



# Transformational leadership and organizational citizenship behavior: new mediating roles for trustworthiness and trust in team leaders

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## Abstract

This study investigates the pivotal role of trust in bridging the effects of transformational leadership on organizational citizenship behavior (OCB). The study was conducted using a multilevel longitudinal approach with 276 employees in 71 teams from private medium-sized organizations in Kuala Lumpur, Malaysia. Transformational leadership was found to be positively related to: (1) three facets of trustworthiness (ability, benevolence, and integrity); (2) trust in the leader; and (3) OCB. All three facets of trustworthiness mediated the relationship between transformational leadership and trust in leaders. In addition, trust in the leader mediated only the relationship between the benevolence facet of trustworthiness and OCB. As OCB is inherently benevolent, these findings not only are consistent with the principle of compatibility, but they also contribute to theorizing about ‘how’ trust plays an important role in the influence of transformational leadership on employees.

**Keywords** Transformational leadership · Trustworthiness · Ability · Benevolence · Integrity · Trust · Organizational citizenship behavior · Malaysia

## Introduction

In past decades, transformational leadership has been well investigated but, more recently, it has arguably gained new relevance in the context of transformations in the world of work, arising from Industrial Revolution 4.0 (Ghislieri et al., 2018) and, most recently, from the COVID-19 pandemic (Haque, 2021). These phenomena have called on studies to

re-examine the role of transformational leadership today (Asbari et al., 2021). A meta-analysis of leadership’s social and transformational benefits has found that leadership was positively related to job performance (Fuller et al., 2022), employee creativity (Koh et al., 2019), and safety behavior (Clarke, 2013). The benefits of transformational leadership are found to span countries (Crede et al., 2019), organizations (Sparks & Schenk, 2001), and organizational teams (ref. Lee et al., 2019). This study focuses on benefits for organizational teams, with these teams likely to be the most proximal to everyday working life.

While findings from prior studies have strongly validated the role of transformational leadership in various work outcomes and across various levels of organizations, a lack of understanding remains about possible mediators between antecedents on the one hand and consequences on the other. A key example is trust (in leaders) (Chen et al., 2021). Within the literature on workplace trust, it is acknowledged that trust is a basis for employees’ cooperative behaviors, organizational communication, and prevention of future organizational conflicts (Matzler & Renzl, 2006). Yet the organizational literature on trust has not, to date, been linked to leadership, in general, and, in particular, to transformational leadership. These links are logical, perhaps based on

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the concept that leadership is founded on trust. They also indicate a gap in the comprehensive picture of how trust leads to positive work outcomes (Burke et al., 2007).

The current trust literature on transformational leadership is so scarce that only two studies can be found in the trust literature in relation to transformational leadership in the past years. A study conducted in China by Zhu et al. (2013), compared the difference between cognitive trust and affective trust as mediators of relationships between transformational leadership and various work outcomes: organizational commitment, organizational citizenship behaviors (OCBs), and job performance. The study found that only affective trust mediated the relationships of transformational leadership with employees' affective organizational commitment, OCB, and job performance. Cognitive trust, in contrast, negatively mediated the relationship between transformational leadership and job performance. Another study conducted in Turkey by Altunoğlu et al. (2018) found that affective trust mediated the relationship between transformational leadership and employees' job performance. Together, these studies highlighted that trust is multidimensional and affects employees differently. Conceptually, a distinction has been drawn between perceived trustworthiness and attributed trust (Yang, 2016). A leader can logically be perceived as trustworthy even though he/she is not quite fully trusted (e.g., when he/she is under pressure from upper management to behave in un-citizen-like ways towards subordinate team members).

As such, the trust literature warrants more attention from the organizational literature, especially from a leadership perspective where it plays an important role in employee's work outcomes. Various competing models have been tested to analyze how leadership trust fits between transformational leadership and work outcomes (Yang, 2016). The result from the best model indicated that leadership trust is a proximal mediator between transformational leadership and work outcomes. In discussing trust as a mediator in the relationship between transformational leadership and work outcomes, trust can be viewed in various ways. Trust literature encompasses trustworthiness, trust propensity, and trust (i.e. Mayer et al., 1995). As such, there is a need to investigate the relationship between the various types of trust; in particular, the relationship between trustworthiness and trust – this has not been investigated in the leadership literature. From a relational perspective, the study proposes that employees will first evaluate the trustworthiness level of the leader prior to displaying how trusting they are towards their leader (i.e., trust in leader). Trustworthiness is hypothesized to mediate transformational leadership and trust in the leader, while trust in the leader mediates trustworthiness and OCB.

From the theoretical perspective, we use social exchange theory (Cropanzano & Mitchell, 2005), similar to the study by Altunoğlu et al. (2018) to further explore the relationships between employees and leaders in a trust setting. However, we expanded on the trust aspects as mediators where we explore both trustworthiness and trust in leader as two aspects of trust that act as mechanisms in the transformational leadership-work outcomes relationship. While a few studies in the trust literature have integrated the leadership constructs into their research, the current study is the first to investigate the influence of transformational leadership on the three facets of a leader's trustworthiness.

Set in an Eastern country, this study is well-placed to undertake an investigation of transformational leadership. This is in line with a meta-analysis study (Crede et al., 2019) which reported that Southeast Asia is one of the best regions in which to show the effectiveness of transformational leadership. This pioneering study relates transformational leadership to a leader's trustworthiness, thus contributing to the trust literature. It helps to build a deeper understanding of how leadership styles impart trust among employees, thus enhancing performance in the workplace. Previous studies have mostly looked at trustworthiness as a whole rather than multidimensional (cf. Braun et al., 2013; Shih et al., 2012), not allowing practitioners and human resource (HR) personnel to know which facets of trustworthiness to address in improving trust within the workplace.

The use of a multilevel approach in which transformational leadership is treated as a multilevel construct provides a more objective and a higher degree of agreement on these leaders compared to when leadership is treated as an individual construct. Moreover, the use of longitudinal data allows the establishment of a cause-and-effect relationship between transformational leadership, trustworthiness, trust in the leader, and OCB. Our study's findings specify the facets of trustworthiness within the transformational leadership style that help to improve the relationship with employees, as well as the processes involved, with both being beneficial for the organization's productivity (Shockley-Zalabak et al., 2010). The proposed model is illustrated below in Fig. 1.

## Theoretical framework

Social exchange theory is one of the most influential conceptual frameworks to understand the employee-organization relationship (Coyle-Shapiro & Conway, 2004). The main tenet of social exchange theory (Cropanzano & Mitchell, 2005) is on the reciprocal relationship between two parties, wherein it can be positive or negative, depending on the quality of the relationship. A positive treatment from one party will result in a positive response from the other party and vice versa. Likewise, trust is derived based on the

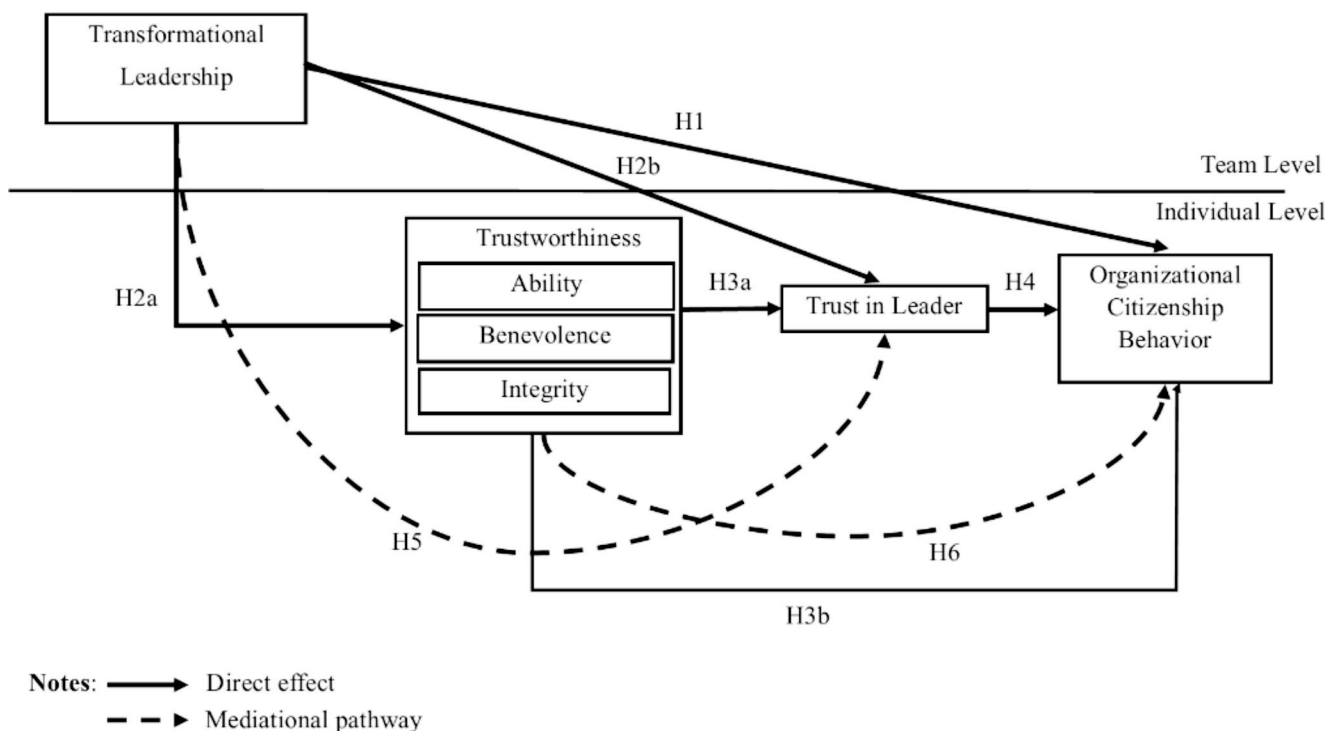


Fig. 1 Hypotheses and Research Model

exchange interactions between parties with the expectation that trust develops over time through reciprocal relationships that would demonstrate trustworthiness. In the current study, our focus is on how transformational leaders treat their employees, resulting in how employees react in response to those treatments, through perception, and ultimately through behavior. Using transformational leadership style which consists of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass & Avolio, 1994), we argue that these characteristics set a positive tone for the two parties to develop a reciprocal relationship that is positive and conducive to the organization. We set leaders as an initiation of trust between the two parties as leaders often command a high level of authority in the Asian setting, hence, they initiate how the relationship ought to be. We focus on the trust aspect as a core element of a good social relationship at the workplace while emphasizing that those characteristics of the leader would reflect a leader’s trustworthiness and thereafter, how employees react to it (i.e., trust in leader), and subsequently, their organizational citizenship behavior. This display of organizational citizenship behavior will perpetuate reciprocal behavior from the leader, sustaining the cycle of leadership, trust, and OCB. With this study, we highlight the role of trust as the underpinning mechanism in social exchange relationships. The following literature will expand on how transformational leadership style may create a social

exchange relationship that is positive for the employees and the organization.

## Review of the literature and hypotheses development

### Transformational leadership and organizational citizenship behavior

Transformational leadership was first defined as a process in which “leaders and their followers raise one another to higher levels of morality and motivation” (Burns, 1978, p. 20). The literature has shown various positive outcomes of transformational leadership for employees, teams, and organizations, such as increased knowledge sharing (Kim & Park, 2020); self-efficacy (Pillai & Williams, 2004); team climate (Sun et al., 2014); and innovation (Jaiswal & Dhar, 2015). Findings are also supported in both Western and Eastern countries (Crede et al., 2019), showing that this is an effective leadership style for employees. Studies have also shown that the attributes of transformational leadership are universal and generalizable across cultures (Den Hartog et al., 1999).

Transformational leadership consists of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass & Avolio, 1994). When leaders display careful consideration and sensitivity towards

employees' needs and skills, they can influence employees in a positive way. Specifically, leaders influence employees' cognitive and emotional state (López-Domínguez et al., 2013) which then puts employees in a positive frame of mind to work productively.

Organizational citizenship behavior (OCB) is defined as “an individual behavior which is not rewarded by a formal reward system ... but that, when combined with the same behavior in a group, results in effectiveness” (Organ, 1988, p. 4). As it is more than job performance, OCB, not relating to required work tasks, consists of altruism, courtesy, sportsmanship, conscientiousness, and civic virtue. In other words, it encompasses work behaviors that are above and beyond work duties and responsibilities. Various studies have shown that OCBs increase under transformational leadership (Kim, 2014; López-Domínguez et al., 2013). For example, the study by Kim (2014) showed that transformational leadership leads to higher OCB through affective commitment.

Focusing on the aspects of individual consideration and intellectual stimulation within transformational leadership, a leader is attentive to employees' needs and allows employees to excel in their work by using their own approach. This autonomy serves as a job resource that employees use to do their work well (Den Hartog & Belschak, 2012). Consequently, employees possess high levels of energy and morale at work. In return, employees reciprocate this conducive relationship by ensuring they perform at a level beyond what is needed by the organization. Employees' behavior is not the result of compulsion, but instead comes from feeling a sense of obligation to return the favor when treated well by leaders. This resonates with social exchange theory (Cropanzano & Mitchell, 2005) which states that a social relationship between two individuals in an exchange process is based on maximizing returns and reducing costs for both parties. This expectation of reciprocity between leader and employees perpetuates organizational citizenship behavior (OCB).

**Hypothesis 1** Transformational leadership is positively related to organizational citizenship behavior (OCB).

### **Transformational leadership as an antecedent to trustworthiness and trust**

A key component by leaders to ensure organizational effectiveness is employees' trust in their leaders (Burke et al., 2007). In other words, the effectiveness of a leader is demonstrated by the level of trust that employees have in their leader. If employees do not trust their leader, this means that the leader is not effective in influencing employees. When

a leader has no influential power, he/she is not able to carry out a leader's task which is to serve as a bridge between employees and the organization's demands, while ensuring that employees' output fulfills these demands. Having no influential power will result in a failure of leadership.

Within the literature on trust, the most influential model of trust by Mayer et al. (1995) stated that trust can be viewed as trustworthiness, trust propensity, and trust as a process. In the current study, we focus on trustworthiness and trust in the leader, as trustworthiness reflects employees' perceptions and evaluation of their leader's character and, indirectly, reflects the effectiveness of his/her leadership, which also serves as an important mechanism in leading to higher trust in leader (Dirks & Ferrin, 2002). We also argue that trustworthiness precedes trust, linking the cognitive mechanism to the emotional mechanism and, finally, to employees' behavior. Trustworthiness is defined as “the subjectively perceived point on a continuum at which an individual's behaviors are perceived as complying with the ethical duties considered to be owed to the person who is making the decision to trust” (Caldwell & Jeffries, 2001, p. 6). It is often represented by ability, benevolence, and integrity (Colquitt & Rodell, 2011). Trust, on the other hand, is defined as “the extent to which a person is confident in and willing to act on the basis of the words, actions, and decisions of another” (McAllister, 1995, p. 25).

The model of trust described how trustworthiness and trust are linked (Mayer et al., 1995). As trustworthiness is described as the characteristics of the trustee (i.e., the leader) by the trustors (i.e., the employees), it then influences how trustors respond to those characteristics in the form of trust.

The characteristics of transformational leadership can be interpreted using the social exchange perspective. While no studies have linked transformational leadership to trustworthiness, we argue that they are related through various elements. We argue that the characteristics of transformational leadership exude the characteristics of trustworthiness (i.e., high ability, benevolence, and integrity). For the ability facet, transformational leadership consists of idealized influence and intellectual stimulation. Leaders need to know their field of expertise to demonstrate these characteristics which allows them to provide sound input to employees. If the leader does not have a relevant background and expertise, he/she is not able to display the ability facet. Ability has many aspects, such as cognitive ability and emotional intelligence. Studies have also found that transformational leaders have high emotional intelligence, a type of ability useful in managing employees (Côté, 2014).

For the benevolence facet, transformational leaders are known for their individualized consideration. When leaders are considerate and specifically cater to the needs and strengths of each employee, employees feel the leader is

attending to and caring for them. Transformational leadership also includes the benevolence facet within the Asian context where leaders can be authoritarian. In a study conducted in Turkey by Gumusluoglu et al. (2013), the four categories of transformational leadership were found to bear similarities with the four characteristics of transformational leadership: benevolent paternalism, vision implementation, employee participation and teamwork, and proactive behavior. Of the four, benevolent paternalism was found to be the most influential facet of transformational leadership. The inference, therefore, is that transformational leaders have a high level of benevolence toward their employees.

For the integrity facet, transformational leaders are known for their ability to transform employees to meet the organization's objectives and goals. This requires that leaders comply with carrying out the necessary actions to achieve these objectives. In their study among 1,354 managers in the United States, Parry and Proctor-Thomson (2002) found that transformational leadership has a high correlation with perceived integrity and organizational effectiveness. This indirectly shows that transformational leaders have integrity, contrary to the findings of opposing studies which found transformational leadership to also be narcissistic (but not to the extent of immoral activities in the workplace) (O'Reilly & Chatman, 2020).

Studies have shown that untrustworthiness is directed toward leaders who lack cognitive diversity and do not inspire employees (e.g., Holley et al., 2019), with these being the opposite characteristics to the individualized consideration and inspirational motivation of transformational leadership. This type of leader does not engage employees, thus preventing the bonding of a quality leader–member relationship. Taken altogether, when employees cognitively evaluate their leaders from these three facets, transformational leaders are found to show these three characteristics.

In addition, these characteristics allow employees to trust their leaders, as transformational leaders are known to have a high-quality leader–member exchange relationship with their employees. Such a relationship often comes with high trust, communication, and respect by both parties. When this happens, employees trust their leaders. Trust, deemed to be a social and emotional act (Dunning et al., 2012), is also derived from a working environment where leaders and employees have the same values and visions (Gillespie & Mann, 2004). Leaders with the characteristics of transformational leadership exhibit behaviors such as caring for employees, considering employees' points of view, and motivating employees by using a positive influence approach to increase the level of trust that they feel (Islam et al., 2021). Various studies have also found that transformational leadership leads to higher trust between employees (Schlechter & Strauss, 2008; Yang, 2014). Hence:

**Hypothesis 2** Transformational leadership is positively related to: (a) leader trustworthiness (i.e., ability, benevolence, and integrity) and (b) trust in the leader.

### **Transformational leadership increases organizational citizenship behavior (OCB) through leader trustworthiness and trust in the leader**

Whereas previous studies have not been able to differentiate or link trustworthiness and trust in the leader, the current study argues that trustworthiness leads to higher trust in the leader. Our argument is based on two reasons. Firstly, trustworthiness is a cognitive mechanism that employees use to evaluate their leader based on its three facets. Trust in the leader, on the other hand, mostly revolves around employees' emotional mechanisms. Although some studies have stated that trust itself is a cognitive process, most have shown it to be predominantly an emotional component that affects individuals' behavior (Dunning et al., 2012).

While both trustworthiness and trust lead to better work outcomes for employees, trustworthiness, when controlled for trust, has also shown its distinctive property in work outcomes (Colquitt et al., 2007). This is supported by another study conducted by Kiyonari et al. (2006) which found that trust does not precede trustworthiness. This is in line with the argument that the trustworthiness–trust relationship transpires from the cognitive to the emotional facet of trust (Tomlinson et al., 2020). This, therefore, addresses the lack of consensus on how these two should be treated.

Prior research has shown that leader trustworthiness leads to higher organizational citizenship, as shown in studies by S. Kim and Kuo (2015), Lester and Brower (2003), and Singh and Srivastava (2009). These studies provided the following arguments in support of this view. Firstly, this can be attributed to leaders not emphasizing personal responsibility when an issue occurs but instead focusing on solving the matter (Kim, S. & Kuo, 2015). This reflects leadership behavior of high ability, benevolence, and integrity, thus allowing employees to carry out their tasks at a level higher than what is required. Trustworthy leaders also provide managerial coaching to employees, resulting in employees displaying higher OCB (Singh & Srivastava, 2009) and reflecting a leader with high ability and benevolence.

Finally, as trust is a social act, it is mostly mutual and reciprocal. Lester and Brower (2003) found that when leaders perceive employees to be trustworthy, that is, a subtle act of benevolence, employees also perceive leaders to be trustworthy which facilitates OCB at a higher level. Mediation studies between positive leadership styles, such as transformational leadership (ref. Podsakoff et al., 1990; Qiu et al., 2019), have also found that trust in the leader mediates



relationships between these leadership styles and OCB, further suggesting that trust in the leader and OCB are directly positively related. Hence:

**Hypothesis 3** Leader trustworthiness (i.e., ability, benevolence, and integrity) is positively related to (a) trust in the leader and (b) organizational citizenship behavior (OCB).

**Hypothesis 4** Trust in the leader is positively related to organizational citizenship behavior (OCB).

While most studies apply trust as a mediator in relationships between leadership styles and OCB, the current study has extended these previous studies by having trustworthiness precede trust in the leader and creating a three-pathway model (i.e., transformational leadership → trustworthiness → trust in the leader → OCB). We argue that transformational leadership reflects trustworthiness which then increases trust in the leader and, finally, employees display a higher level of organizational citizenship behavior (OCB). Again, we note on the cognitive–emotional–behavior pathway that employees first evaluate the credibility of their leaders prior to having emotional trust in them.

Various studies have also shown trust to be a mediator in relationships between transformational leadership and positive work outcomes, such as job satisfaction (Yang, 2014), team performance (Braun et al., 2013), and employee championing behavior during organizational change (Islam et al., 2021). These show that trust is an important mechanism that links transformational leadership to positive work outcomes. Yet no studies have explored the pivotal role played by trust in the trustworthiness–OCB relationship.

In a meta-analysis conducted by Nohe and Hertel (2017), the leader–member exchange was identified as the strongest mediator in the relationship between transformational leadership and organizational citizenship behavior (OCB). A high-quality leader–member exchange between a leader and his/her employees is acknowledged as signifying trust, respect, obligations, and mutual influence between the two (Graen & Uhl-Bien, 1995). The authors further identified the importance of the relational mechanism (compared to the attitudinal mechanism) in the relationships of transformational leadership with employee work processes and work outcomes, from the trust perspective. These elements all allow leaders to have a positive influence on employees who then work well.

**Hypothesis 5** Leader trustworthiness (i.e., ability, benevolence, and integrity) mediates the relationship between transformational leadership and trust in the leader.

**Hypothesis 6** Trust in the leader mediates the relationship between leader trustworthiness (i.e., ability, benevolence, and integrity) and organizational citizenship behavior (OCB).

## Method

### Participants

The current study employed a two-wave longitudinal multilevel design with a three-month time gap among 276 employees (average age = 31.43 years; standard deviation [SD] = 9.57) in 71 teams from various private organizations in Kuala Lumpur, the capital city of Malaysia. The location was chosen as it is Malaysia's main economic hub. All organizations were from the service industry with all participants being white-collar employees working from their offices with an appropriate work schedule. The mean length of participants' working experience was 37.54 months (SD = 53.7), with more female participants ( $n = 162, 58.7\%$ ) than male participants. Participants' mean working hours per week was 46.13 h (SD = 77.12) and their mean salary was Malaysian ringgit (RM) 3,463.62 (SD = 2,097.98). Their mean work performance appraisal score for the previous year was 74.59/100 (SD = 16.25).

### Procedure

Prior to data collection, the necessary ethics approval was obtained (Approval number: SUREC 2017/075) from the university's ethics board of the main author's university at the time the study was initiated. Upon ethical approval, organizations were contacted seeking their participation in the study, with their details obtained from the list of small/medium-sized enterprises (SMEs) on the Malaysian governmental website. The researchers followed up with organizations that expressed participation interest. Physical questionnaires were distributed to employees in teams in these organizations. One week following distribution, the researchers returned to these organizations to collect the completed (and incomplete) questionnaires sealed in the envelopes provided. Each team numbered from 3 to 11 participants. Three months after the first round of data collection, the researchers returned to the same organizations to distribute the second set of questionnaires which participants returned one week after questionnaire distribution.

While all responses from the same sources may invite common method variance (CMV), the study has taken measures to reduce this issue. Below were some of the steps taken to reduce CMV as recommended by Chang et al. (2010). Scales were measured on various Likert-scale ranges to reduce the issue caused by similar scale endpoints and anchor effect (Podsakoff et al., 2003). Participants were reminded that their responses will be kept private and confidential where the questionnaire was to be sealed in a blank envelope provided by the researcher. They were also allowed to bring home the questionnaire and complete it at their own pace.

## Instruments

The instruments in the questionnaire were chosen based on their established reliability and validity, and their suitability within the Malaysian context (ref. Juhdi et al., 2013; Lee et al., 2019). The questionnaire was in the original English language and in the official language of Malaysia (i.e., Malay) so participants could complete the questionnaires using their best understanding of the questions being asked. The Malay language was back-translated to mirror its English wording and meaning (Brislin, 1970). The reliability of the scales is shown in Table 1.

*Transformational leadership* was measured using 23 items from the Transformational Leadership Inventory (TLI) (Podsakoff et al., 1990) with the term “my leader” changed to “my group leader” to better reflect leadership as a multilevel construct. An example of one item is as follows: “My group leader leads by example.” The scale ranged from ‘1’ (strongly disagree) to ‘7’ (strongly agree).

*Leader trustworthiness* was measured using 17 items from the Organizational Trust Instrument (OTI) (Mayer & Davis, 1999). These items were as follows: ability (six items); benevolence (five items); and integrity (six items). Examples of the items are as follows: “My leader is very capable of performing his/her job” (ability); “My leader is very concerned about my welfare” (benevolence); and “Sound principles seem to guide my leader’s behavior” (integrity). The scale ranged from ‘1’ (strongly disagree) to ‘5’ (strongly agree).

*Trust in the leader* was measured using 10 items consisting of cognitive and affective trust items adopted from McAllister (1995). Examples of the items are as follows: “I can rely on my leader to do what is best at work” (cognitive trust) and “If I share my problems with my leader, I know (s)he would respond with care” (affective trust). The scale ranged from ‘1’ (strongly disagree) to ‘5’ (strongly agree).

*Organizational citizenship behavior (OCB)* was measured using six items from the Organizational Citizenship Behavior Scale (Wayne et al., 1997). An example of one

item is as follows: “I help others with their work when they have been absent even when I am not required to do so.” The scale ranged from ‘1’ (never) to ‘7’ (always).

## Analysis strategy

The use of multilevel and longitudinal approaches allows better measurement of the leadership construct which should be treated as an organizational-level construct rather than as an individual-level construct (Day & Harrison, 2007). Leadership is about managing a group of employees. Thus, using input from a group of employees on their leader’s level of transformational leadership provides a more objective picture of that leader, although it is still a collective perception rather than the leader’s actual behavior per se. In addition, responses not derived from the leader prevent the personal bias of guarding one’s identity and ego. The use of longitudinal data allows a better understanding of the causal link between leadership style, employees’ trust processes, and work outcomes.

Prior to testing the hypotheses, we first ascertained that transformational leadership was a group-level construct. The  $r(WG)(J)$  (index of agreement) for transformational leadership was 0.92, indicating a high level of within-group agreement (LeBreton & Senter, 2008). The intraclass correlation coefficient (ICC[I]) showed 0.18 and the  $F_{(III)}$  value was found to be significant ( $F_{(III)} = 1.92, p < .001$ ), indicating that transformational leadership has sufficient justification to be aggregated and treated as a group-level construct.

To test our hypotheses, hierarchical linear modeling (HLM) software (Bryk & Raudenbush, 1992) was used. Transformational leadership was treated as a group-level construct, with the study considering employees’ shared perceptions, even more so in the Asian context with its focus on groups (Johns, 2010). Three types of analysis were conducted: lower-level direct effects, cross-level direct effects, and mediation effect. Lower-level direct effects and cross-level direct effects were tested using Mathieu and Taylor’s (2007) recommendations. Firstly, we ran the analysis for lower-level direct effects, followed by conducting a cross-level direct effects analysis.

For lower-level direct effects (Hypotheses 3 and 4), the lower-level dependent variable was regressed on the independent variable. An example of a lower-level HLM equation is as follows:

$$\text{Trust in the leader} = \beta_0 + \beta(\text{leader trustworthiness}) + r.$$

For cross-level direct effects (Hypotheses 1 and 2), the lower-level (LL) outcome variables were first regressed on lower-level (LL) independent variables, followed by regressing the lower-level (LL) outcome variables on the cross-level variable (i.e., transformational leadership).

An example of a cross-level HLM equation is as follows:

**Level 1 model**  $OCB = \beta_0 + \beta(\text{trust in the leader}) + r$ .

**Level 2 Model**  $\beta_{0j} = G_{00} + G_{01}(\text{transformational leadership}) + u_{0j}$ .

Finally, Shapiro–Wilk tests were conducted to test the normality of the variables for the mediation hypotheses (Hypotheses 5 and 6), with all variables found to be normally distributed ( $p > .05$ ). We then followed the testing steps, as recommended by Baron and Kenny (1986). Firstly, a significant relationship should be found for all relationships between  $X \rightarrow Y$ ,  $X \rightarrow M$ , and  $M \rightarrow Y$  in the presence of  $X$ ;  $X$  being the independent variable,  $Y$  being the outcome variable, and  $M$  being the mediation variable. A full mediation occurred if the  $X$  in the relationship between  $M \rightarrow Y$  is not significant. If it does, then it is partial mediation. The Monte Carlo test (Selig & Preacher, 2008) was then used to confirm the mediation pathway relationship. If both values of the lower-level (LL) and upper-level (UL) variables does not contain zero (0), this would be confirmed (MacKinnon et al., 2004). The Monte Carlo test was conducted using a 95% confidence interval (CI) and with 20,000 repetitions.

### Results

Table 1 presents the descriptive analysis and correlations between all measures at the individual level. The results from the HLM analysis are shown in Tables 2 and 3. A summary of the findings is presented in Fig. 2.

**Hypothesis 1** predicted that transformational leadership is positively related to organizational citizenship behavior (OCB). As indicated in Table 2, Model 2, our analysis suggests that transformational leadership has a positive significant relationship with organizational citizenship behavior (OCB) ( $\gamma = 0.24, p < .001$ ). Hence, Hypothesis 1 was supported.

**Hypothesis 2** predicted that transformational leadership is positively related to (a) leader trustworthiness (i.e., ability, benevolence, and integrity) and (b) trust in the leader. All hypotheses under Hypothesis 2 were supported, with transformational leadership having positive relationships with ability ( $\gamma = 0.30, p < .001$ ); benevolence ( $\gamma = 0.26, p < .001$ ); integrity ( $\gamma = 0.34, p < .001$ ); and trust in the leader ( $\gamma = 0.33, p < .001$ ) (see Table 3, Models 11–14).

**Hypothesis 3** predicted that leader trustworthiness (i.e., ability, benevolence, and integrity) is positively related to (a) trust in the leader and (b) organizational citizenship behavior (OCB). All hypotheses in Hypothesis 3(a) were supported,

**Table 1** Means, Standard Deviations, Reliability, and Pearson's Bivariate Correlations

Variables	Mean	SD	$\alpha$	1	2	3	4	5	6	7	8	9	10	11	F	ICC(I)
1. Transformational Leadership	4.89	0.74	0.92	<b>0.68</b>											1.916**	0.1765
2. Ability Time 1	4.01	0.66	0.92	0.63**	<b>0.74</b>										1.325*	0.1112
3. Ability Time 2	3.79	0.69	0.94	0.44**	0.59**	<b>0.79</b>									1.774**	0.1689
4. Benevolence Time 1	3.65	0.59	0.88	0.61**	0.68**	0.37**	<b>0.67</b>								1.140	0.0791
5. Benevolence Time 2	3.94	0.74	0.92	0.44**	0.40**	0.71**	0.52**	<b>0.76</b>							1.782**	0.1641
6. Integrity Time 1	3.73	0.74	0.85	0.59**	0.73**	0.48**	0.75**	0.43**	<b>0.63</b>						1.480*	0.1176
7. Integrity Time 2	3.63	0.65	0.89	0.47**	0.51**	0.79**	0.42**	0.77**	0.54**	<b>0.70</b>					1.965**	0.1682
8. Trust in Leader Time 1	3.84	0.61	0.93	0.68**	0.79**	0.48**	0.77**	0.51**	0.78**	0.51**	<b>0.63</b>				1.533*	0.0547
9. Trust in Leader Time 2	3.78	0.64	0.93	0.48**	0.50**	0.76**	0.47**	0.81**	0.48**	0.81**	0.56**	<b>0.63</b>			2.155**	0.1441
10. OCB Time 1	5.54	0.91	0.92	0.27**	0.10*	0.05	0.18**	0.13*	0.12**	0.13*	0.20**	0.08	<b>0.66</b>		2.028**	0.1396
11. OCB Time 2	4.19	1.17	0.89	0.21**	0.06	0.15**	0.15**	0.26**	0.09	0.19**	0.14*	0.23**	0.46**	<b>0.66</b>	1.926**	0.2211

Notes: SD = standard deviation; ICC = intraclass correlation coefficient; OCB = organizational citizenship behavior; N (individual) = 276; N (team) = 71; \* $p < .05$ ; \*\* $p < .01$ . Bold: Average variance explained.



**Table 2** Hierarchical Linear Modeling (HLM) Analyses of Lower-Level Outcomes and Cross-Level Effect of Transformational Leadership on Lower-Level Outcomes

Effect	OCB Time 2	OCB Time 2	OCB Time 2	OCB Time 2	OCB Time 2	OCB Time 2	Trust in Leader Time 2
Model	1	2	3	4	5	6	7
<b>Lower-Level Effects</b>							
OCB Time 1							
Trust in Leader Time 1	0.26(0.11)*			0.41(0.17)*	0.11(0.17)	0.33(0.18) <sup>+</sup>	
Ability Time 1			0.11(0.10)	-0.19(0.16)			0.43(0.10)***
Benevolence Time 1			0.25(0.10)*		-0.17(0.15)		0.43(0.08)***
Integrity Time 1			0.17(0.11)			-0.10(0.18)	0.44(0.09)***
<b>Cross-Level Effects</b>							
Transformational Leadership Time 1		0.24(0.06)***					

Notes: The first value is the unstandardized parameter estimate, and the value in parentheses is the standard error (SE); OCB = organizational citizenship behavior; <sup>+</sup> = significant at one-tailed test; \**p* < .05; \*\*\**p* < .001; N (individual) = 276; N (team) = 71

**Table 3** Hierarchical Linear Modeling (HLM) Analyses of Lower-Level Outcomes and Cross-Level Effect of Transformational Leadership on Lower-Level Outcomes

Effect	Trust in Leader Time 2	Trust in Leader Time 2	Trust in Leader Time 2	Trust in Leader Time 2	Ability Time 2	Benevolence Time 2	Integrity Time 2
Model	8	9	10	11	12	13	14
<b>Lower-Level Effects</b>							
OCB Time 1							
Trust in Leader Time 1							
Ability Time 1		0.43(0.10)***					
Benevolence Time 1			0.43(0.10)***				
Integrity Time 1				0.44(0.09)***			
<b>Cross-Level Effects</b>							
Transformational Leadership Time 1	0.33(0.06)***	0.33(0.06)***	0.33(0.06)***	0.33(0.06)***	0.30(0.06)***	0.26(0.06)***	0.34(0.07)***

Notes: The first value is the unstandardized parameter estimate, and the value in parentheses is the standard error (SE); OCB = organizational citizenship behavior; \*\*\**p* < .001; N (individual) = 276; N (team) = 71

with leader trustworthiness having a positive relationship with trust in the leader (ability,  $\beta = 0.43$ ,  $p < .001$ ; benevolence,  $\beta = 0.43$ ,  $p < .001$ ; and integrity,  $\beta = 0.44$ ,  $p < .001$ ) (see Table 2, Model 7). However, the ability and integrity facets of leader trustworthiness showed insignificant relationships with OCB while the benevolence facet of leader trustworthiness showed a significant positive relationship with OCB (ability,  $\beta = 0.11$ ,  $p = .30$ ; benevolence,  $\beta = 0.25$ ,  $p = .012$ ; integrity,  $\beta = 0.17$ ,  $p = .14$ ) (see Table 2, Model 3). Hence, Hypothesis 3(b)'s lower level of support indicated partial support for Hypothesis 3. Hypothesis 4 predicted that trust in the leader and OCB are positively related. This was supported ( $\beta = 0.26$ ,  $p < .05$ ) (see Table 2, Model 1).

**Hypothesis 5** predicted that leader trustworthiness (i.e., ability, benevolence, and integrity) would mediate the relationship between transformational leadership and trust in the leader. In testing the hypothesis, the conditions as stated by Baron and Kenny (1986) were fulfilled. Firstly, we found a direct effect only from X→Y (transformational

leadership→trust in the leader). We then analyzed the mediation effect using the path from transformational leadership→trustworthiness (i.e., ability, benevolence, and integrity)→trust in leader by using the Monte Carlo test. Specifically, we used the parameter estimates from Table 3, Models 12–14 as the values for the direct effect from transformational leadership to trustworthiness ( $\gamma = 0.30$ , standard error [SE] = 0.06;  $\gamma = 0.26$ , SE = 0.06;  $\gamma = 0.34$ , SE = 0.07). We then used the parameter estimates for Table 3, Models 9–11 (trustworthiness [i.e., ability, benevolence, and integrity]→trust in the leader;  $\beta = 0.43$ , SE = 0.10;  $\beta = 0.43$ , SE = 0.10;  $\beta = 0.44$ , SE = 0.09) with transformational leadership in the model. The Monte Carlo bootstrapping indicated that transformational leadership has a significant effect on trust in the leader through trustworthiness (ability: 95% CI, lower level [LL] = 0.0592, upper level [UL] = 0.2160; benevolence: 95% CI, LL = 0.0471, UL = 0.1936; integrity: 95% CI, LL = 0.0759, UL = 0.2374). Hypothesis 5 was supported.

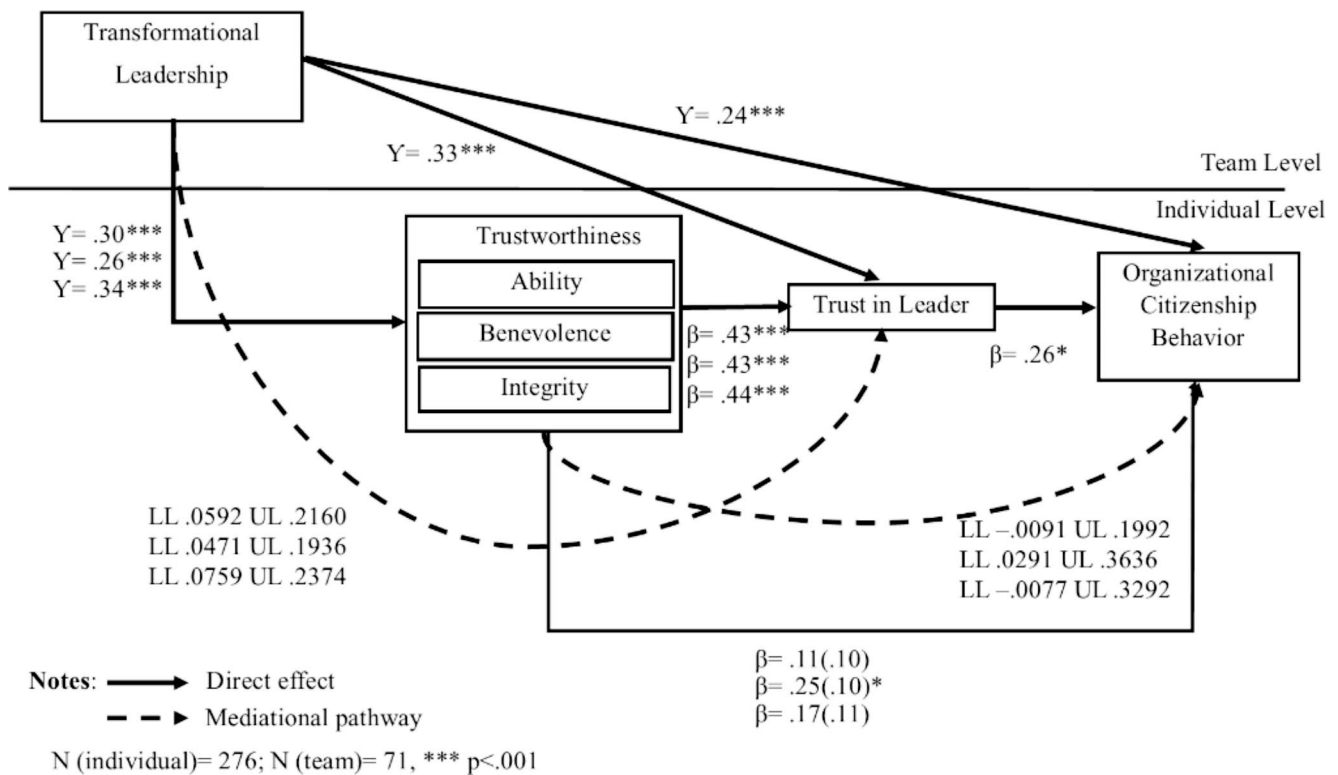


Fig. 2 Final Model

**Hypothesis 6** predicted that trust in the leader would mediate the leader trustworthiness (i.e., ability, benevolence, and integrity) and OCB relationship. We repeated the same procedure to see the effect of leader trustworthiness on OCB through trust in the leader. Thus, we first used the parameter estimates from Table 2, Model 3 as the values for the direct effect from leader trustworthiness (i.e., ability, benevolence, and integrity) to OCB ( $\beta = 0.11$ ,  $SE = 0.10$ ;  $\beta = 0.25$ ,  $SE = 0.10$ ;  $\beta = 0.17$ ,  $SE = 0.11$ ). We then used the parameter estimates from Table 2, Model 7 as the values for the direct effect from leader trustworthiness (i.e., ability, benevolence, and integrity) to trust in the leader ( $\beta = 0.43$ ,  $SE = 0.10$ ;  $\beta = 0.43$ ,  $SE = 0.08$ ;  $\beta = 0.44$ ,  $SE = 0.09$ ), and the parameter estimates from Table 2, Models 4–6 (trust in the leader  $\rightarrow$  OCB) with leader trustworthiness in the model ( $\beta = 0.41$ ,  $SE = 0.17$ ;  $\beta = 0.11$ ,  $SE = 0.17$ ;  $\beta = 0.33$ ,  $SE = 0.18$ ). The Monte Carlo bootstrapping supported the mediation process from benevolence to OCB through trust in the leader (95% CI,  $LL = 0.0291$ ,  $UL = 0.3636$ ). However, mediational processes from ability and integrity to OCB through trust in the leader were not supported (95% CI,  $LL = -0.0091$ ,  $UL = 0.1992$ ; 95% CI,  $LL = -0.0077$ ,  $UL = 0.3292$ ). Thus, Hypothesis 6 was partially supported.

## Discussion

Previous research linking leadership to employee outcomes has focused on trust in the leader as a mediator. Our study's contribution lies in providing a nuanced understanding of the role of trustworthiness and trust in the leader which is different in its conceptualization of trust within the transformational leadership–OCB relationship. Specifically, our study investigated: (1) how trustworthiness is a reflection of transformational leadership in which high transformational leadership would have high trustworthiness, thus helping to increase trust in employees; (2) how trustworthiness precedes trust in the leader in increasing OCB, validating the cognition–emotion–behavior pathway for an individual's behavior; (3) how trustworthiness and trust in the leader are two different and distinctive constructs within the trust literature; and (4) the processes from transformational leadership to trustworthiness, trust in the leader, and organizational citizenship behavior (OCB).

Overall, using a two-wave longitudinal multilevel design with a three-month time gap, we found that the characteristics of transformational leadership, as collectively perceived by team members, translate into how employees evaluate

their leader's trustworthiness, preceding trust in the leader and, in return, benefiting the organization with employees displaying higher OCB towards one another.

### Theoretical contributions

Trust is known to be a social and emotional act (Dunning et al., 2012). Its focus is on relationships, herein, the relationship between a leader and his/her employees. While it is commonly known that trust in the leader mediates leadership styles and positive work outcomes, our research reveals the importance of social exchange theory (Cropanzano & Mitchell, 2005), as shown in Fig. 2, in how trust in the leader is derived. To be specific, an emotional trust reaction is derived from how employees perceive their leaders: this can be directed by the characteristics of transformational leadership (i.e., idealized influence, inspirational motivation, intellectual stimulation, and individual consideration) that mirror the three facets of trustworthiness (i.e., ability, benevolence, and integrity).

The relationship from transformational leadership to trustworthiness occurs through an evaluation process on how the leader treats the employees. Thereafter, this evaluation would lead to employees' emotional state, namely, trust in the leader, in turn, their organizational citizenship behavior which displays the level of relationship between the leader and the employees in this social exchange. The study also shows that trustworthiness and trust serve as a social resource, specifically important in the Asian context which emphasizes human relationships, thus, increases employees' organizational citizenship behavior (OCB). It also resonates with social exchange theory which views a good relationship as bringing benefits to both parties while reducing the cost of the relationship. This answers the call by Coyle-Shapiro and Diehl (2018) to examine the trust process in social exchange relationships within the social exchange theory.

Our study's results suggest that transformational leadership displays all the facets of trustworthiness, with many previous studies finding that transformational leadership leads to employees' high trust in their leaders. When we look at the characteristics of transformational leadership, we find that they mirror high trustworthiness. The ability facet of trustworthiness can be traced from the inspirational motivation and intellectual stimulation facets of transformational leadership. Leaders are only able to inspire and motivate employees and stimulate employees' intellect when they carry the right messages to employees and have the knowledge to support these messages. A leader cannot convince employees if he/she is unsure of what he/she is talking about or about his/her field. Convincing requires credibility which is reflected in ability. Benevolence is reflected in the personal consideration facet of transformational leadership

through which leaders treat every employee as different in terms of their strengths and weaknesses and manage employees accordingly. Employees are thus able to be themselves and to show what they do best. The integrity facet is reflected in transformational leadership's overall behaviors which have seen this style of leadership viewed, to date, as one of the most effective styles of leadership. Transformational leaders are required to achieve their organization's visions and objectives, and, with this style of leadership, it is unlikely they will behave in an unethical manner.

Furthermore, the current study's findings strengthen the trust perspective, linking trustworthiness to trust in the leader. Our findings indicate that employee perception of the leader's trustworthiness precedes how employees respond to it (i.e., trust in the leader), showing that cognitive evaluation precedes employees' emotional processes. This is supported by prior research which found that trust in the leader does not precede the leader's trustworthiness (Kiyonari et al., 2006). Hence, the importance of trustworthiness in the formation of trust is emphasized. This can be viewed from the cognitive–emotional–behavior pathway that illustrates how trust in the leader serves as an emotional mediator between the relationship of trustworthiness (cognitive in nature) and organizational citizenship behavior (OCB).

This is consistent with the principle of compatibility (Ajzen & Fishbein, 1977): a behavior is at its strongest when attitudes are most strongly associated with that behavior, in this case, the benevolence facet of trustworthiness leading to OCB through trust in the leader. The study's findings support the view that transformational leadership and trustworthiness are distinctive constructs (Colquitt et al., 2007). They also support the view that a leader's influence on employees should be viewed from a social and relationship perspective (Nohe & Hertel, 2017) and that the trust perspective can link the influence of transformational leaders to employees' behaviors, all of which have rarely been investigated.

With leaders serving as a bridge between management and employees to achieve the organization's goals and objectives, they also play an important role in developing social capital – the basis of trust – for employees (Ellinger et al., 2011). The acts of displaying ability, showing kindness, and possessing integrity convey to employees that transformational leadership is a trustworthy leadership style, thus influencing their trust in the leader. However, for employees to display high OCB, this needs to be viewed through the lens of reciprocity using social exchange theory (Cropanzano & Mitchell, 2005). The benevolence facet of a leader's trustworthiness provides a good leader–member exchange relationship between leaders and employees, thus increasing employees' organizational citizenship behavior

(OCB) through actions showing altruism and sportsmanship (Erkutlu & Chafra, 2016).

### Practical implications

The study's findings show that transformational leadership translates to high trustworthiness in the leader among employees. In other words, transformational leaders are viewed by employees as having high levels of ability, benevolence, and integrity. When employees perceive their leader to have a high level of ability, they trust that the leader can lead the team and complete the required tasks given to him/her (Brower et al., 2000). Employees also believe that transformational leaders are kind and caring, as well as concerned about them, making them feel secure and supported (Zhu & Akhtar, 2014). Transformational leadership is viewed as having a high level of integrity, giving employees more confidence that their leader will not be responsible for misconduct and will always look after the welfare of their organization (McGillivray & Smith, 2006). These characteristics become more important with the anticipated future of work indicating greater use of digital platforms and less face-to-face contact, thus confirming the importance of establishing a basis of trust for a conducive work relationship (Arnold, 2017).

During selection and hiring, the HR department may want to consider these characteristics when going through potential candidates for leadership roles within the organization. While ability is easier to assess through candidates' work experience and academic qualifications, benevolence, and integrity are values and beliefs of candidates which may be a little difficult to verify (Brody, 2010). Personnel from the HR department can further question candidates about past incidents where they acted with benevolence and integrity or can use a situational judgment test in which candidates' responses reflect their character and values (Webster et al., 2020). By seeking candidates with the right characteristics, it is easier for organizations to train and develop a transformational leadership style that will play a positive role in employees' work outcomes.

Trust is an important element within the Asian context (Tan & Tambyah, 2011). It serves as a foundation for human relationships while, in work relationships, it has a direct effect on leaders' connection with employees. Organizations should ensure that they establish a high trust climate internally for better workflow, through better communication, information sharing, and transparency. While the Asian culture may be more rigid, structured, and authoritarian (Cheng et al., 2014), leaders in Asian organizations can be trained to develop a transformational leadership style. Leaders with this style consider each employee, providing employees with motivation and support, inspiring employees, and

becoming role models in influencing employees to achieve the organization's goals and objectives. Not only does this help the relationship between leaders and employees, but it also boosts the morale of the whole organization (McManus & Mosca, 2015).

### Limitations and future directions

While the study has taken many steps in reducing the threat of common method bias which includes ensuring the anonymity and privacy of the participants, using different Likert scales for various constructs, and collecting data at different time points, it still does not fully eliminate the threat of common method bias. As such, it is recommended that future studies should ensure that data is obtained from various sources including the use of objective data (Podsakoff et al., 2003).

The relationship between transformational leadership and trustworthiness may only be relevant in the Malaysian context as this relationship has not been tested in other countries. It has been stated that transformational leadership is one of Malaysia's more effective leadership styles even though it is a Western-derived construct (Crede et al., 2019). We were unable to confirm if similar findings would be found in other Asian countries beyond Malaysia to validate this statement.

Future research could replicate this study in other countries and with a different leadership style or different work outcomes beyond OCB to gradually provide a more comprehensive understanding of the relationship between leadership style, trustworthiness, and work outcomes. Research could also explore what facets of these leadership styles relate to the three facets of trustworthiness. In our study, trust in leader mediates only benevolence and OCB. Research could explore other work outcomes that are more congruent with the ability and integrity facets. This would allow practitioners and HR personnel to provide practical and precise guidance on how to improve leadership skills (cf. Timperley, 2005) and which trustworthiness characteristics to enhance in leaders.

A three-wave study would also help to expound upon the intricate relationship between these variables (Ployhart & MacKenzie, 2015). By following the conservation of resources (COR) theory (Hobfoll, 2011), the reverse relationships of these constructs could be tested. The COR theory argues that the provision of resources will help to generate more resources. For example, perhaps OCB could be a form of resources that increases trust in the leader, with trust in the leader also increasing a leader's trustworthiness.

## Conclusion

This study is the first to explore transformational leadership in the trust context and to investigate the effects of transformational leadership processes on work outcomes. Future studies could investigate the role of the propensity for trust in these relationships. The use of a three-wave approach would be useful for investigating the causal links between these constructs and for exploring if reverse relationships (e.g., higher OCB leads to higher trust in the leader; higher trust in the leader leads to higher trustworthiness) could also occur. This type of ripple effect could potentially make all our livelihoods more sustainable in the uncertain world in which we all now live, and in the world of work where we work.

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**Data Availability** The datasets generated and/or analyzed during the current study are available from the corresponding author in response to a reasonable request.

## Declarations

**Ethical approval statement** Ethical approval has been applied and granted for this study (Approval no: SUREC 2017/075).

**Conflict of interest** On behalf of all authors, the corresponding author states that no author has a conflict of interest.

**Informed consent** All participants were given a participant information sheet and participated voluntarily in the study. Participants could also end their participation at any point of the study without any penalty.

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