RESEARCH ARTICLE

The role of environmental transformational leadership in employees' influencing organizational citizenship behavior for environment well-being: a survey data analysis

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Abstract

Many researchers and intellectuals focused on the topic of organizational citizenship behavior for the environment (OCBE); however, employees' pro-environmental behaviors, such as eco-helping, eco-civic engagement, and eco-initiatives, are often being ignored. Also, the investigation of the stimulating factors behind these behaviors remains weak. Hence, this research aims to explore the role of environmental transformational leadership (ELT) in these three types of organizational citizen behaviors for the environment (OCBE) considering the indirect effects of psychological empowerment and leader-member exchange (LMX). We examined the effects of meditation by using four steps for mediation analysis and the Sobel test. Chi-square (χ^2) tests for observing the difference were also applied. The results from a survey of 500 employees from the manufacturing industry in China provide that environmental transformational leadership contributes indirectly and directly to promoting environmental behavior within organizations due to the inspirational nature of transformational leaders. Furthermore, the intentions of employees for organizational environmental behavior stimulate on account of a high sense of leader-member exchange and psychological empowerment. Based on these findings, the study suggests that leadership in organizations should facilitate their employees with psychological empowerment and sharing of information and initiative regarding the environment for boosting OCBE. It is also recommended that at the time of recruitment and selection of employees, they should be given orientations regarding environmental protection and resource conservation. Moreover, organizations should promote the transformational style of leadership to achieve environment-related goals.

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Introduction

Over the last 30 years, scholars have increasingly discussed the factors that contribute to environmental sustainability since human actions have been believed to increase greenhouse gases which negatively affect global climate and human health (Ahmed et al. 2021a, 2021b; Xue et al. 2021; Adebayo and Rjoub 2021; Adebayo et al. 2021). In this context, a plethora of research focuses on macroeconomic factors and environmental sustainability nexus (Rej et al. 2021, 2022; Murshed et al. 2022); however, less attention has been given to leadership types in promoting organization citizenship behavior for the environment. During the past two decades, research on transformational leadership has grown substantial attention in academia (Dvir et al. 2002; Lowe et al. 1996; Qu et al. 2015; Strom et al. 2013). According to Qu et al. (2015), transformational leadership as a variable is defined as "the inspirational, charismatic and visionary actions and dealings that motivate and influence followers to go beyond the expectations specified in their formal work roles and job descriptions." Transformational leaders, due to their inspirational nature, have good contributions in a team supporting and their behavior within organizations. And it also acts as a stimulator to improve employees' work outcomes, which also includes their behavior, attitudes, and job performance (Lai et al. 2020).

Many studies have evaluated behavioral aspects and organizational performance relationships (Huang et al. 2021; Zhuang et al. 2021; Li and Xie 2020; Djuitaningsih and Arifiyantoro 2020). Pro-environmental behaviors (PEBs) are the focal points for researchers nowadays for providing guidance and support for organizational success (Liang et al. 2022; Blok et al., 2015; Norton et al 2014; Robertson and Barling 2017). Beyond this, further research is required to overcome the issue of environmental sustainability. Due to this reason, our study proposes and reflects the mechanisms that underlie the organizational citizenship behavior of employees for the environment. Some authors (e.g.Robertson and Barling, 2013; Wesselink et al., 2017; Yuriev et al., 2018) state that the immediate managers and supervisors act as a stimulator to enhance pro-environmental behavior and create awareness among the employees in organizations for environmental sustainability.

In the same vein, Yuriev et al. (2018) reveal that the research domain of the impact of transformational leadership on the environment is limited. Transformational leadership is the most debatable perspective nowadays for scholars and policymakers (Lord et al. 2017). It was also suggested in the current study of Begum et al. (2020) that transformational leadership for the environment is a basic need for all nations which should be explored by scholars in different contexts.

Toward that end, we focus on transformational leadership because the link of TL has been consistently observed with employees' performance (Wanasida et al. 2021). and particularly for the sustainability of the planet and environment (Begum et al. 2020). It is magnified in the literature that the leading, coaching, and stimulation provided by environmental transformational leaders make employees competent to address ecological issues (Ryan and Deci 2000).

This study primarily examines the nexus between environmental transformational leadership and citizenship behavior of the workers in the organizations (OCBE) for the environment. For OCBE, we focus on the three dimensions of OCBE developed by Boiral and Paillé (2012), including eco-helping, eco-civic engagements, and eco-initiatives. These dimensions have been frequently used for empirical investigation of pro-environmental behavior in the literature of environmental management studies. Therefore, by analyzing the relationship of these dimensions with PEBs, this study will make a valuable contribution to environmental management literature. Furthermore, Terrier et al. (2016) investigated these dimensions of OCBE with the nexus of personality traits of undergraduates, and they recommended these OCBEs should be tested among the experienced workers of the organization. Due to this reason and to make this idea novel and fill the literature gap, this study explores the results from the employees working in different sorts of manufacturing organizations with two-way mediation of psychological empowerment for employees and leader-member exchange (LMX).

Moreover, we advance the literature review of our study by testing whether an employee's psychological empowerment and exchange relationship between leader and member influence the effect of transformational leadership for environment and OCBE. In the study of Bass and Steidlmeier (1999), it was argued that the potential mediator for transformational leadership effects is employee empowerment. As per the study of Grant (2012), the employees in the organizations having psychological empowerment can generate high feelings of responsibility for constructive changes, and they put their extra efforts towards organizational goals resulting in OCBE. It was further explained in his study that all the contribution of employees is resultant of transformational leadership. And organizational leadership support, guidance, proper mentoring, and coaching are cognitions of psychological empowerment. Similarly, Terrier et al. (2016) mentioned that the employees who perceived the support from their organizations and leadership have a high sense of contributions to protect the environment with a greater understanding of psychological empowerment. This will be, in turn, associated with OCBE; due to this evidence, we explore the indirect effect of psychological empowerment among the independent and dependent variables.

Similarly, many researchers found a positive relationship between LMX and OCB (Ilies et al. 2007; Martin et al. 2016). Furthermore, Anand et al. (2018) stated in their study that the followers with high LMX have a greater sense of motivation to engage in organizational citizenship behavior. Ng (2017) in his review of transformational leadership and performance outcomes with indirect effects of LMX and organizational support found the partial mediation for LMX and recommended LMX should emerge as the most relevant mediator for leadership studies. They further suggested that it will be better for productive results to test it with other social exchange mechanisms, and this argument provided strength to Paillé and Raineri (2015) argument that variable like LMX has been extensively studied in HRM context and less in environmental context; to that end, it should be studied in an environmental context, which may offer some interesting insights to promote environmental citizenship behavior.

Graen and Uhl-Bien (1995) explained that LMX theory is purely based on the notion of role making. It was further argued that the followers with high LMX relationships can interact on a frequent basis with their leadership and have a high level of support, confidence, and encouragement. And as per the study of Liden et al. (1997), employees have access to promotions and socio-emotional support with high LMX relations. Graen and Uhl-Bien (1995) addressed the potential overlap between LMX and transformational leadership theory, which is further supported by several studies (Anand et al. 2011; Piccolo and Colquitt 2006). More explicitly, employees with a high level of LMX may have a high willingness to accept the positive influence of their leaders having transformational traits, which provides strength to the notion of Graen and Uhl-Bien (1995) that LMX theory is congruent and matching to leadership. So, based on this evidence, we can say that the theory of transformational leadership is supporting our study as of the theory of LMX.

The theory of transformational leadership explained that leadership having transformational traits could boost up the influence on followers for engaging in organization citizenship practices by stimulating and increasing the impact of psychological empowerment (Bass 1985; Bass and Steidlmeier, 1999). The empowering effects of transformational leaders have been reflected in the theory of transformational leadership which is also endorsed in the most recent study of (Hapsari et al. 2021).

For instance, it was being observed by Burns (1978) that the main purpose of Transformational leadership is to get involve subordinates not only to stimulate but also to activate and trigger them for active participation. Such type of leadership stimulates, engage, and generates a sense of empowerment among their followers by encouraging, supporting, and promoting identifications with the members of the organization, goals, and values (Kark et al. 2003;

Shamir et al. 1993) and by initiating a sense of internal motivation concerns about self-fulfillment, achievement, and self-development (Bass and Steidlmeier 1999). The theory of transformational leadership further explains that there is a significant positive impact of transformational leadership behavior on the behavioral outcomes of employees (Shamir et al. 1993; Tosi 1991; Yukl 1999).

As far as the contribution of the study is concerned, we applied our model in different sorts of Chinese manufacturing organizations. We collected responses from the employees of these organizations to check the validity of our model. A lot of environmental regulations have been imposed on Chinese organizations from the government for the sustainability of the environment (Sarkis et al. 2011). In previous literature, the majority of research has been explored on the strategies regarding environment at the organization level instead of employees' behavior (Daily et al. 2009). To that end, we seek to enrich understandings of workforce/employees' behavior for the environment through leadership in Chinese organizations, although Chinese organizations have a high level of hierarchical management infrastructure and collectivist approaches with the hostile situation of transformational leadership (Graves et al. 2013). Meanwhile, in a general context, a positive association of transformational leadership has been observed in China (Walumbwa and Lawler 2003). To that end, we seek to enrich understandings of workforce/employee's behavior for the environment through leadership for different insights. Particularly, we investigated the role of transformational leadership for the environment with indirect effects of LMX and Psychological empowerment of employees. In authors' knowledge, this is the first contribution in literature with the help of this theoretical framework. This piece of research work also contributes to the limited literature on employees' citizenship behavior for the environment in manufacturing organizations. This is because manufacturing organizations are often involved in a wider variety of environmental initiatives and management systems for the environment, such as recycling processes, energy-saving activities, green behavior, and resource-saving (Sarkis 2001). There is a great potential to save resources and improve efficiency in the manufacturing factors, and these actions contribute to environmental sustainability. Besides, the study focuses on the Chinese manufacturing sector because China is the leading contributor to environmental deterioration and a major player in international trade (Ahmed et al. 2020). Hence, building organizational citizenship behavior in Chinese organizations can decrease global environmental degradation.

Thus, the main purpose for conducting this research work is to obtain a more detailed and comprehensive understanding of empowering effect of environmental transformational leaders by determining the leader-member exchange context which plays a significant role in shaping the nexus

between environmental transformation leadership, employees' psychological empowerment, and environmental-related organizational citizenship behavior and, furthermore, to find out to what extent the indirect outcome of psychological empowerment and LMX mediates the relationship of the independent and dependent variable. This research work will provide evidence on OCBE in an organizational context. This is because, for initiating green practices in organizations, a transformational trait of leadership plays a vital role in enhancing OCBE in an organization (Egri and Herman 2000; Fernández et al. 2006).

Theoretical background and literature review

Transformational leadership and environmental transformational leadership

Past studies (see, e.g., Podsakoff et al. 2000; Vega-Vazquez et al. 2012) explained that transformational leadership has a noteworthy impact on the extra-role performance of employees and OCB. In the environmental context, it was explained that due to the inspiring nature of transformational leadership, the leaders motivate and encourage their followers and act as role models for environmental values, behavior, and taking into account the suitable and appropriate actions regarding environmental concerns and problems (Graves and Sarkis, 2012; Robertson and Barling 2017). The environmental transformational leaders have a visionary approach to the environment, and they stimulate the ability of employees to strengthen the behavior for environmental sustainability.

Technology has its place in environmental sustainability, but without organizational citizenship behavior of employees and their readiness to endeavor voluntary actions, the chance of achieving a sustainable environment is questionable (Graves and Sarkis 2018; Jabbour and de Sousa Jabbour 2016; Yuriev et al. 2018).

Leader-member exchange

In our research model, we use LMX as a mediating variable with the relation of environmental transformational leadership and OCBE. LMX basically reflects the quality of relationship and sense of attachment among leaders and their subordinates (Liden and Maslyn 1998). It was suggested in LMX theory that leaders create different sorts of exchange relationships like economic and social relationships with their subordinates (Dansereau et al. 1975; Liden and

Maslyn 1998). Liden and Graen (1980) explained that low LMX relationship reflects the completion of formal tasks while high LMX relations are beyond the formal contract of job and are based on reciprocal influences, mutual trust, coordination, and support, and this social quality of leadership has a significant impact on organizational outcomes specifically OCB (Anand et al. 2018). Anand et al. (2018) suggested that organizations should promote LMX particularly social relationships in the context of discretionary behavior. Our study is consistent with a study by Boiral (2009), arguing that OCBE is discretionary behavior without a formal reward system promoting environmental sustainability in organizations.

Organizational citizenship behavior for environment (OCB-E)

The voluntary participation of employees in green environmental activities can play a vital role in the environmental progress of organizations. Workers can perform different sorts of behaviors that are related to environmental activities (Yuriev et al. 2018). The active participation and involvement of the workforce are meaningful in the integration of environmental standards. Moreover, OCBE is defined as the discretionary actions taken by employees to save the environment and their engagement in environmental concerns which establish effective environmental management (Boiral 2009).

Boiral and Paillé (2012) analyzed proper measurement and explanation of OCBE comprised of three dimensions as given. First, eco-initiatives are action-oriented behaviors that are environmentally friendly and improve the environmental practices in workplaces to conserve energy and other energy-related resources; they care about the recyclable material in proper containers, promote environmental behavior, and reduce cost. Second, eco-civic engagement behavior can provide support to eco-initiatives in an organization because the people in this type of behavior act enthusiastically and voluntarily in environment-related events, and they are involved in environmental-related projects and green initiatives which boost the organization's reputations. Third, eco-helping is the collaborative approach for environmental concerns and taking that concerns into action. The employees indulged in this type of environmental behavior are supportive in nature with their colleagues, and they promote green behavior in the organizations among new employees. They are a good source of empowerment for new employees for green behavior. Boiral and Paillé (2012) recommended in their study that the items of these three variables are a good source for managers to create a sense of environmental volunteer's acts among the subordinates.

Employee's psychological empowerment

Psychological empowerment is considered as an inclusive motivational process that is embodied as a self-expressive and motivation at intrinsic-level orientation toward work (Dust et al. 2014). According to Yen et al. (2004), the psychological empowerment of employees is a source of internal motivation which boosts OCB among the employees of organizations. Morrison (1996) postulated that for good and effective OCB, employees must be influenced to fulfill their job and job-related responsibilities. Furthermore, employees' psychological empowerment is the best source to promote organizational citizenship behavior (Chiang and Jang 2008; Conger and Kanungo 1998; Liden et al. 2000; Tsaur and Lin 2004). According to Grant (2012), the psychological empowerment stemming from organizational and leadership support tends to promote OCB.

Relation between environmental transformational leadership and OCBE

Several studies have focused on the relationship between transformational leadership, ethical leadership, and pro-environmental behavior (Gkorezis, 2015; Robertson and Barling 2013). Nowadays, the main focus of organizations is the implementation of environmental initiatives like eco-design, environmental management systems, green purchasing, recycling and energy management, and energy conservations. Although these initiatives play a vital role in the success and reputation of organizations, employees' readiness is mandatory for the startup of these sorts of activities (Boiral 2009; Chaoping 2005; Daily et al. 2009; Li et al. 2006). The values-based, inspiring nature of transformational leadership (see, e.g., Bass, 1985; Bass et al. 1996) makes it suitable for stimulating environmentally responsible behaviors of employees (Egri and Herman 2000; Fernández et al. 2006).

Employees' involvement in environmental activities and initiatives can boost the reputation of organizations in the form of greening environmental progress. Workers perform different sorts of green behaviors (Yuriev et al. 2018), and only values-based transformational leadership can promote that behavior of employees for the environment (Bass 1985; Bass et al. 1996). Furthermore, Boiral and Paillé (2012) analyzed the appropriate measurement and explanation of OCBE, which is comprised of three dimensions, i.e., eco-initiatives, eco-civic engagement, and eco-helping. The eco-initiatives have been investigated in various studies, whereas the concepts of eco-civic engagement and eco-helping have often been overlooked in the literature (Anderson and Bateman 2000; Boiral and Paillé 2012; Hanna et al. 2000; Ramus and Steger 2000). Boiral and Paillé (2012) further suggested that these three variables are a good source for measuring

pro-environmental behaviors of employees in the form of voluntary behavior. Based on these aforementioned findings, our study proposes the following assumption:

> Hypothesis 1. Environmental transformational leadership is positively related to organizational citizenship behavior for the environment.

Relationship between environmental transformational leadership, leader-member exchange, and psychological empowerment

The most dominant and fruitful perceptive for leadership is transformational leadership (Lord et al. 2017) because of its positive effect on OCB (Caillier 2014; Ng 2017). Furthermore, it is particularly pertinent to realize environmental goals, taking care of environmental sustainability and planet for future generations (Blok et al., 2015; Graves and Sarkis 2018; L. M. Graves et al., 2013; Robertson and Barling 2013, 2017; Wesselink et al. 2017) by inspiring employees for environmental initiatives (Egri and Herman, 2000). Transformational leadership due to its inspiring nature, motivate and inspire subordinates for environmentally sustainable activities in the future. In their research work, L. M. Graves and Sarkis (2018), further explained that these sorts of leadership guide and support their employees for bringing these types of behavior which are environmentally sustainable. Finally, they also encourage and strengthen the abilities of their subordinates to solve environmental issues by tailoring their capacity building through training.

LMX theory conceptualized the notion of role making (Graen 1976), equity, and social exchange culture (Anand et al., 2011; Dulebohn et al. 2012; Graen and Uhl-Bien 1995; Martin et al. 2010). The literature of LMX is differentiated between low-quality LMX relationships and high-quality relationships. The low quality of relationships is based on transactional exchanges, while high-quality LMX is driven by social exchange (transformational) criteria (Little et al. 2016). Due to the reason mentioned above, LMX is closely related to transformational leadership (Ng 2017), And it is due to its values-based inspirations (Bass 1985) which are supportive to their followers through individualized considerations (Zacher et al. 2014). It is evident from the previous studies that LMX followers with high LMX relationships are characterized by mutual obligations and support, respect, and trust, and they are willing to accept the inspirational influence of transformational leaders (Anand et al., 2011; Piccolo and Colquitt 2006). The direct relationship between transformational leadership and LMX has been seen in the past studies (Basu and Green 1997; Deluga 1992). So, based on the aforementioned discussions, we postulated the following hypothesis.

Hypothesis 2a: Environmental transformational leadership is positively related to leader-member exchange.

The confidence of transformational leaders in attaining the goals and objectives with the main focus of environmental sustainability and to deal with environmental issues by using the abilities of employees is likely to stimulate the notch to which employees feel capable and discourse environmental problems and issues (Avolio et al. 2004; Fred O Walumbwa et al. 2008). Through their compelling vision of the future and inspiring stories and narratives of collective purpose, workers manifest cognitive reasoning of impact and meanings, and through their proper guidance and support, coaching and mentoring, and their problem-solving behavior, employees become self-determined and competent (Grant 2012). Thus, this is through these reasonings and intents of psychological empowerment that transformational leadership plays a significant role in the motivations of workers and their high level of performance and citizenship behavior. The employees in the organizations with psychological empowerment have high feelings of responsibility for constructive changes, and they put their extra efforts towards organizational goals resulting in OCB, and this is due to transformational leadership. Moreover, many studies like leadership (Behling and McFillen 1996; Conger and Kanungo 1998; Spreitzer 1995) suggested that to get the positive influence from the rejoinders of teams and co-workers, empowerment of employees is imperative to the capacity of transformational leadership. The proposed hypothesis based on aforesaid evidence is as follows.

Hypothesis 2b: Environmental transformational leadership is positively related to psychological empowerment.

Dulebohn et al. (2012) argued that high level of leader-member exchange and getting support from leaders the subordinates will experience a high quality of discretionary behavior like OCBE. This was further recommended by Gkorezis (2015) that as supervisor support, guidance and LMX are important determinants of organizational citizenship behavior for the environment, and specifically transformational leaders due to a high level of inspiration and LMX relationships can boost the OCBE. Many behavioral outcomes of LMX have been reported in past studies which include organizational citizenship behavior, organizational commitment, and performance respectively (Eisenberger et al., 2010; Ilies et al. 2007; Kamdar and Van Dyne 2007; Li and Hung 2009). For Paillé and Raineri (2015), LMX should be investigated in discretionary behavior like organizational citizenship behavior for interesting insights. And based on these arguments, we develop the under given hypothesis.

Hypothesis 3a: Leader-member exchange is positively related to organizational citizenship behavior for the environment.

In the general context, the OCBE is a kind of discretionary behavior that is based on voluntary acts and efforts without any monetary rewards from organizations. Furthermore, this kind of discretionary behavior improves the effectiveness and reputation of the organization (Abdulrab et al. 2018; Özdemir and Ergun 2015; Wang et al. 2005). For authors like Daily et al. (2009), Boiral and Paillé (2012), and Terrier et al. (2016), OCBE is also a discretionary behavior, and the employees who are indulging in these types of behavior have a significant impact on the performance of the organization which is particularly attached to environmental sustainability. They further explained these types of discretionary behaviors and stated, OCBE is a type of behavior that is discretionary in nature, and it promotes environmentally friendly behavior among the employees of organizations without any formal reward system. They further explained that these OCBEs have different types of initiatives like helping organizations to implement green initiatives, proper disposal of waste, energy-saving during work hours, etc.

Some research work has been done on exploring the relation between transformational leadership, ethical leadership, and environmental-related behavior (Gkorezis, 2015; Robertson and Barling, 2013). Nowadays, the chief focal point of the organizations is the implementation of environmental initiatives like eco-design, environmental management systems, green purchasing, recycling and energy management, and energy conservations. Although these initiatives play a vital role in the success and reputation of organizations, employees readiness is essential for the startup of these sorts of activities (Boiral 2009; Chaoping 2005; Daily et al. 2009; Li et al. 2006). The researchers also empirically investigated the dimensions of transformational leadership, such as visionary motivating abilities, moral modeling, charisma, and individualized consideration. The values-based, inspiring nature of transformational leadership (Bass 1985; Bass et al. 1996) makes it appropriate for thought-provoking ecologically responsible behaviors of employees. Egri and Herman (2000) and Fernández et al. (2006) proposed that employees' involvement in environmental activities and initiatives can boost the reputation of organizations in the form of greening environmental progress. Workers perform different sorts of greening behaviors (Yuriev et al. 2018) and only values-based transformational leadership can promote the behavior of employees for the environment (Bass 1985; Bass et al. 1996). Furthermore, Boiral and Paillé (2012) analyzed the appropriate measurement and explanation of OCBE, which is comprised of three

dimensions, i.e., eco-initiatives, eco-civic engagement, and eco-helping. The eco-initiatives have been investigated in various studies, whereas the concepts of eco-civic engagement and eco-helping have often been overlooked in the literature (Anderson and Bateman 2000; Boiral and Paillé 2012; Hanna et al. 2000; Ramus and Steger 2000). Moreover, Boiral and Paillé (2012) suggested that these three variables are a good source for measuring pro-environmental behaviors of employees in the form of voluntary behavior.

Conger and Kanungo (1988) suggested that there should be an increment in resources for employees in taking actions and effective distribution of decision-making authority and focus should be psychological empowerment (Hancer and George 2003; Spreitzer 1995; Thomas and Velthouse 1990). According to Yen et al. (2004), the psychological empowerment of employees is a source of internal motivation and boosts OCB among the employees of organizations. Similarly, Morrison (1996) postulated that for good and effective OCB, employees must be influenced to fulfill their job and job-related responsibilities. Furthermore, an employee's psychological empowerment remains the best source to promote organizational citizenship behavior (Chiang and Jang 2008; Conger and Kanungo 1998; Liden et al. 2000; Tsaur and Lin 2004). As psychological empowerment plays a vital role in boosting OCB, according to Terrier et al. (2016), pro-environmental organizational settings tend to influence employees advocators of environmental well-being which is linked with OCBE. On the basis of these arguments and literature from past empirical studies, we assume the hypothesis that:

> Hypothesis 3b: Psychological empowerment is positively related to organizational citizenship behavior for the environment.

Some studies have supported the indirect path of LMX via mediation with transformational leadership and OCB and found a positive relationship among study variables (Howell and Hall-Merenda 1999; Wang et al. 2005). Dulebohn et al. (2012) argued that high level of leader-member exchange and getting support from leaders the subordinates will experience a high quality of discretionary behavior like organizational citizenship behavior for the environment. Gkorezis (2015) found a mediating effect of LMX between a leader's behavior and employees' outcomes links rouse the environmental initiatives and behavior for environmental sustainability in the organizations. Thereby, Gkorezis (2015) recommended that supervisor support, guidance, and LMX are important determinants of environmental-related behavior and specifically transformational leaders.

Due to the high level of inspiration and LMX relationships, OCBE is stimulated. Many behavioral outcomes of LMX have been reported in past studies which include organizational citizenship behavior, organizational commitment, and performance, respectively (Eisenberger et al. 2010; Ilies et al. 2007; Kamdar and Van Dyne 2007; Li and Hung 2009). For Paillé and Raineri (2015), LMX should be investigated in discretionary behavior like organizational citizenship behavior for interesting insights. Consistently, Little et al. (2016) argue that LMX is driven by transformational leadership, and it acts as a mediator. Based on this discussion, we formulate the following hypotheses.

> Hypothesis 4a: The relationship between environmental transformational leadership and organizational citizenship behavior for the environment is mediated by the leader-member exchange.

Epitropaki and Martin (2005) postulated that by empowering the employees, the perceptions of being taken seriously had been created among employees by transformational leadership. Generally, when employees are being valued and listened to by transformational leaders, they feel ownership with the organization. Bass and Steidlmeier (1999) argued that the potential mediation in the general context for transformational leadership effects is employees' empowerment. Consistently, Barroso Castro et al. (2008) stated that the empowerment of employees with capability and control mediates the relationship of transformational leadership and employees' attitudes and behaviors. Based on this solid reasoning, this study assumes the indirect (mediating) role of physiological empowerment with environmental transformational leadership and OCBE. The hypothesis is stated in the following lines.

> Hypothesis 4b: The relationship between environmental transformational leadership and organizational citizenship behavior for the environment is mediated by psychological empowerment.

The conceptual model of the study is presented in Fig. 1.

Methodology

Sample size and data collection process

For statistically testing the hypotheses, we gathered data from the manufacturing industry from four cities of China where manufacturing organizations are mostly located. To become part of our survey, we invited 600 employees who participated voluntarily. We distributed the survey among employees with pre-stamped envelopes to return us the

Fig. 1 The conceptual model of the study. Dotted lines show meditation effect while the straight line shows a direct effect between variables
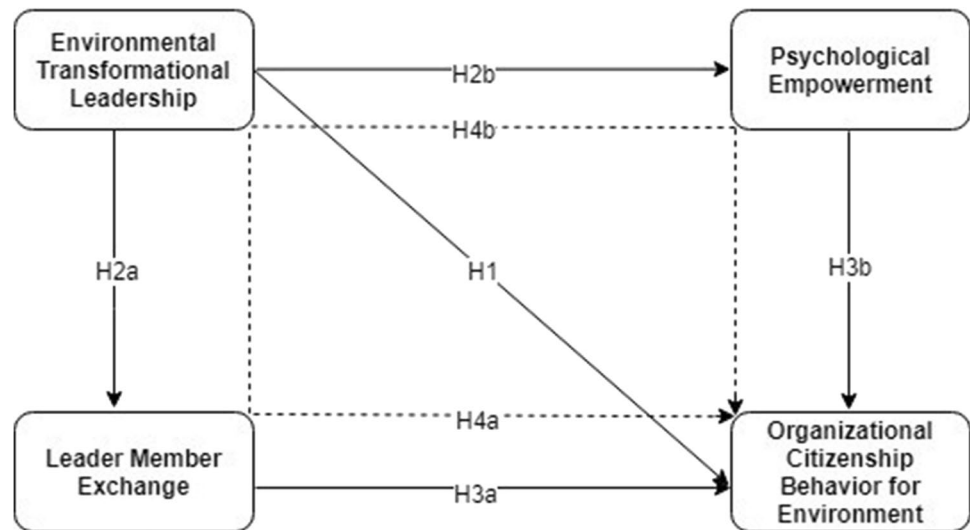
questionnaire through surface mail. All employees work in different organizations and different geographical areas. The cross-section of all the employees was carefully chosen from each organization based on gender, education, and age. A total of 550 questionnaires were returned by employees. After removing 50 incomplete responses, the final remaining matched sample size, which was further considered for analysis, was 500 employees resultant with a valid response rate of 83%. The reason for missing data was that perhaps employees were having a difficulty in evaluating their managers' environmental trait of leadership. For avoidance from the common method of bias, we collected data in three phases on an interval basis of 3 weeks. In the first wave of gathering data, employees were requested to give ratings for environmental transformational leadership and demographic information which were mentioned in our research instrument. In the second phase of data collection, employees were asked to rate leader-member exchange and psychological empowerment items. In the third week, the employees who participated in the first two surveys provided ratings for OCBE. All respondents representing different organizations participated in our research work on a volunteer basis. They were also provided with a consent form by authors to fill this survey.

Demographic characteristics include gender, age, education, job description, and tenure. In the final sample, the majority of respondents were female 389 (77.8%), and also 111 (22.2%) were males. The average age of 41.6% of participants was between 20 and 25 years, 25% were aged between 26 and 30 years, 29.4% were aged between 31 and 35 years, and the rest were more than 36 years of age. Fifty percent of the participants had a bachelor's degree. Most of the participants (57.2%) had a tenure of 5 years or less, and the rest are more than 5 years.

Measures

The items of the survey were translated from English to the Chinese language by a professional translator, then translated back to English (Simon et al. 2017). The translation of the Chinese version was then reviewed by the co-author (A Chinese speaker), and all other discrepancies were resolved. All of the responses of our piece of research work were measured with the help of a 5-point Likert scale ranging from 1 representing "strongly disagree" to 5 representing "strongly agree."

Environmental transformational leadership

The items of transformational leadership for the environment were adopted from the study of L. M. Graves et al. (2013). The items which we evaluated were covering the five features of this particular variable including idealized influence, idealized attribute, intellectual stimulation, individual considerations, and inspirational motivations. Five items were used to measure transformational leadership for the environment, such as "My manager displays confidence about environmental issues" and "My manager provides teaching and coaching on environmental issues." The value of the coefficient for Cronbach's alpha for the variable of environmental transformational leadership was 0.85.

Leader-member exchange

The 7 items for LMX were adapted from the study of Graen and Uhl-Bien (1995). The items comprise "My leader understands my job problems and needs." and" My leader recognizes my potential." The Cronbach's alpha value for the variable of LMX was identified as 0.83.

Psychological empowerment

The construct of psychological empowerment in our study was adapted from the study of Spreitzer (1995), containing 12 items. The sample items for psychological empowerment are "I am self-assured about my capabilities to perform my work activities" and "My job activities are personally meaningful to me." Cronbach's alpha of psychological empowerment was 0.89.

Organizational citizenship behavior for environment

For measuring the OCBE, we adapted 10 items identified by Boiral and Paillé (2012). The sample items for this study variable are "I spontaneously give my time to help my colleagues take the environment into account in everything they do at work" and "I undertake environmental actions that contribute positively to the image of my organization." Furthermore, Cronbach's alpha value for OCBE was identified as 0.98.

Data analysis

The dataset of our empirical study might encounter the issues concerning common method biasness, so we applied the method of single factor which was explaining the mainstream of variance (Podsakoff et al. 2003). The majority of research scholars have discussed the problem of common method variance comprehensively with the support of the method identified by Harman (Podsakoff et al. 2003). The technique identified by Harman is a so-called single factor test method. We added all items of the instrument from all particular constructs in the structure of connection for analysis of unrotated factors. This further determines that the maximum variances cannot be accounted for 1 common factor. For example, more than 50% of the variance was accounted for. Many factors can be extracted through the analysis of unrotated factors from all quantifiable items and further propose the procedure of variance elucidated by each of the factors. The findings from the analysis of unrotated variables display that the dependent as well as independent variables extracted dissimilar factors with the help and findings of this procedure. No single factor has a variance greater than the value of 50%. The 1st factor is OCBE with 37.87% of variance explained. To that end, findings disclosed that there is no problem or issue of common method bias in items of our study variables.

Confirmatory factor analysis

Confirmatory factor analysis (CFA) is useful for assessing the measurements of the model. As it is reflected in Table 1 of this study, the main findings of confirmatory

Table 1 Descriptive statistics

	1	2	3	4
1. OCB	**(0.98)**			
2. ETL	0.298**	**(0.85)**		
3. LMX	0.242**	0.133**	**(0.83)**	
4. PE	0.466**	0.227**	0.188**	**(0.89)**
Mean	4.056	4.266	3.535	4.078
Standard Deviation	0.947	0.520	1.014	0.605
AVE	0.922	0.597	0.567	0.624
CR	0.983	0.856	0.839	0.892

$N = 500$; all correlations between study variables are significant at $p < 0.01$.

Cronbach's alphas are displayed along diagonal.

[b]ETL = environmental transformational leadership, OCB = organizational citizenship behavior, LMX = leader-member exchange, PE = psychological empowerment, CR = composite reliabilities, AVE = average variance extracted.

factor analysis reveal outstanding model fitness as per the sequence of measurements which is given as CMIN/df: 3.519, $p = 0.001$, CFI = 0.959, TLI = 0.951, RMSEA = 0.071, RMR = 0.030. All calculated values regarding the analysis of CFA are meeting the threshold values and further show reasonable and satisfactory properties. Moreover, we also calculated the reliability and validity with the support of the measurement model in our study. For investigating reliability, we also applied Cronbach's α as well as composite reliability. As per suggestions of Chin (1998), the adequate range of values for both of them should be > 0.80. For assessing the validity of scales, convergent and discriminant validities were considered and taken into account. The evolution of convergent validity is based on three focal point criteria: The values for item loading (λ) must be significant and greater than the value of 0.70; for each construct, the values for composite reliability should be more than a range of 0.80 with the same explanations as the reliability of Cronbach's α and the value of AVE must be higher than the value of 0.50 (Hair et al. 2010). They further explained the evaluation of discriminant validity by comparing the square root of average and correlation for each construct and concluded that AVE or square root average is always greater than values of correlations. Furthermore, Table 2 of our study is reflecting the values for convergent validity and (α), which are also termed as reliability values. All the mentioned values for constructs and their loading of item values are more than 0.70. The value for composite reliability is also more than 0.80 ranging from 0.839 to 0.983. Similarly, the value for Cronbach's α is also higher than 0.80 ranging from 0.83 to 0.98. The AVE values of our study are also greater than 0.50 covering the range of 0.567 to 0.922. Finally, the findings which are depicted in Table 2 of our study are reporting a high degree of reliability with

Table 2 Confirmatory factor analysis results

Model	χ^2	df	χ^2/df	$\Delta\chi^2$	CFI	TLI	RMR	RMSEA
Model 4. Four-factor[a]	454.014	129	3.519		0.959	0.951	0.030	0.071
Model 3. Three-factor	1184.549	132	8.974	730.58	0.866	0.845	0.156	0.126
Model 2. Two-factor	1950.668	134	14.557	1496.654	0.769	0.736	0.161	0.165
Model 1. One-factor	2959.864	135	21.925	2505.85	0.640	0.592	0.167	0.205

***$p < 0.001$. $N = 500$, CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation.

[a]Environmental transformational leadership, leader-member exchange, psychological empowerment, and organizational citizenship behavior as four independent factors.

excellent and outstanding values of convergent validity given as AVE > 0.05, CR > 0.80, α > 0.80. For checking the adequacy of sample size, the test of KMO identified by Kaiser–Meyer–Olkin was also applied. For discriminant validity, it is mentioned in Table 2 that the square root of AVE for all constructs is more than its cross constructs' square correlations.

Correlation matrix

Structural equation model

The fit indices which were provided by AMOS 22 presented that the proposed model had an adequate fit CMIN/df: 3.569, $p = 0.001$, CFI = 0.957, TLI = 0.950, RMSEA = 0.072, and RMR = 0.047 (Byrne 2001). The SEM findings and results are presented in Fig. 2 with values of standardized coefficients and t values measurements.

At first, the findings reflect that the outcome of environmental transformational leadership on OCBE is positively significant (β = 0.19; $t = 4.292$, $p < 0.001$), which is further supporting Hypothesis 1. Additionally, the estimated values of the standardized coefficients are indicating that the

link among environmental transformational leadership and the leader-member exchange containing values (β = 0.17; $t = 3.168$, $p < 0.001$), and further psychological empowerment (β = 0.26; $t = 5.096$, $p < 0.001$) are positive and significant, showing the justifications and support for Hypothesis 2a and 2b. The findings also describe statistical and significant positive bearings of both leader-member exchange (LMX) (β = 0.15; $t = 3.542$, $p < 0.001$) and psychological empowerment (PE) (β = 0.42; $t = 9.215$, $p < 0.001$) on organizational citizenship behavior, thus providing assistance and support in favor of hypothesis 3a and 3b.

Testing the mediating effect of leader-member exchange and psychological empowerment

We adopted the approach of Baron and Kenny (1986) having four steps for mediation analysis, and chi-square (χ^2) tests for observing the difference. We also applied (Sobel, 1982) tests for investigating the mediation of LMX and psychological empowerment on the relationships between environmental transformational leadership and OCBE. The summary of findings containing information regarding Sobel and further χ^2 difference tests are mentioned in Table 3 of our study.

Fig. 2 The structural model with standardized path coefficients
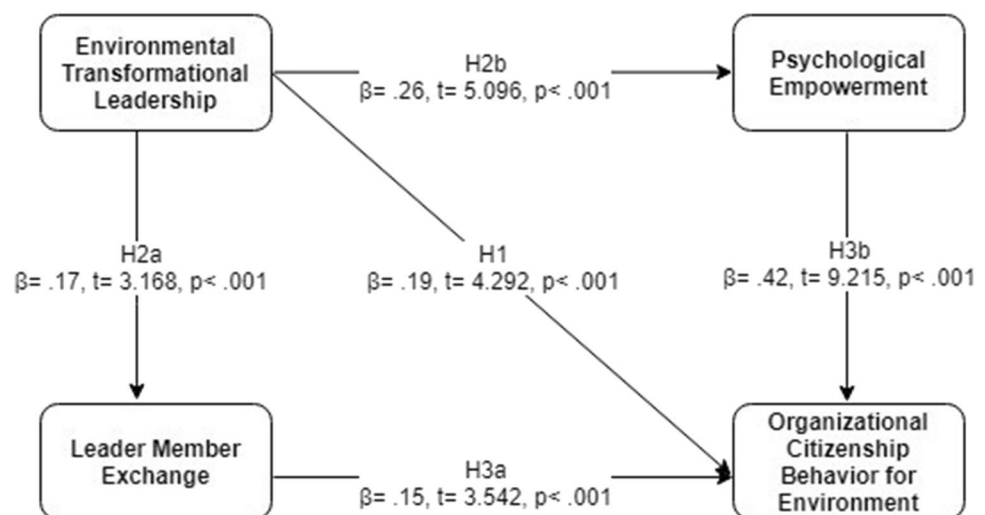
Table 3 Testing mediating effect of LMX and PE

Mediating effect of:	Between	Statistics of $P^a \rightarrow O^b$, When $M^c \rightarrow O$ is set at 0					Statistics of $P \rightarrow O$, When $M \rightarrow O$ allowed					Decrease[d] in χ^2	Sobel Test (z)
		B	SE	β	t	χ^2	B	SE	β	t	χ^2		
LMX[f]	ETL→OCB	0.67	0.097	0.33	6.882***	264.24	0.59	0.051	0.29	6.124***	243.65	20.59	2.51**
PE[g]	ETL→OCB	0.69	0.096	0.35	7.193***	434.65	0.42	0.082	0.21	4.730***	338.11	96.53	4.48**

LMX = leader-member exchange; PE = psychological empowerment; ETL = environmental transformational leadership; OCB = organizational citizenship behavior.

[a]Independent variable.

[b]Dependent variable.

[c]Mediator.

[d]Decrease in χ^2 for the decrease of one degree of freedom.

[e]Size of direct effect when the direct effect of the mediator on the dependent variable is controlled.

[f]Hypothesis 4a.

[g]Hypothesis 4b.

***$p < 0.001$, **$p < 0.05$.

For Hypothesis 4a, which stated that an increased level of LMX relations mediates a positive relationship between environmental transformational leadership and OCBE, the first two situations are satisfactory (see results for Hypotheses 1, 2a, and 3a). The structural model was re-estimated for checking the 3rd and 4th settings of condition, by coercing the direct effect of LMX on OCBE (set β=0). While the direct path from LMX to OCBE was structured at zero in the constrained structural model, the estimated paths from environmental transformational leadership to organizational citizenship behavior were significant at $p < 0.001$ (β=0.33, t=6.882). Yet, direct effects of environmental transformational leadership on organizational citizenship behavior were estimated along with leader-member exchange in the mediating model, the paths from environmental transformational leadership to OCBE became significant showing empirical values (β=0.29, t=6.124, $p < 0.001$), and further presenting that leader-member exchange partially mediates the relation among dependent (environmental transformational leadership) and independent (OCBE) as shown in Fig. 3. Additionally, the results and findings of the difference in χ^2 values among the constrained model (χ^2 (63)=264.245) and the mediating model (χ^2 (62)=243.655) were also showing significant association (χ^2=20.59 > χ^2=0.5(1)=3.84, df=1). Shortly, increased leader-member exchange partially mediates the relation between environmental transformational leadership and OCBE.

For Hypothesis 4b, that increment in psychological empowerment mediates positively significant relationships among the nexus of environmental transformational leadership and OCBE. Moreover, the structural model was further re-estimated by constraining the direct effect of psychological empowerment on OCBE as (set β=0) to test the further four conditions. Figure 4 shows that psychological empowerment was a
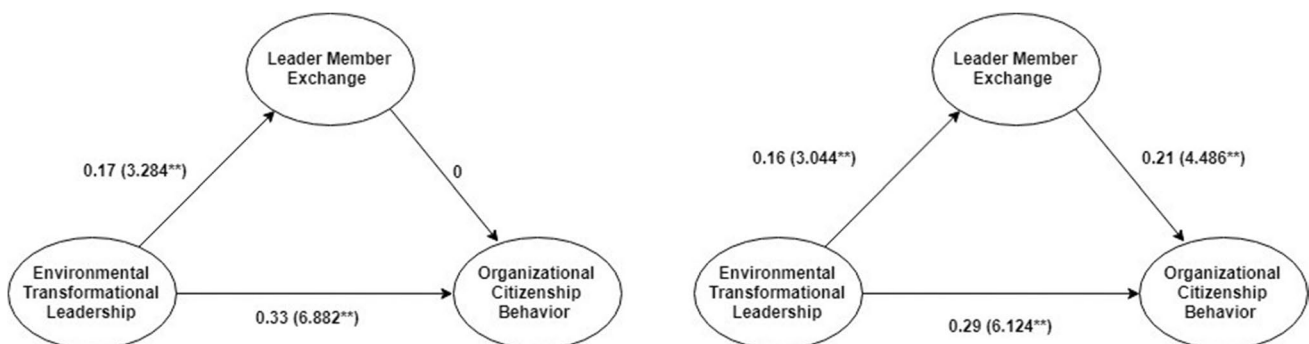
Fig. 3 Testing the mediation effects of leader-member exchange. *The constrained model*: $x^2 = 262.245$, $df = 63$, $p < 0.001$, $x^2/df = 4.19$. *The mediating model*: $x^2 = 243.655$, $df = 62$, $p < 0.001$, $x^2/df = 3.93$
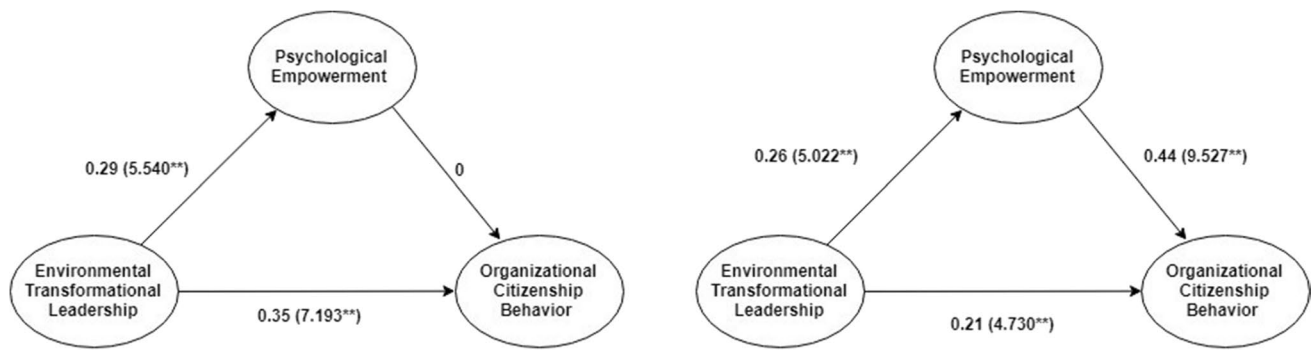
Fig. 4 Testing the mediation effect of psychological empowerment

partial mediator between environmental transformational leadership and organizational citizenship behavior; the strength of association among the relationship of environmental transformational leadership and organizational citizenship behavior was significantly increased with the addition of psychological empowerment in the model. We can also say that, when the direct path from psychological empowerment to organizational citizenship behavior is in a controlled manner, the estimated path from environmental transformational leadership to organizational citizenship behavior was significant at $p < 0.001$ ($\beta = 0.35$, $t = 7.193$). However, when the direct effect of environmental transformational leadership on organizational citizenship behavior was estimated along with psychological empowerment in the model of mediation, the path coefficients (β) determined from environmental transformational leadership to organizational citizenship behavior reduced to level.21 ($t = 4.730$), representing partial mediation of the variable of psychological empowerment, even though the estimated paths remained significant at level $p < 0.001$. Additionally, the difference occurring in χ^2 values among the constrained model and the mediation model is significant ($\chi^2 = 96.53 > \chi^2 = 0.5(1) = 3.84$, $df = 1$). These results further suggest that the model of mediation was determining a significant improvement over the constrained structural model, further supporting Hypothesis 4b of our study.

The tests identified by Sobel (1982) were also used for the statistical and empirical significance of the mediated effects (MacKinnon et al. 2002). As indicated in the 1st column of Table 3, environmental transformational leadership did show statistically significant indirect effects on organizational citizenship behavior via increased level of leader-member exchange ($\Delta\chi^2 = 20.59$, $\Delta df = 1$; $z = 2.51$, $p < 0.001$). Also, environmental transformational leadership shows statistically significant indirect effect on organizational citizenship behavior through increased psychological empowerment ($\Delta\chi^2 = 96.53$, $\Delta df = 1$; $z = 4.48$, $p < 0.001$).

Discussion

Although the concerns for organizational citizenship behavior for the environment (OCBE) have been documented by many researchers and intellectuals (Boiral et al. 2015; Ramus and Killmer 2007; Theyel 2000; Yuriev et al. 2018), eco-helping, eco-initiative, and eco-civic engagement have often been unheeded in the past literature. The basic aim of our research is to study the environmental transformational leadership effect on these three types of OCBE with indirect effects of psychological empowerment and leader-member exchange. The results reflect that transformational leadership is contributing directly and indirectly to promoting environmental behavior in organizations. These findings suggest transformational leaders influence the environmental behavior of employees due to their inspirational nature. And further intentions of employees for OCBE increase when there is a high sense of leader-member exchange and psychological empowerment. The leadership in organizations should facilitate their workforce with psychological empowerment and sharing of information and initiatives regarding the environment for boosting OCBE. Our study also suggests that at the time of recruitment and selection, the employees should be given orientations regarding environment protection and sustainability by top leadership. So, that subordinates can implement these practices and behavior to protect the environment for future envisions.

The direct effect of environmental transformational leadership with organizational citizenship behavior for the environment in our results is significant and consistent with the past studies (Deci and Ryan 2016; Graves et al. 2013; Soyez et al. 2009), that found a positive significant relationship between leadership and organizational citizenship behavior for the environment by using different motivational variables. The positive association of these variables is matching our hypothesis, which is also matching with the general context of transformational leadership and its literature (Ng 2017), as well as transformational leadership for the

environment (Graves et al. 2013; Graves and Sarkis 2018). Unlike past studies, this study considers the mediating effects of leader-member exchange and psychological empowerment between independent and dependent variables. These effects suggest that leader-member exchange (LMX) and psychological empowerment (PE) of employees from leaders play a significant and positive strength of association between the nexus of environmental transformational leadership and OCBE. These findings for the relationship between transformational leadership and high level of LMX relationship are consistent with the previous findings (Anand et al. 2011; Ng 2017; Piccolo and Colquitt 2006). However, our results regarding psychological empowerment are consistent with the study of Terrier et al. (2016).

We used the dimensions of OCBE which were constructed by Boiral and Paillé (2012) in our research work with the linkages of transformational leadership, leader-member exchange, and psychological empowerment. These voluntary and discretionary types of behavior can be implemented in every type of organization in the world, particularly in China. The transformational trait of leadership with high intensity of leader-member exchange and psychological empowerment about (voluntary behavior) can play a vital role to implement these practices in organizations for the sustainability of the environment. The discussions of our results further suggest these practices in Chinese organizations. In China, organizations should make sure that leadership particularly transformational leadership should facilitate these three types of OCBE regardless of monitory rewards.

Conclusion

The results of the study confirmed that environmental transformational leadership trait plays a vital and momentous role in enhancing discretionary behavior like OCBE in Chinese organizations. Due to the inspirational trait of transformational leadership, its precise measurements should be further investigated for the sustainability of the environment. Furthermore, we provided evidence on the setups of literature that motivate employees' environmental behavior with the support and role of environmental transformational leadership. We also investigated the complex nexus among transformational leadership for the environment, leader-member exchange, and psychological empowerment of employees for enhancing environmental behavior. Our findings suggest that perceptions of employees concerning environmental transformational leadership are considered to be mandatory for facilitating OCBE with the help of psychological empowerment and a high degree of LMX relations. There is a significant direct and indirect linkage between

transformational leadership and organizational citizenship behavior for the environment. Finally, our findings provide that the organizations that intend to obtain environment-related goals and objectives should facilitate and promote the transformational style of leadership, as they are a good source to provide psychological empowerment to employees and their friendly relationship with employees for promoting environmental behavior in organizations.

Implications of the study

Our results have important implications for policymakers, researchers, and scholars who have a keen interest to promote environmental behavior in China as well as anywhere in the globe. There is a need for continuous considerations for promoting environment-friendly leadership, particularly transformational leadership, for eliciting employees' behavior for protecting the environment and promoting environmental protection initiatives. As the leaders are the eye of followers, the top management should provide assistance and support to adopt environmentally sustainable behavior in organizations. Yuriev et al. (2018) also recommended that immediate managers produce a spark for enhancing OCBE. Furthermore, at the time of recruitment and selection, the top management should put into consideration the environmental concerns. Our research contribution is a source of reinforcement for other scholars as we are desirous of continuing to do further research on the nexus of various leadership styles and different sorts of motivational variables. For more interesting findings, the instrument should be designed and filled by leaders, managers, supervisors, and by other employees. Our research work suggests that organizations should start initiatives for capacity building of managers and leaders to discuss and consider environmental concerns for solving environmental issues. It is also suggested in our research work that if employees have a high sense of psychological empowerment and leader-member relationship, they will respond more and positively to OCBE.

Limitations of the study

Our research work provides basic information about the antecedent of organizational citizenship behavior for the environment linking with environmental transformational leadership in the context of the People's Republic of China, but there are several limitations. The first limitation in the authors' point of view is that all data was collected based on the perceptions of employees about their leaders, and self-rating of their organizational citizenship behavior for the environment which may lead to biased findings. In future works, the perceptions of leaders and managers should also

be considered for different insights as they are role models for the rest of the employees in organizations. Another limitation could be that the datasets for this study were collected from professional employees. Although they are the most reliable source, the valuable responses from lower-level employees cannot be ignored, and they should also be considered for making interesting findings. Another limitation of the study is the focus on the manufacturing sector of four cities only. In this context, future studies may focus on conducting comparative studies in different sectors for interesting results.

In the future, scholars can apply this study across the different scenarios and cultures for making the body of literature more strong. The last limitation for this study is that due to cross-sectional and self-report data, the concerns for raising common variances may occur (Podsakoff et al. 2012) which can make the data biased.

Appendix

Questionnaire.

Dear Sir/Madam,

The purpose of the survey is to analyze the link from environmental transformational leadership to employees' organizational citizenship behaviors: mediating role of leader-member exchange and psychological empowerment.

Being a significant member of Organization your valuable responses are required.

All personal information is important statistically and will be kept confidential.

Name: _____

Organization: _____

Department: _____.

Designation: _____.

Email: _____.

Gender: a) Female   b) Male.

Education:

(a) Graduate (b) Master,M.B.A/B.B.A   c) M.A/M. Sc/M. Phil/M.S

(d) Ph.D   (e) Other.

Management level:a) Upper   b) Middle   c) Lower.

Total no. of employees in the organization:

a) 1to 50   b) 51 – 100   c) 101 – 150.
d) 151 – 200   e) More than 200.

Total experience in years:

(a) 0 – 5 years   (b) 6—10 years   (c) 11 -15 years.
(d) 16 -20 years (e) 21–25 years (f) 26- 30 years
g) 31- Above years.

Please read each statement and indicate how much you are agreeing with it.

1: Strongly Disagree.
2: Disagree.
3: Neutral.
4: Agree.
5: Strongly Agree.

Section – I

A: Environmental transformational leadership (IV)

1. My manager displays confidence about environmental issues	1 2 3 4 5
2. My manager talks about the importance of protecting nature	1 2 3 4 5
3. My manager talks enthusiastically about what we need to do to protect nature	1 2 3 4 5
4. My manager gets me to look at environmental problems in new ways	1 2 3 4 5
5. My manager provides teaching and coaching on environmental issues	1 2 3 4 5

Section – II

B: Leader-member exchange

I would engage in organizational citizenship behavior for the environment at work because:

1. My leader recognizes my potential	1 2 3 4 5
2. I usually know that my leader is satisfied with me for what I do	1 2 3 4 5
3. My leader understands my job problems and needs	1 2 3 4 5
4. Regardless of formal authority, my leader helps me to solve my problems in my work activities	1 2 3 4 5
5. Regardless of formal authority, my leader bails me out at his/ her expense	1 2 3 4 5
6. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so	1 2 3 4 5
7. I always try to characterize my working relationships with my leader	1 2 3 4 5

2. B: Employees psychological empowerment (M)

I would engage in organizational citizenship behavior for the environment at work because:

1. The work I do is very important to me	1 2 3 4 5
2. My job activities are personally meaningful to me	1 2 3 4 5
3. The work I do is meaningful to me	1 2 3 4 5
4. I am confident about my ability to do my job	1 2 3 4 5
5. I am self-assured about my capabilities to perform my work activities	1 2 3 4 5
6. I have mastered the skills necessary for my job	1 2 3 4 5
7. I have significant autonomy in determining how I do my job	1 2 3 4 5
8. I can decide on my own how to go about doing my work	1 2 3 4 5

9. I have considerable opportunity for independence and freedom in how I do my job	1 2 3 4 5
10. My impact on what happens in my department is large	1 2 3 4 5
11. I have a great deal of control over what happens in my department	1 2 3 4 5
12. I have significant influence over what happens in my department	1 2 3 4 5

Section – III Organizational citizenship behavior for the environment

1- I spontaneously give my time to help my colleagues take the environment into the account in everything they do at work	1 2 3 4 5
2- I encourage my colleagues to adopt more environmentally conscious behavior	1 2 3 4 5
3- I encourage my colleagues to express their ideas and opinions on environmental issues	1 2 3 4 5
4- I actively participate in environmental events organized by in and/or by my company	1 2 3 4 5
5- I stay informed of my company's environmental initiatives	1 2 3 4 5
6- I undertake environmental actions that contribute positively to the image of my organization	1 2 3 4 5
7- I volunteer for project's endeavors or events that address environmental issues in my organization	1 2 3 4 5
8- In my work, I weigh the consequences of my actions before doing something that could affect the environment	1 2 3 4 5
9- I voluntarily carry out environmental actions and initiatives in my daily work activities	1 2 3 4 5
10- I make suggestions to my colleagues about ways to protect the environment more effectively, even when it is not my direct responsibility	1 2 3 4 5

Declarations

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