbasis Teologi Persahabatan. *Pengaruh Jurnal Teologi Kristen* 2, 102–115. doi: 10.36270/PENGARAH.V2I2.29
- Azwar, S. (2012). *Reliabilitas Dan Validitas*. Yogyakarta: Pustaka Pelajar.
- Baron, R. M., and Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *J. Pers. Soc. Psychol.* 51, 1173–1182.
- Bhal, K. T. (2006). LMX-citizenship behavior relationship: Justice as a mediator. *Leadersh. Organ. Dev. J.* 27, 106–117. doi: 10.1108/01437730610646615
- Birgit Schyns, H.-J. W. (2008). The relationship between leader-member exchange and outcomes as rated by leaders and followers. *Leadersh. Org. Dev.* 29, 631–646.
- Bitew, F., and Gedifew, M. (2020). Effects of Servant Leadership on Institutional Effectiveness of Public Universities in Ethiopia. *Int. J. Sci. Basic Appl. Res.* 52, 190–204.

- Blau, P. M. (1964). *Exchange and Power in Social Life*. Piscataway, NJ: Transaction Publishers.
- Blau, P. M. (1968). "Interaction: Social exchange," in *International Encyclopedia of the Social Sciences*, ed. D. L. Sills (New York, NY: Macmillan/Free Press), 452–458.
- Boone, L. W., and Makhani, S. (2012). Five Necessary Attitudes of a Servant Leader. *Rev. Bus.* 33, 83–96.
- Bozeman, B., and Gaughan, M. (2011). Job satisfaction among university faculty: Individual, work, and institutional determinants. *J. High. Educ.* 82, 154–186. doi: 10.1353/jhe.2011.0011
- Brashear, T. G., Boles, J. S., and Brooks, C. M. (2003). An empirical test of trust-building processes and outcomes in sales manager-salesperson relationships. *J. Acad. Mark. Sci.* 31, 189–200. doi: 10.1177/0092070302250902
- Brown, S., and Bryant, P. (2015). Getting to Know the Elephant: A Call to Advance Servant Leadership through Construct Consensus, Empirical Evidence, and Multilevel Theoretical Development. *Servant Leadersh. Theory Practice* 2:2.
- Burch, M. J., Swails, P., and Mills, R. (2015). Perceptions of administrators' servant leadership qualities at a Christian University: A descriptive study. *Education* 135, 399–405.
- Byrne, M., Chughtai, A. A., Flood, B., and Willis, P. (2012). Job satisfaction among accounting and finance academics: Empirical evidence from Irish higher education institutions. *J. High. Educ. Policy Manage.* 34, 153–167. doi: 10.1080/1360080X.2012.662740
- Cerci, P. A., and Dumludag, D. (2019). Life satisfaction and job satisfaction among university faculty: The impact of working conditions, academic performance and relative income. *Soc. Indic. Res.* 144, 785–806. doi: 10.1007/s11205-018-02059-8
- Chan, S. C. H., and Mak, W. M. (2014). The impact of servant leadership and subordinates' organizational tenure on trust in leader and attitudes. *Pers. Rev.* 43, 272–287. doi: 10.1108/PR-08-2011-0125
- Chiniara, M., and Bentein, K. (2016). Linking servant leadership to individual performance: Differentiating the mediating role of autonomy, competence and relatedness need satisfaction. *Leadersh. Q.* 27, 124–141. doi: 10.1016/j.leaqua.2015.08.004
- Choudhary, A. I., Akhtar, S. A., and Zaheer, A. (2013). Impact of Transformational and Servant Leadership on Organizational Performance: A Comparative Analysis. *J. Bus. Ethics* 116, 433–440. doi: 10.1007/s10551-012-1470-8
- Claar, V. V., Jackson, L. L., and Tenhaken, V. R. (2014). Are Servant Leaders Born or Made? *Theory Practice* 1, 46–52.
- Cogliner, C. C., Schriesheim, C. A., Scandura, T. A., and Gardner, W. L. (2009). Balance in leader and follower perceptions of leader-member exchange: Relationships with performance and work attitudes. *Leadersh. Q.* 20, 452–465. doi: 10.1016/j.leaqua.2009.03.010
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cook, J., and Wall, T. (1980). New Work Attitude Measures of Trust, Organizational Commitment and Personal Need Commitment. *J. Occup. Psychol.* 53, 39–52. doi: 10.1111/j.2044-8325.1980.tb00005.x
- Dahleez, K. A., Aboramadan, M., and Bansal, A. (2021). Servant leadership and affective commitment: The role of psychological ownership and person-organization fit. *Int. J. Organ. Anal.* 29, 493–511. doi: 10.1108/IJOA-03-2020-2105/FULL/XML
- Dahleez, K., and Aboramadan, M. (2022). Servant leadership and job satisfaction in higher education: The mediating roles of organizational justice and organizational trust. *Int. J. Leadersh. Educ.* doi: 10.1080/13603124.2022.2052753
- Dami, Z. A., Imron, A., Burhanuddin, B., Supriyanto, A., and Mustiningsih, M. (2022). Servant Leadership and Life Satisfaction at Public School in Indonesia: Career Satisfaction as Mediator. *Pedagogika* 145, 94–116. doi: 10.15823/p.2022.145.6
- Dash, G., and Paul, J. (2021). CB-SEM vs PLS-SEM methods for research in social sciences and technology forecasting. *Technol. Forecast. Soc. Change* 173:121092. doi: 10.1016/j.techfore.2021.121092
- de Lourdes Machado-Taylor, M., Meira Soares, V., Brites, R., Brites Ferreira, J., Farhangmehr, M., Gouveia, O. M. R., et al. (2014). Academic job satisfaction and motivation: Findings from a nationwide study in Portuguese higher education. *Stud. High. Educ.* 41, 541–559. doi: 10.1080/03075079.2014.942265
- Dirks, K. T., and Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *J. Appl. Psychol.* 87, 611–628. doi: 10.1037/0021-9010.87.4.611
- Dorenkamp, L., and Rühle, S. (2019). Work-life conflict, professional commitment, and job satisfaction among academics. *J. High. Educ.* 90, 56–84. doi: 10.1080/00221546.2018.1484644
- Du Plessis, M., Wakelin, Z., and Nel, P. (2015). The influence of emotional intelligence and trust on servant leadership. *SA J. Ind. Psychol.* 41, 1–9. doi: 10.4102/sajip.v41i1.1133
- Ehrhart, M. G. (2004). Leadership and Procedural Justice Climate As Antecedents of Unit-Level Organizational Citizenship Behavior. *Pers. Psychol.* 57, 61–94. doi: 10.1111/j.1744-6570.2004.tb02484.x
- Epitropaki, O., and Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *J. Appl. Psychol.* 90, 659–676. doi: 10.1037/0021-9010.90.4.659
- Erkutlu, H., and Chafra, J. (2015). Servant Leadership and Voice Behavior in Higher Education. *Yükseköğretimde H İztmetkâr Liderlik ve Dile Getirme D avranışı* 30, 29–41.
- Esen, M., Bellibas, M. S., and Gumus, S. (2018). The Evolution of Leadership Research in Higher Education for Two Decades (1995-2014): A Bibliometric and Content Analysis. *Int. J. Leadersh. Educ.* 23, 259–273. doi: 10.1080/13603124.2018.1508753
- Espy, T. Y. (2006). Educating the Heart, Head, and Hands: Servant Leadership as a Transformational Model for Student Success. *J. Coll. Character* 7:6. doi: 10.2202/1940-1639.1207
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., and Liden, R. C. (2019). Servant Leadership: A systematic review and call for future research. *Leadersh. Q.* 30, 111–132. doi: 10.1016/j.leaqua.2018.07.004
- Farling, M. L., Stone, A. G., and Winston, B. E. (1999). Servant Leadership: Setting the Stage for Empirical Research. *J. Leadersh. Stud.* 6, 49–72. doi: 10.1177/107179199900600104
- Filatroy, E. W., Yuniawan, A., and Kristanto, R. S. (2018). Pengaruh Kecerdasan Emosional, Kepemimpinan Pelayan (Servant Leadership) dan Kepuasan Kerja Terhadap Kinerja Pada Dosen Sekolah Tinggi Ilmu Ekonomi di Kota Semarang. *Jurnal Ilmiah Administrasi Bisnis Dan Inovasi* 2, 166–178. doi: 10.25139/jai.v2i1.1148
- Geidfew, M. T., and Bitew, F. M. (2019). Impact of Servant Leadership Style on Institutional Effectiveness of Public Universities in Ethiopia. *J. Educ. Pract.* 10, 9–18.
- Ghasemy, M., Erfanian, M., and Gaskin, J. E. (2020). Affective events theory as a theoretical lens for improving the working environment of academics in developing economies. *J. Appl. Res. High. Educ.* 13, 300–324. doi: 10.1108/JARHE-02-2020-0030
- Gooch, K. B., Roderick, E., Gough, M. Z., and Pelco, L. E. (2021). *Servant leadership as a framework for building university community: The intersecting missions of faith partners and public higher education institutions*. Available online at: [https://scholarscompass.vcu.edu/wilder\\_pubs/52](https://scholarscompass.vcu.edu/wilder_pubs/52).
- Greenberg, J. (2011). *Behavior in organization*, 10th Edn. London: Pearson Education.
- Greenleaf, R. K. (1977). *Servant Leadership : A Journey into the Nature of Legitimate Power and Greatness*. Mahwah, NJ: Paulist Press.
- Hai, T. N., and Van, Q. N. (2021). Servant leadership styles: A theoretical approach. *Emerg. Sci. J.* 5, 245–256. doi: 10.28991/esj-2021-01273
- Haider, A., Khan, M. A., Taj, T., and Equation, S. (2020). Impact of Servant Leadership on Teaching Effectiveness : A Study of Public Sector. *Glob. Regional Rev.* 5, 509–518. doi: 10.31703/grr.2020(V-1).54
- Hair, J. F. Jr., Black, W. C., Babin, B. J., Anderson, R. E., and Tatham, R. L. (2010). *Multivariate Data Analysis*, 7th Edn. Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F. Jr., Howard, M. C., and Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *J. Bus. Res.* 109, 101–110. doi: 10.1016/j.jbusres.2019.11.069
- Hair, J. F., Black, W. C., Babin, B. J., and Anderson, R. E. (2014). *Multivariate Data Analysis*. Berlin: Springer.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., and Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 2nd Edn. Los Angeles: Sage.
- Hair, J. F., Ringle, C. M., and Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *J. Mark. Theory Practice* 19, 139–152. doi: 10.2753/MTP1069-6679190202
- Han, S. S., and Kim, N. E. (2012). Effects of nurses' perception of servant leadership on leader effectiveness, satisfaction and additional effort: Focused on the mediating effects of leader trust and value congruence. *J. Korean Acad. Nurs.* 42:85. doi: 10.4040/JKAN.2012.42.1.85
- Hancock, M. L. (2019). *Leadership In Christian Higher Education: The Impact of Different Leadership Styles On Students*. Lakeland: Southeastern University.

- Handoyo, S. (2010). Pengukuran Servant Leadership sebagai Alternatif Kepemimpinan di Institusi Pendidikan Tinggi pada Masa Perubahan Organisasi. *Makara Sosial Humaniora* 14, 130–140. doi: 10.7454/mssh.v14i2.675
- Hannay, M. (2008). The Cross-Cultural Leader : The Application of Servant Leadership Theory in the International Context. *J. Int. Bus. Stud.* 1, 1–13.
- Harrison, C. (2017). *Leadership Theory and Research: A Critical Approach to New and Existing Paradigms*. Cham: Springer International Publishing. doi: 10.1007/978-3-319-68672-1
- Hartono, H., Suyanto, B., and Adam, S. (2021). Servant leadership on the inter-church deliberation institute of Surabaya. *Utopia y Praxis Latinoamericana* 26, 431–441. doi: 10.5281/zenodo.4678934
- Hashim, M., Azizullah Khan, M., and Adnan, S. (2019). Servant Leadership and Enhancement of Organizational Performance. *Glob. Soc. Sci. Rev.* 4, 117–122. doi: 10.31703/GSSR.2019(IV-1).15
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Commun. Monogr.* 76, 408–420. doi: 10.1080/03637750903310360
- Henderson, D. J., Liden, R. C., Glibkowski, B. C., and Chaudhry, A. (2009). LMX differentiation: A multilevel review and examination of its antecedents and outcomes. *Leadersh. Q.* 20, 517–534. doi: 10.1016/j.LEAQUA.2009.04.003
- Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* 43, 115–135. doi: 10.1007/s11747-014-0403-8
- Hope, A. S. (2010). *Pendidikan Kristen Kontekstual*. Makale: Institut Agama Kristen Negeri Toraja.
- Htun, W. (2022). Employees Job Satisfaction and Retention at Workplace. *J. Posit. Sch. Psychol.* 6, 4342–4346.
- Hunter, E. M., Neubert, M. J., Perry, S. J., Witt, L. A., Penney, L. M., and Weinberger, E. (2013). Servant leaders inspire servant followers: Antecedents and outcomes for employees and the organization. *Leadersh. Q.* 24, 316–331. doi: 10.1016/j.leaqua.2012.12.001
- Hylen, M. G., and Willian, L. (2020). Servant Leadership and Principal Preparation: A Christian University Perspective. *J. Character Educ.* 16, 13–25.
- Ingram, O. C. J. (2003). *The Conceptualization and Perception of Servant Leadership in Christian Higher Education*. Michigan: ProQuest.
- Jagela, W. M. (2019). Student Perceptions of the Influence of Servant Leadership at Two Christian Denomination Campuses. *Excell. Educ. J.* 8, 91–115.
- Jahan, N., and Kim, S. W. (2021). Understanding online community participation behavior and perceived benefits: A social exchange theory perspective. *PSU Res. Rev.* 5, 85–100. doi: 10.1108/PRR-12-2019-0036
- Jiang, W., Wang, L., and Lin, H. (2016). The role of cognitive processes and individual differences in the relationship between abusive supervision and employee career satisfaction. *Pers. Individual. Differ.* 99, 155–160. doi: 10.1016/j.paid.2016.04.088
- Jondar, A. (2021). Implikasi Kepemimpinan Servant dalam Bidang Pendidikan. *PRAJA Observer J. Penelitian Administrasi Publik* 1, 53–69.
- Joseph, E. E., and Winston, B. E. (2005). A correlation of servant leadership, leader trust, and organizational trust. *Leadersh. Organ. Dev. J.* 26, 6–22. doi: 10.1108/01437730510575552
- Keradjaan, H., Sondakh, J. J., Tawaas, H. N., and Sumarauw, J. S. (2020). The Effect of Servant Leadership on Lecturer Performance Through Trust in Leader as A Mediation Variable. *Int. J. Soc. Sci. Bus. A.* 4, 344–351. doi: 10.23887/IJSSB.V4I3.25442
- Khan, M. N., and Malik, M. F. (2017). My leader's group is my group". Leader-member exchange and employees' behaviours. *Eur. Bus. Rev.* 29, 551–571. doi: 10.1108/EBR-01-2016-0013
- Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling*, 3rd Edn. New York, NY: The Guilford Press.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *Int. J. E-Collab.* 11, 1–10. doi: 10.4018/ijec.2015100101
- Lambert, E. G., Keena, L. D., Haynes, S. H., Ricciardelli, R., May, D., and Leone, M. (2020). The Issue of Trust in Shaping the Job Involvement, Job Satisfaction, and Organizational Commitment of Southern Correctional Staff. *Crim. Justice Policy Rev.* 32, 193–215. doi: 10.1177/0887403420903370
- Langhof, J. G., and Guldenberg, S. (2020). Servant Leadership: A systematic literature review—toward a model of antecedents and outcomes. *Ger. J. Hum. Resource. Manag.* 34, 32–68. doi: 10.1177/2397002219869903
- Latif, K. F. (2020). Servant leadership, career, and life satisfaction in higher education: A cross-country study of Spain, China, and Pakistan. *Appl. Res. Qual. Life* 16, 1221–1247. doi: 10.1007/s11482-019-09809-x
- Latif, K. F., and Marimon, F. (2019). Development and validation of servant leadership scale in Spanish higher education. *Leadersh. Organ. Dev. J.* 40, 499–519. doi: 10.1108/LODJ-01-2019-0041
- Latif, K. F., Machuca, M. M., Marimon, F., and Sahibzada, U. F. (2021). Servant Leadership, Career, and Life Satisfaction in Higher Education: A Cross-Country Study of Spain, China, and Pakistan. *Appl. Res. Qual. Life* 16, 1221–1247. doi: 10.1007/S11482-019-09809-X
- Le Blanc, P., and González-Romá, M. (2012). A team level investigation of the relationship between Leader-Member Exchange (LMX) differentiation, and commitment and performance. *Leadersh. Q.* 23, 534–544. doi: 10.1016/j.leaqua.2011.12.006
- Lee, A., Lyubovnikova, J., Tian, A. W., and Knight, C. (2020). Servant leadership: A meta-analytic examination of incremental contribution, moderation, and mediation. *J. Occup. Organ. Psychol.* 93, 1–44. doi: 10.1111/joop.12265
- Liden, R. C., and Maslyn, J. M. (1998). Multidimensionality of leader-member exchange: An empirical assessment through scale development. *J. Manage.* 24, 43–72. doi: 10.1016/S0149-2063(99)80053-1
- Liden, R. C., Wayne, S. J., Meuser, J. D., Hu, J., Wu, J., and Liao, C. (2015). Servant leadership: Validation of a short form of the SL-28. *Leadersh. Q.* 26, 254–269. doi: 10.1016/j.LEAQUA.2014.12.002
- Liden, R. C., Wayne, S. J., Zhao, H., and Henderson, D. (2008). Servant leadership: Development of a multidimensional measure and multi-level assessment. *Leadersh. Q.* 19, 161–177. doi: 10.1016/j.leaqua.2008.01.006
- Ling, Q., Lin, M., and Wu, X. (2016). The trickle-down effect of servant leadership on frontline employee service behaviors and performance: A multilevel study of Chinese hotels. *Tour. Manag.* 52, 341–368. doi: 10.1016/j.TOURMAN.2015.07.008
- Lowe, J. (1998). "Trust: The invaluable asset," in *Insights on Leadership : Service, Stewardship, Spirit, and Servant-Leadership*, ed. L. C. Spears (Hoboken: Wiley), 398.
- Lumintang, S. I. (2019). Manajemen Mutu Pendidikan dan Kepemimpinan Kontemporer Bagi Peningkatan Perguruan Tinggi Keagamaan di Abad XXI. *Voice Wesley J. Ilmiah Musik dan Agama* 2, 1–12. doi: 10.36972/JVOW.V2I2.24
- MacKenzie, S. B., and Podsakoff, P. M. (2012). Common method bias in marketing: Causes, mechanisms, and procedural remedies. *J. Retail.* 88, 542–555. doi: 10.1016/j.jretai.2012.08.001
- Manz, C. C., and Sims, H. P. (1987). Leading Workers to Lead Themselves: The External Leadership of Self- Managing Work Teams. *Adm. Sci. Q.* 32:106. doi: 10.2307/2392745
- Maryance, R. T. (2020). Pengaruh Kepercayaan dan Kepuasan Kerja dengan Komitmen Organisasi Kepala Sekolah di SMA Swasta Sekotamadya Jakarta Timur. *J. Indonesia Sosial Sains* 1, 209–214. doi: 10.36418/jiss.v1i3.36
- Mayer, R. C., Davis, J. H., and Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *Acad. Manage. Rev.* 20:709. doi: 10.2307/258792
- McAllister, D. J. (1995). Affect - and Cognition-Based Trust As Foundations for Interpersonal Cooperation In Organizations. *Acad. Manage. J.* 38, 24–59. doi: 10.2307/256727
- McAllister, D. J., and Bigley, G. A. (2002). Work context and the definition of self: How organizational care influences organization-based self-esteem. *Acad. Manage. J.* 45, 894–904. doi: 10.2307/3069320
- Mccann, J. T., Graves, D., and Cox, L. (2014). Servant Leadership, Employee Satisfaction, and Organizational Performance in Rural Community Hospitals. *Int. J. Bus. Manag.* 9, 28–38. doi: 10.5539/ijbm.v9n10p28
- Mcquade, K. E., Harrison, C., and Tarbert, H. (2020). Systematically reviewing servant leadership. *Eur. Bus. Rev.* 33, 465–490. doi: 10.1108/EBR-08-2019-0162
- Melinda, T., Antonio, T., and Christina. (2018). "Servant Leadership Approach to Improve Performance In Higher Education," in *The Fifth International Conference on Entrepreneurship*, (Surabaya: Universitas Ciputra), 308–314.
- Melinda, T., Antonio, T., and Christina. (2019). Servant Leadership Dimension in Higher Education. in *Proceedings of the 2019 International Conference on Organizational Innovation (ICOI 2019)* Atlantis: Atlantis Press. 677–681. doi: 10.2991/icoi-19.2019.118
- Melinda, T., Antonio, T., and Christina. (2020). Confirmatory Analysis of Servant Leadership Dimension To the Indonesian Academic Leader. *Jurnal Aplikasi Manajemen* 18, 730–740. doi: 10.21776/ub.jam.2020.018.04.12
- Memon, M. A., Cheah, J.-H., Ting, T. R. H., and Chuah, F. (2018). Mediation Analysis Issues and Recommendations. *J. Appl. Struct. Eq. Model.* 2, i-ix doi: 10.47263/JASEM.2(1)01



- Mgaiwa, S. J. (2021). Academics' job satisfaction in Tanzania's higher education: The role of perceived work environment. *Soc. Sci. Humanit. Open* 4:100143. doi: 10.1016/j.ssaho.2021.100143
- Miao, Q., Newman, A., Schwarz, G., and Xu, L. (2014). Servant leadership, trust, and the organizational commitment of public sector employees in China. *Public Adm.* 92, 727–743. doi: 10.1111/padm.12091
- Miner, J. B. (2005). *Organizational Behavior I Essential Theories of Motivation and Leadership*. New York, NY: Routledge.
- Moll, J., and Kretschmar, L. (2017). An investigation of the suitability of a Servant Leadership model for academic Group Leaders at German universities. *J. Leadersh. Educ.* 16, 166–182. doi: 10.12806/V16I12/T1
- Mooradian, T., Renzl, B., and Matzler, K. (2006). Who trusts? Personality, trust and knowledge sharing. *Manag. Learn.* 37, 523–540. doi: 10.1177/1350507606073424
- Mustapha, U. Z. (2019). Servant Leadership in the Last Decade : A Systematic Review. *J. Corp. Responsib. Leadersh.* 6:53. doi: 10.12775/JCRL.2019.003
- Ndoria, J. (2004). *Servant-Leadership: Is it an Academic Jargon or a Life Style? Servant-Leadership Research Roundtable*. Virginia, US: Regent University.
- Newman, A., Kiazad, K., and Miao, Q. (2014). Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organisational citizenship: A case of the head leading the heart? *J. Bus. Ethics* 123, 113–123. doi: 10.33844/jjol.2020.60501
- Ng, K.-Y., Koh, C., and Goh, H.-C. (2008). "The heart of the servant leader: Leader's motivation-to-serve and its impact on LMX and subordinates' extra-role behavior," in *Knowledge-driven Corporation-Complex Creative Destruction*, eds G. B. Graen and J. A. Graen (Charlotte: Information Age), 125–144. doi: 10.1177/0306307017749634
- Palestinian Ministry Higher Education, [PMHESR] (2019). *Statistical Yearbook 2018/2019*. Ramallah: Palestinian ministry of higher education.
- Park, J. (2018). Higher education employees' self-assessment of person-organization fit: The role of work conditions and job satisfaction. *Int. Rev. Public Adm.* 23, 55–77. doi: 10.1080/12294659.2018.1447883
- Parker, S. K., and Ohly, S. (2008). "Designing motivating jobs," in *Work Motivation: Past, Present, and Future*, eds R. Kanfer, G. Chen, and R. Pritchard (New York, NY: Routledge), 233–284.
- Parris, D. L., and Peachey, J. W. (2012). A Systematic Literature Review of Servant Leadership Theory in Organizational Contexts. *J. Bus. Ethics* 113, 377–393. doi: 10.1007/S10551-012-1322-6
- Parris, D. L., and Peachey, J. W. (2013). A systematic literature review of servant leadership theory in organizational contexts. *J. Bus. Ethics* 113, 377–393. doi: 10.1007/s10551-012-1322-6
- Pekerti, A. A., and Sendjaya, S. (2010). Exploring servant leadership across cultures: Comparative study in Australia and Indonesia. *Int. J. Hum. Resource. Manag.* 21, 754–780. doi: 10.1080/09585191003658920
- Perry, R., and Mankin, L. (2007). Organizational trust, trust in the chief executive and work satisfaction. *Public Pers. Manage.* 36, 165–179. doi: 10.1177/009102600703600205
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., and Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* 88, 879–903. doi: 10.1037/0021-9010.88.5.879
- Prajogo, N. S. (2019). Implementasi Kepemimpinan Gembala yang Melayani Berdasarkan 1 Petrus 5:2-10 di Kalangan Gembala Jemaat Gereja Bethel Indonesia se-Jawa Tengah. *Harvester Jurnal Teologi Dan Kepemimpinan Kristen* 4, 1–21. doi: 10.52104/HARVESTER.V4I1.5
- Quddus, A., Nugroho, B. S., Hakim, L., Ritaudin, M. S., Nurhasanah, E., and Suarsa, A. (2020). Effect of Ecological, Servant dan Digital Leadership Style Influence University Performance? Evidence from Indonesian Universities. *Sys. Rev. Pharm.* 11, 408–417. doi: 10.31838/SRP.2020.10.64
- Rajiani, I., and Pyplacz, P. (2018). National culture as modality in managing the carbon economy in southeast Asia. *Pol. J. Manag. Stud.* 18, 296–310. doi: 10.17512/pjms.2018.18.1.22
- Ramos, S. V. (2020). Servant Leadership Towards The 21st Rich Media Technologies Amidst Covid-19. *JATI-J. Southeast Asian Stud.* 25, 40–59. doi: 10.22452/jati.vol25no2.3
- Rao, M. S., Rao, P. M., and Strock, J. (2019). The Journal of Values-Based Leadership Book Review: Serve to Lead: 21st Century Leaders Manual by James Strock Serve to Lead: 21st Century Leaders Manual. *J. Values-Based Leadersh.* 12:16. doi: 10.22543/0733.121.1262
- Rhee, K. Y. (2010). Different effects of workers' trust on work stress, perceived stress, stress reaction, and job satisfaction between Korean and Japanese workers. *Safer Health Work* 1, 87–97. doi: 10.5491/SHAW.2010.1.1.87
- Ricky. (2017). *Servant leadership in higher education: A case of academic leadership in a faith-based university in Indonesia*. Birmingham: The University of Birmingham.
- Riduwan. (2012). *Metode dan Teknik Penyusunan Proposal Penelitian*. Bandung: Alfabeta.
- Robertson, R., Gockel, C., and Brauner, E. (2013). Trust your teammates or bosses? Differential effects of trust on transactive memory, job satisfaction, and performance. *Empl. Relat.* 35, 222–242. doi: 10.1108/01425451311287880
- Rodríguez-Carvajal, R., De Rivas, S. D., Herrero, M., Moreno-Jiménez, B., and Van Dierendonck, D. (2014). Leading people positively: Cross-cultural validation of the Servant Leadership Survey (SLS). *Span J. Psychol.* 17:E63. doi: 10.1017/SJP.2014.73
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., and Camerer, C. (1998). Not So Different After All: A Cross-Discipline View Of Trust. *Acad. Manage. Rev.* 23, 393–404. doi: 10.5465/AMR.1998.926617
- Sahawneh, F. G., and Benuto, L. T. (2018). The Relationship Between Instructor Servant Leadership Behaviors and Satisfaction with Instructors in an Online Setting. *Online Learn.* 22, 107–129. doi: 10.24059/olj.v22i1.1066
- Saleem, F., Zhang, Y. Z., Gopinath, C., and Adeel, A. (2020). Impact of servant leadership on performance: The mediating role of affective and cognitive trust. *SAGE Open* 10. doi: 10.1177/2158244019900562
- Sarstedt, M., and Cheah, J. H. (2019). Partial least squares structural equation modeling using SmartPLS: A software review. *J. Mark. Anal.* 7, 196–202. doi: 10.1057/s41270-019-00058-3
- Schwarz, G., Newman, A., Cooper, B., and Eva, N. (2016). Servant Leadership and Follower Job Performance: The Mediating Effect of Public Service Motivation. *Public Adm.* 94, 1025–1041. doi: 10.1111/padm.12266
- Sendjaya, S., Eva, N., Butar Butar, I., Robin, M., and Castles, S. (2017). SLBS-6: Validation of a Short Form of the Servant Leadership Behavior Scale. *J. Bus. Ethics* 156, 941–956. doi: 10.1007/S10551-017-3594-3
- Senjaya, S., and Pekerti, A. (2010). Servant leadership as antecedent of trust in organizations. *Leadersh. Organ. Dev. J.* 31, 643–663. doi: 10.1108/01437731011079673
- Shafai, A. A. (2018). *The Perceptions of Saudi Arabia Higher Educational Leaders on Servant Leadership : The Use of Authority and Power*. San Francisco: University of San Francisco.
- Shah, S. A., Asif, M. A., Shoukat, M. H., Polatci, S., and Rehman, S. U. (2022). Quality Management Practices and Inter-Organizational Project Performance: Moderating Effects of Inter-Organizational Communication, Relationship, and Process Conflicts in Healthcare. *SAGE Open* 12, 1–16. doi: 10.1177/21582440221113829
- Sibirian, H. H. (2020). Pentingnya Model Kepemimpinan dalam Pendidikan Kristen Masa Kini. *OSF [Preprint]*. doi: 10.31219/OSF.IO/UJK3R
- Silalahi, F. H. M. (2020). Analisis Teologikal-Homiletikal Kepemimpinan Pelayan Tuhan. *J. Apokaliptis* 11, 1–13.
- Singh, S., and Ryhal, P. C. (2021). How Does Servant Leadership Behaviour Affect Job Satisfaction? A Study on Indian Academia. *FIIB Bus. Rev.* 10, 52–61. doi: 10.1177/2319714520968697
- Smith, B. N., Montagno, R. V., and Kuzmenko, T. N. (2004). Transformational and Servant Leadership: Content and Contextual Comparisons. *J. Leadersh. Organ. Stud.* 10, 80–91. doi: 10.1177/107179190401000406
- Sparrowe, R. T. (1994). Empowerment in the hospitality industry: An exploration of antecedents and outcomes. *Hosp. Res. J.* 17, 51–73. doi: 10.1177/109634809401700306
- Spreitzer, G. M., and Mishra, A. K. (2016). Giving Up Control without Losing Control: Trust and its Substitutes' Effects on Managers' Involving Employees in Decision Making. *J. Leadersh. Org. Stud.* 24, 155–187. doi: 10.1177/1059601199242003
- Stafford, L. (2014). "Social Exchange Theories: Calculating the Rewards and Costs of Personal Relationships," in *Engaging Theories in Interpersonal Communication: Multiple Perspectives*, eds L. A. Baxter and D. O. Braithwaite (Thousand Oaks, CA: SAGE Publications, Inc), 377–390. doi: 10.4135/9781483329529.n28
- Strawser, J. A., Flagg, J. C., and Holmes, S. A. (2000). Job perceptions and turnover behavior of tenure-track accounting educators. *J. Account. Educ.* 18, 315–340. doi: 10.1016/S0748-5751(01)00004-5

- Stringer, L. (2006). The link between the quality of the supervisor–employee relationship and the level of the employee's job satisfaction. *Public Organ. Rev.* 6, 125–142. doi: 10.1007/s11115-006-0005-0
- Szromek, A. R., and Wolniak, R. (2020). Job Satisfaction and Problems among Academic Staff in Higher Education. *Sustainability* 12:4865. doi: 10.3390/su12124865
- Thibaut, J. W., and Kelley, H. H. (1959). *The Social Psychology of Groups*. Hoboken: Wiley-Blackwell.
- Thompson, R. S. (2002). *The Perception of Servant Leadership Characteristics and Job Satisfaction in a Church-Related College*. Terre Haute: Indiana State University.
- Ukeni, I. G., Harrington, S., and Reynolds, K. (2019). “UWS Academic Portal Motivation to serve: A Quantitative Examination of Servant Leadership In Turbulent Times,” in *Academy of International Business US Northeast Regional Conference 2019 Disrupt or Be DisruptedAt: Rutgers Business School*, (Newark NJ: Rutgers University).
- van Dierendonck, D. (2011). Servant Leadership: A Review and Synthesis. *J. Manag.* 37, 1228–1261. doi: 10.1177/0149206310380462
- Walumbwa, F. O., Hartnell, C. A., and Oke, A. (2010). Servant Leadership, Procedural Justice Climate, Service Climate, Employee Attitudes, and Organizational Citizenship Behavior: A Cross-Level Investigation. *J. Appl. Psychol.* 95, 517–529. doi: 10.1037/A0018867
- Wang, H., Law, K. S., Hackett, R. D., Wang, D., and Chen, Z. X. (2005). Leader-member exchange as a mediator of the relationship between transformational leadership and followers' performance and organizational citizenship behavior. *Acad. Manag. J.* 48, 420–432. doi: 10.5465/AMJ.2005.17407908
- Weiss, D. J., Dawis, R. V., England, G. W., and Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. Minnesota: University of Minnesota. doi: 10.1037/t05540-000
- Whitener, E. M., Brodt, S. E., Korsgaard, M. A., and Werner, J. M. (1998). Managers as Initiators of Trust: An Exchange Relationship Framework for Understanding Managerial Trustworthy Behavior. *Acad. Manag. Rev.* 23, 513–530. doi: 10.5465/AMR.1998.926624
- Wilkes, C. G. (1998). *Jesus on Leadership: Discovering the Secrets of Servant Leadership from the Life of Christ*. Jaico Publishing House: Wheaton.
- Wong, Y., Wong, C., and Ngo, H. (2012). The effects of trust in organisation and perceived organisational support on organisational citizenship behaviour: A test of three competing models. *Int. J. Hum. Resour. Manag.* 23, 278–293. doi: 10.1080/09585192.2011.610966
- Wu, L. Z., Tse, E. C. Y., Fu, P., Kwan, H. K., and Liu, J. (2013). The Impact of Servant Leadership on Hotel Employees' "Servant Behavior." *Cornell Hosp. Q.* 54, 383–395. doi: 10.1177/1938965513482519
- Yamin, S., and Kurniawan, H. (2011). *SPSS Complete: Tehnik Analisis Statistik Terlengkap dengan Software*. Chicago, IL: SPSS.
- Yukl, G. A. (2017). *Leadership in organizations*. London: Pearson Education.
- Zeng, N., Liu, Y., Gong, P., Hertogh, M., and König, M. (2021). Do right PLS and do PLS right: A critical review of the application of PLS-SEM in construction management research. *Front. Eng. Manag.* 8, 356–369. doi: 10.1007/s42524-021-0153-5
- Zhao, X., Lynch, J. G. Jr., and Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *J. Consum. Res.* 37, 197–206. doi: 10.1086/651257