

Linking environmentally-specific transformational leadership and employees' green advocacy: The influence of leadership integrity

Saskia Crucke | Marie Servaes | Tom Kluijtmans | Shana Mertens | Eveline Schollaert

Faculty of Economics and Business Administration, Ghent University, Ghent, Belgium

Correspondence:

Marie Servaes, Faculty of Economics and Business Administration, Ghent University, Tweeckerkenstraat 2, 9000 Ghent, Belgium.

Email: marie.servaes@ugent.be

ABSTRACT

Given the environmental challenges facing organizations, there is an increasing interest in how to stimulate the green behavior of employees. This study focuses on how leaders foster green advocacy, a specific category of green behavior that refers to influencing others to demonstrate green behavior by sharing environmental knowledge and discussing environmental issues. Our study, using a sample of 363 employees of a Belgian grocery retail company, provides valuable insights on the complex role of leaders in stimulating green advocacy. The results reveal that environmentally-specific transformational leadership is positively related to employees' green advocacy. Our results further provide insights into the underlying mechanisms explaining this relationship, as we find that environmentally-specific transformational leadership is indirectly related to employees' green advocacy through environmental CSR and organizational environmental support. Finally, leadership integrity is found to positively moderate the direct as well as the indirect relationship between environmentally-specific transformational leadership and green advocacy.

KEYWORDS

corporate social responsibility, environmentally-specific transformational leadership, green advocacy, leadership integrity, organizational support, green behavior

1 | INTRODUCTION

To address the dramatic impact of environmental pollution and climate change, businesses worldwide are embracing enhanced environmental responsibility (Aguinis & Glavas, 2012). Organizations are increasingly implementing environmental initiatives and encouraging their employees to display green behavior. Green behavior, also called pro-environmental behavior (Ones, Wiernik, Dilchert, & Klein, 2015), refers to a series of behaviors, such as saving resources, protecting ecology, and turning waste into treasure (Afsar & Umrani, 2020).

Various studies demonstrate that employees' green behavior positively affects both individual (e.g., job satisfaction) and organizational (e.g., financial results) outcomes (Norton, Parker, Zacher, & Ashkanasy, 2015). In light of these positive impacts, it is relevant to study how to stimulate green behavior in the workplace.

Accordingly, a growing body of literature is exploring the antecedents of employees' green behavior. Some studies identify antecedents at the individual level, such as environmental knowledge (Ahmed, Sun, Raza, Qureshi, & Yousufi, 2020; Vicente-Molina, Fernandez-Sainz, & Izagirre-Olaizola, 2013) and organizational identification (Afsar, Cheema, & Javed, 2018). Other studies reveal organizational level antecedents, such as organizational attention for corporate social responsibility (CSR) (Afsar, Cheema, et al., 2018; Afsar & Umrani, 2020; Ahmed et al., 2020; Chen & Khuangga, 2020; Onkila, 2015; Shah, Cheema, Al-Ghazali, Ali, & Rafiq, 2020).

Additionally, empirical research reveals how leaders affect employees' green behavior. Studies demonstrate, for example, the positive impact of supervisory environmental support on workplace green behavior (Cantor, Morrow, & Montabon, 2012; Gkorezis, 2015; Paille & Meija-Morelos, 2019; Raineri & Paille, 2016). Further, leadership styles are gaining attention; for example, the link between spiritual leadership and employee pro-environmental behavior

(Afsar, Badir, & Kiani, 2016; Afsar, Cheema, et al., 2018; Graves, Sarkis, & Zhu, 2013; Robertson & Carleton, 2018). However, existing empirical research focusing on the role of leadership in fostering employees' green behavior is scarce. Accordingly, there are multiple calls to study the impact of leaders on workplace green behavior, including underlying mechanisms that explain and those conditional factors that influence this relationship (Afsar, Shahjehan, & Shah, 2018; Kim, Kim, Han, Jackson, & Ployhart, 2017; Wang, Zhou, & Liu, 2018).

This study answers these calls by studying the impact of leaders on green advocacy, a specific category of employees' green behavior. According to the green five taxonomy, introduced by Ones and Dilchert (2012) to describe the diversity of workplace green behaviors, green advocacy corresponds to the behavioral category of influencing others. Green advocacy can be defined as the extent to which employees discuss environmental sustainability openly, express their different views, and share knowledge to inspire others to embrace green behavior (Kim et al., 2017). Green advocacy is considered a particularly relevant aspect of workplace green behavior because research shows that employees stimulate workplace green behavior among their colleagues by showcasing green advocacy (Afsar & Umrani, 2020; Kim et al., 2017; Norton et al., 2015; Shah et al., 2020).

This study examines the impact of employees' direct leader on green advocacy. Direct leaders are highly visible to employees and can significantly influence their green behavior (Graves et al., 2013; Robertson & Barling, 2013). Therefore, we expect that they may also affect employees' green advocacy. We particularly focus on environmentally-specific transformational leadership demonstrated by direct leaders. Environmentally-specific transformational leadership, referring to "a type of transformational leadership that is focused on influencing corporate environmental responsibility" (Robertson, 2018, p. 962), is a critical leadership style to study, as it encourages employees to care about the environment and to adopt

green behaviors (Afsar, Cheema, et al., 2018; Groves & LaRocca, 2011; Robertson & Barling, 2013; Robertson & Carleton, 2018).

Subsequently, we unravel possible mechanisms through which environmentally-specific transformational leadership affects employees' green advocacy. We hereby argue that direct leaders, as they are considered as agents or representatives of the organization, impact employees' perception of organization level cues, in turn influencing employees' behavior (Eisenberger et al., 2010; Kurtessis et al., 2017; Wayne, Shore, & Liden, 1997). In particular, we study how environmentally-specific transformational leadership indirectly impacts employees' green advocacy, by positively influencing employees' perceptions of environmental CSR and organizational environmental support, in turn positively influencing employees' green advocacy (Ahmad, Ahmad, Islam, & Kaleem, 2020; Paille & Meija-Morelos, 2019; Tian & Robertson, 2019).

Finally, we argue that environmentally-specific transformational leaders are particularly effective in fostering employees' green advocacy when they are perceived to have high levels of integrity by their subordinates. The latter is explained because the values and the behavior of the leaders themselves are in line with the pro-environmental values and behavior they promote. In aiming for the research objectives, data were collected from a Belgian grocery retail company. The retail sector is a suitable sector to study the impact of leaders on employees' green advocacy for two main reasons. First, companies in the retail sector are increasingly implementing environmental programs, relying on employees' green behavior to be successful (Cantor et al., 2012). Second, companies in the retail sector have a decentralized structure. This implies that the direct leader, as an intermediary between the headquarters and the individual retail store, plays an important role in promoting the central environmental programs and fostering green behavior in the individual retail stores (Miller & Miller, 2020; Naidoo & Gasparatos, 2018).

Our study contributes to the literature on workplace green behavior by offering valuable insights on the role of leaders in stimulating green behavior among their subordinates. We further contribute by studying green advocacy, a specific category of green behavior, which is understudied.

The structure of this paper proceeds as follows. After discussing the theoretical background of the study, we systematically develop a number of hypotheses on the relationship between environmentally-specific transformational leadership and green advocacy. Thereafter, the data collection and methods are highlighted. After presenting our results, we discuss our findings and illustrate the limitations and present recommendations for further research.

2 | THEORETICAL BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1 | Theoretical background

There is an ambiguous conceptualization used for employees' green behavior within the research field (Ones, Wiernik, Dilchert, & Klein, 2018). Therefore, Ones and colleagues (2018) highlight the relevance of using the green five taxonomy (Ones & Dilchert, 2012) to describe employees' green behavior. The green five taxonomy (Ones & Dilchert, 2012) organizes green behavior into five categories: conserving, avoiding harm, transforming, influencing others, and taking initiative. Green advocacy, the aspect this study focuses on, pertains to influencing others (Ones & Dilchert, 2012). We use the term green advocacy to describe how employees exchange information and communicate their different viewpoints in order to inspire others to adopt green behavior (Kim et al., 2017). Employees displaying green advocacy discuss environmental problems and possible solutions, share relevant knowledge, and try to improve the environment through communication (Shah et al., 2020). Research on this category of employees' green behavior is limited. Yet, studies find that green advocacy is a predictor for the green behavior of

the employee's colleagues (Afsar & Umrani, 2020; Kim et al., 2017; Norton et al., 2015; Shah et al., 2020). Through social interaction, employees exchange perceptions about the work context and constitute a common vision on the importance of workplace green behavior (Kim et al., 2017) because the social cues accompanying green advocacy can trigger and further motivate an individual's personal goals for implementing green behaviors (Afsar & Umrani, 2020).

Research on green behavior and its predictors is longstanding (Hines, Hungerford, & Tomera, 1987). The focus on examining green behavior, in general, and green advocacy, specifically, in the work context is nonetheless relatively recent (Afsar et al., 2020; Kim et al., 2017; Norton, Zacher, Parker, & Ashkanasy, 2017; Ones & Dilchert, 2012). This new focus lies in the acknowledgment that the workplace is a context within which factors external to employees' control can produce different degrees of variation in green behavior (He, Morrison, & Zhang, 2020; Norton et al., 2017). Subsequent studies indicate that multiple contextual factors influence employees' workplace green behavior (Afsar, Shahjehan, et al., 2018; Ahmed et al., 2020; Besieux, Baillien, Verbeke, & Euwema, 2018; Goswami, O'Brien, Dawson, & Hardiman, 2018; Kim, McGinley, Choi, & Agmapisarn, 2020; Robertson & Carleton, 2018; Saifulina & Carballo-Penela, 2017; Wang et al., 2018), but that these factors "do not work in isolation but rather, within a dynamic, holistic, and interrelated conceptual framework to ultimately determine individual behavior" (He et al., 2020; Tudor, Barr, & Gilg, 2008, p. 426). Following this perspective, our study investigates the influence of interrelated contextual factors on employees' green advocacy. The conceptual framework we present is summarized in Figure 1 and serves as a guide throughout the remainder of this section.

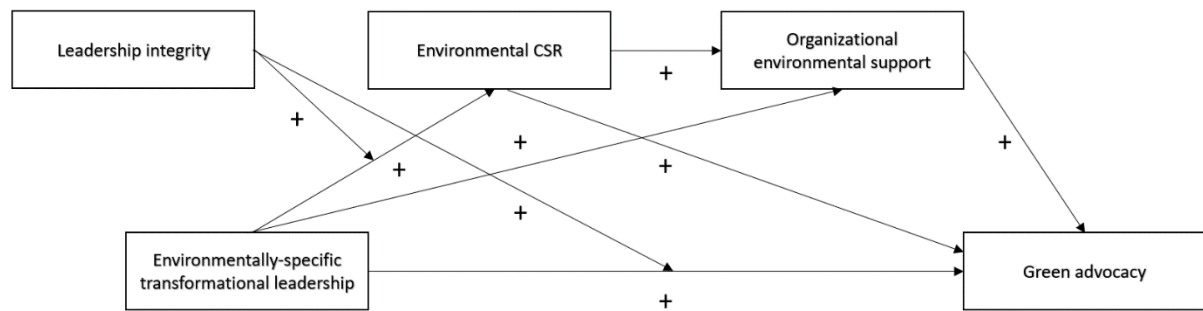


FIGURE 1 Conceptual framework

2.2 | The relationship between environmentally-specific transformational leadership and green advocacy

Transformational leadership highlights the symbolic behavior of the leader. Transformational leaders focus employees' attention on the group or organization's long-term objectives and provide a sense of purpose (Graves et al., 2013; Robertson & Carleton, 2018). As we extend the notion of transformational leadership to environmental issues, we can expect leaders with an environmentally-specific transformational leadership style to communicate a clear and cohesive environmental vision to their employees (Graves et al., 2013; Robertson & Barling, 2013). Environmentally-specific transformational leadership is defined as "a type of transformational leadership that is focused on influencing corporate environmental responsibility" (Robertson & Carleton, 2018, p. 962). This leadership style rests on a set of moral assumptions about the relationship between leaders and followers (Van Aswegen & Engelbrecht, 2009).

Afsar, Shanjehan, and Shah (2018) argue that environmentally-specific transformational leadership is one of the most effective leadership styles to study in this field. Environmentally-specific transformational leadership is an ethically grounded leadership theory in which leaders inspire employees to modify their value system, move beyond self-interest, and raise followers

to higher levels of morality (Burns, 1978; Kura, 2016; Wang et al., 2018). When it comes to environmentally-specific transformational leadership, leaders harness their employee relationships to deliberately influence and encourage their employees to dedicate themselves to implementing green behavior in the workplace (Chen & Chang, 2013; Robertson & Barling, 2013; Robertson & Carleton, 2018). This transformational process is grounded on the norm of social responsibility, which is “an internalized belief of moral obligation to help others without any consideration of an expected personal benefit” (Groves & LaRocca, 2011, p. 513). Since employees internalize the values advocated by the leader, this implies that employees’ green behavior can be enhanced by the influence of leaders and the implementation of an environment-specific transformational leadership style (Robertson & Barling, 2013). Previous research supports this relationship, demonstrating that when employees perceive their direct leader to be an environmentally-specific transformational leader, they exhibit more green behavior, as leaders act as their role-models (Kura, 2016; Peng, Yin, Hou, Zou, & Nie, 2020; Wang et al., 2018). Subsequently, as green advocacy is a subset of green behavior, we expect that environmentally-specific transformational leadership positively relates to green advocacy. We propose the following hypothesis:

Hypothesis 1: Environmentally-specific transformational leadership positively relates to green advocacy.

2.3 | The mediating effect of environmental corporate social responsibility

Corporate social responsibility (CSR) is defined as “the context-specific actions and policies of an organization aimed at improving the well-being of stakeholders by accounting for the triple baseline of economic, social, and environmental performance” (El Akremi, Gond, Swaen, De

Roeck, & Igalens, 2018, p. 225). Environmental CSR specifically focuses on environmentally responsible behavior within CSR as a whole.

In this study, we examine the employees' perception of their organizations' environmental CSR practices instead of the companies' actual environmental CSR strategies. By doing so, we follow the micro-level approach to CSR (Morgeson, Aguinis, Waldman, & Siegel, 2013) and the need to consider "how employees perceive and subsequently react to acts of corporate social responsibility or irresponsibility" (Rupp, Shao, Thornton, & Skarlicki, 2013, p. 896). It is substantive to focus on perceived (environmental) CSR, as employees' perceptions about (environmental) CSR may be more important than the CSR activities themselves since these perceptions are what constitute the reality upon which employees base their decisions, opinions, and attitudes (Aguinis & Glavas, 2012; Gond, El Akremi, Swaen, & Babu, 2017; Hansen, Dunford, Boss, Boss, & Angermeier, 2011; Rupp et al., 2013). A sizeable volume of micro-CSR research has shown a relation between (environmental) CSR perceptions and various employee outcomes (Afsar & Umrani, 2020; Ahmad et al., 2020; Besieux et al., 2018; Cheema, Afsar, & Javed, 2020; Glavas & Kelley, 2014; Shah et al., 2020; Tian & Robertson, 2019).

Employees consider the treatment by their leader, as a representative of the organization, as indicative of organizational level cues (Eisenberger et al., 2010; Kurtessis et al., 2017). This is demonstrated in preliminary research on CSR, underscoring the impact of different leadership styles, such as transformational leadership, on how CSR is perceived by employees (Tian, Liu, & Fan, 2015; Waldman, Siegel, & Javidan, 2006). In particular, environmentally-specific transformational leaders can influence employees' perception by talking about their core values and beliefs. They also underline the risks associated with short-term profit expectations at the cost of the long term benefits to the environment (Allen, Attah, & Gong, 2017; Goswami et al., 2018; Groves & LaRocca, 2011; Lythreatis, Mostafa, & Wang, 2019; Tourigny, Han, Baba, &

Pan, 2019). Thus, we expect that environmentally-specific transformational leadership will positively influence the perception of environmental CSR among employees.

Consequently, building on social exchange theory (Blau, 1964), we argue that higher levels of environmental CSR are related to increased green advocacy. Social exchange theory “merges economics, psychology, and sociology to propose that individuals engage in different types of interactions on the basis of their assessments of potential risk and gain” (Rupp & Mallory, 2015, p. 222). Therefore, if individuals consider the reciprocal benefit of engaging with a person or group to be high, they generate positive feelings regarding the other party, resulting in a sense of trust, commitment, and reciprocity (Blau, 1964). Based on social exchange theory, we argue that employees, who experience their organization as accountable in dealing with collective goals, stakeholders, society, and the environment, will make an extra effort by learning from these initiatives and trying to be part of the (environmental) programs and activities by displaying desired behavior. If an organization adopts environmentally-specific behavior, employees are inclined to give back to their organization in the form of extra-role behavior, as a mutual exchange. Additionally, several studies point to perceived environmental CSR as a predictor of employees’ green behavior (Ahmad et al., 2020; Raza, Farrukh, Iqbal, Farhan, & Wu; Tian & Robertson, 2019). For instance, the study of Boiral, Raineri, and Talbot (2018) indicates that the moment employees consider their organizational CSR practices as environmental problem-solving tools, they become more aware of their natural environment and are better able to create and adopt innovative ideas to enhance the organization's environmental management systems. The perception of environmental CSR may enhance the exchange of information about environmental problems between colleagues and discussion regarding the natural environment itself can increase the ability of employees to engage in green behavior (Boiral et al., 2018). This indicates that environmental CSR influences green

advocacy, as an aspect of employees' green behavior. Based on these arguments, we hypothesize the following:

Hypothesis 2: Environmental CSR mediates the positive relationship between environmentally-specific transformational leadership and green advocacy. Specifically, environmentally-specific transformational leadership positively relates to environmental CSR (H2a), which in turn positively relates to green advocacy (H2b).

2.4 | The mediating effect of perceived organizational environmental support

Perceived organizational support is defined as the extent to which employees perceive that their organization appreciates their contributions and is concerned about their welfare at work (Eisenberger, Huntington, Hutchison, & Sowa, 1986). Similarly, perceived organizational environmental support is defined as “the specific beliefs held by employees concerning how much the organization values their contributions toward sustainability” (Lamm, Tosti-Kharas, & King, 2015, p. 209). Perceived organizational environmental support results from the employees' retrieval and evaluations of their preceding treatment received by the organization. This recall is typically influenced by the treatment by (direct) leaders and, in particular, by specific leadership styles, such as transformational leadership (Cantor et al., 2012; Kurtessis et al., 2017). Indeed, direct leaders are considered as a source of organizational support, as they play a central role in providing organizational resources to employees (Wayne et al., 1997).

As discussed earlier, environmentally-specific transformational leaders inspire employees to modify their value systems and to move beyond self-interest (Burns, 1978; Kura, 2016; Wang et al., 2018). By harnessing their employee relationships and encouraging employees, leaders empower employees and create conditions enabling employees' green behavior (Chen &

Chang, 2013; Robertson & Barling, 2013; Robertson & Carleton, 2018). Because employees consider the behavior of their leader as indicative of organization level cues, this encouragement by the leader can positively impact the perception of organizational environmental support (Raineri & Paille, 2016). Therefore, we expect that employees' perception of their direct leader as an environmentally-specific transformational leader will positively influence their perceived organizational environmental support.

Additionally, based on social exchange theory (Blau, 1964), we expect that organizational environmental support positively affects employees' green advocacy because employees have the need to reply in a mutually positive way when their organization offers them support. Employees are expected to reciprocate this support in the form of green behavior. Social exchange theorists claim that the environmental commitment of employees serves as repayment for the environmental support they received. Previous research indeed supports the positive relationship between organizational environmental support and green behavior (Paille & Meija-Morelos, 2019; Ramus & Steger, 2000), as a result of the social exchange theory (Boiral & Paille, 2012; Norton et al., 2015; Paille, Chen, Boiral, & Jin, 2014).

As green advocacy is a category of green behavior, we develop the following hypothesis:

Hypothesis 3: Perceived organizational environmental support mediates the positive relationship between environmentally-specific transformational leadership and green advocacy. Specifically, environmentally-specific transformational leadership positively relates to perceived organizational environmental support (H3a), which in turn positively relates to green advocacy (H3b).

2.5 | The relationship between environmental CSR and perceived organizational environmental support

In line with existing research, we further expect that the two mediating variables, environmental CSR and perceived organizational environmental support, are not independent. Glavas and Kelly (2014), for instance, demonstrate the positive relationship between perceived CSR and perceived organizational support. They build on psychological contracts literature which claims that interpretations of past exchanges and witnessing fairness towards others could signal to employees that their organization will treat them fair as well (Glavas & Kelley, 2014). Specifically, as it is demonstrated that organizational practices may be antecedents of perceived organizational support (Kurtessis et al., 2017), we argue that perceiving high levels of environmental CSR may enhance a sense of perceived organizational environmental support. This implies that the more employees perceive their organization to adopt environmentally responsible behavior (i.e. environmental CSR), the more they will perceive their organization to support their environmental contributions (i.e. organizational environmental support), leading to the following hypothesis:

Hypothesis 4: Environmental CSR is positively related to perceived organizational environmental support.

2.6 Serial mediation effect of environmental CSR and perceived organizational environmental support

As we earlier argued that environmentally-specific transformational leadership is positively related to environmental CSR (H2a) and that environmental CSR is positively related to

perceived organizational environmental support (H4), in turn positively related to green advocacy (H3b), we expect a serial mediation effect leading to the following hypothesis:

Hypothesis 5: Environmental CSR and perceived organizational environmental support serially mediate the relation between environmentally-specific transformational leadership and green advocacy.

2.6 | The moderating effect of leadership integrity

We additionally study the impact of perceived leadership integrity. Leadership integrity implies that the leader has moral values and executes these values with the greatest possible consistency (Moorman, Darnold, & Priesemuth, 2013). Previous research argues that employees' perception of the integrity of their direct leader is an important leadership characteristic to them, as it reduces their uncertainty inherent in the decision to follow their leader (Moorman, Darnold, Priesemuth, & Dunn, 2012). Although the measurement of leadership integrity does not refer directly to the scope of green behavior, this leadership characteristic provides employees with useful information that makes the decision to follow the leader, and thereby implementing green behavior in the workplace, less risky.

Building on cue consistency theory, we contend that perceived leadership integrity moderates both the direct relationship between environmentally-specific transformational leadership and green advocacy and the serial mediational relationship through perceived environmental CSR and organizational environmental support. Specifically, leadership integrity is expected to moderate the direct path and the pathway between environmentally-specific transformational leadership and perceived environmental CSR.

Cue consistency theory (Anderson, 1965; Slovic, 1966; Wagner, Lutz, & Weitz, 2009) explains the attitudes and behavior of individuals based on the consistency of the cues of information they receive about a social actor or entity. In particular, cue-consistency theory states that if several sources of information about a particular person or organization are consistent, their impact on individual attitudes may be integrated in a linear way, implying that the cumulative and averaged values of the cues can be used to forecast attitudes and behavior (De Roeck, El Akremi, & Swaen, 2016). However, when faced with inconsistent information about a social actor, individuals tend to concentrate on the more negative pieces of information, which may impair their reactions to cues or even cause a negative reaction when judging hypocrisy or generating feelings of treason (Anderson, 1965; Slovic, 1966; Wagner et al., 2009). Employees trust multiple contextual cues and evaluate their consistency to comprehend the organizational environment and modify their attitudes and behaviors correspondingly. Building on cue consistency theory (Anderson, 1965; Slovic, 1966; Wagner et al., 2009), we expect that, if employees perceive their leader to have integrity, the positive relationships between environmentally-specific transformational leadership and green advocacy, and environmentally-specific transformational leadership and perceived environmental CSR is strengthened. This is because contextual cues arising from environmentally-specific transformational leadership and leadership integrity are then considered consistent. Indeed, environmentally-specific transformational leaders who demonstrate integrity not only encourage their employees to modify their value system in order to embrace the broader concept of green behavior, but also hold these values themselves and act accordingly. On the other hand, when employees perceive the integrity of their leader as low, this is not consistent with their environmentally-specific transformational leadership perceptions. Consequently, according to the cue consistency theory, employees will give more attention to the more negative cue, tempering the impact of the leader to foster both environmental CSR and green advocacy (De

Roeck et al., 2016). Based on the aforementioned arguments, we propose the following hypotheses:

Hypothesis 6: Leadership integrity moderates the direct relationship between environmentally-specific transformational leadership and green advocacy, such that this positive relationship is strengthened by higher levels of leadership integrity.

Hypothesis 7: Leadership integrity moderates the indirect relationship between environmentally-specific transformational leadership and green advocacy. Specifically, the positive relationship between environmentally-specific transformational leadership and environmental CSR is strengthened by higher levels of leadership integrity.

3 | METHODS

3.1 | Participants and procedure

In order to achieve the objectives of this study and to test the developed theoretical model, data were collected using surveys that were distributed among employees of a Belgian grocery retail company. A deliberate choice is made to study the role of environmentally-specific transformational leadership in the retail sector, as this sector has a decentralized structure in which the employees' direct leader plays an important role (Miller & Miller, 2020; Naidoo & Gasparatos, 2018). Moreover, "retailers, store managers and senior staff were found to have a vital role in directing other staff on responding to instructions from corporate headquarters and influencing them" (Naidoo & Gasparatos, 2018, p. 132). The selected company is known for actively implementing green strategies in the workplace.

Data were collected in 2019 across stores of the grocery retail company, situated in two Flemish provinces, the Provinces of West Flanders and East Flanders. In total, there are 102 stores in these provinces. Four research assistants were involved in the data collection. They contacted the store managers, asking permission to approach employees for data collection. 48 store managers agreed to collaborate, representing a response rate of 47%. To avoid response bias, it was neither mentioned to the store manager, nor to the employees, that the survey was about the influence of leaders on employees' green behavior. Instead, it was generally stated that the survey was about policies and values of the company. As employees in the stores do not have a computer available, the research assistants distributed paper-and-pencil surveys during their breaks. This implies that the respondents were not selected by the store manager, which is important to avoid sample selection bias. The research assistants collected the completed questionnaires in closed envelopes to preserve the anonymity and confidentiality of the respondents. In total 363 employees completed the survey, providing information about the variables of the conceptual model as well as demographical information of the respondents. Data from the 363 complete questionnaires show that 127 respondents (35%) were men and 236 were women (65%). Respondents averaged 40 years old ($SD = 10.458$, range 19-62) and had an average tenure of 5.25 years ($SD = 4.528$, range 0-25), while 81.5% of the respondents did not have a higher education degree.

3.2 | Common source bias

Although collecting data on both the dependent and independent variables through multiple sources is recommended to minimize the impact of common source variance (Favero & Bullock, 2015), the single source self-reported survey is justified as a measurement method if “both the predictor and criterion variables are capturing an individual's perceptions, beliefs,

judgements, or feelings” (Podsakoff, MacKenzie, & Podsakoff, 2012, p. 549). To minimize the potential impact of common source bias, respondents were encouraged to provide accurate responses, as the survey guaranteed anonymity. Additionally, the survey was pretested and used a detailed cover letter that emphasizes the societal importance of this research. Items related to independent, mediator, and dependent variables were separated in the questionnaire by means of other variables, buffer items, and a cover story (Podsakoff et al., 2012). Apart from these precautions, response options were labelled and items were highlighted to improve clarity (Favero, Meier, & O'Toole, 2016). Second, Harman's one factor analysis indicates no problematic variance values, as one factor loads below 50%, being 36.092 (Podsakoff et al., 2012). Therefore, we argue that the negative impact of common source bias is likely to be limited in this study.

3.3 | Measures

All constructs in the study at hand are derived from previous studies and use a 5-point Likert type scale as measurement (where 1 reflects strong disagreement and 5 reflects strong agreement with the statements). Confirmatory factor analysis (CFA) was carried out to assess the model fit. The CFA fit indices indicate that the developed model captures the pattern of relationships between the observed variables and their underlying constructs adequately (thresholds as advised by Hair, Black, and Babin (2010) are listed between brackets): normed chi-square = 2.029 (< 5), $\chi^2_{365} = 740,535$ ($p < .001$) with Tucker-Lewis index (TLI) = .927 ($\geq .92$), comparative fit index (CFI) = .935 ($\geq .92$), root mean square error of approximation (RMSEA) = .053 (< 0.07 with $CFI \geq 0.92$) and standardized root square residual (SRMR) = .051 ($< .08$ with $CFI \geq .92$). All constructs, items, and factor loadings are reported in Table 1 and discussed below.

3.3.1 | Dependent variable

Green advocacy was measured using three items based on research of Kim, Kim, Han, Jackson, and Ployhart (2017). Specifically, respondents were asked to indicate to what extent they inform and convince fellow employees to act in an environmentally friendly way at the workplace. An example item is “I try to convince my group members to reduce, reuse, and recycle office supplies in the workplace.” The three items from the scale are sufficiently internally consistent (Cronbach’s $\alpha = .777$).

3.3.2 | Independent variables

Environmentally-specific transformational leadership was measured using the scale of Saifulina and Carballo-Penela (2017). The scale consists of six items, of which two were deleted according to the CFA. The remaining four items are internally consistent ($\alpha = .936$). An example item of the environmentally-specific transformational leadership scale is “My supervisor specifies the importance of having a strong sense of environmental purpose.”

To measure *environmental CSR*, items were extracted from the scale of Farooq, Farooq, and Jasimuddin (2014). Environmental CSR was measured using four items. An example item is “My company participates to the activities which aim to protect and improve the quality of the natural environment.” The four items are internally consistent ($\alpha = .872$).

Perceived organizational environmental support was measured using the scale of Saifulina and Carballo-Penela (2017), asking respondents to answer questions related to how their respective organization values contributions to the environment and cares for ecological well-being. “My organization provides its employees with useful information they need to behave in an environmentally friendly way,” is an example item of the scale. All five items were internally consistent, with a Cronbach’s α of .860.

Leadership integrity was measured using the scale developed by Moorman, Darnold, Priesemuth, and Dunn (2013). As the scale consists of three dimensions, factor analysis was carried out to ensure the possibility of a one-factor solution for further analyses. Results favour the use of a one-factor solution, where all but three items load sufficiently (see table 1), thus further analyses were carried out using leadership integrity as a whole, comprising thirteen items. Reliability analysis provides further evidence for this decision ($\alpha = .954$).

Even though drivers of green advocacy are considered the primary determinants within the study at hand, three control variables were included in the research model (Ahmad et al., 2020; Gao & He, 2017). *Gender* was measured using a man/woman construct (man = 0, woman = 1) and *age* was measured in years. Lastly, *tenure* was measured in years, similar to age.

<INSERT TABLE 1 ABOUT HERE>

3.4 | Data analysis

Statistical Package for Social Sciences (SPSS) Version 26 including process macro 3.5 (Hayes, 2012) was used to conduct the correlation analyses and ordinary least square (OLS) regressions on the individual level data.

Table 2 reports the means, standard deviations, bivariate correlations, and Cronbach's Alphas for the variables used in our analyses. All VIF-values (variance inflation factor) are below 1.851, indicating that multi-collinearity ($VIF \geq 10$) is unlikely to be an issue (Field, 2009). Furthermore, assumptions for regression analyses were tested. Visual inspection of the residuals indicates that normality occurs. Although a Durbin-Watson test statistic value above 1.5 is considered as acceptable, based on a sample size of 363, the lower bound threshold value is 1.802 (Field, 2009). Within our data the Durbin-Watson test statistic value is 1.912, indicating that there is no evidence of autocorrelation. Lastly, the White's test indicated heteroscedasticity

($p = .170$). Therefore, analyses were carried out using heteroscedasticity robust standard errors (White, 1980).

4 | RESULTS

4.1 | Univariate and bivariate analysis

The results in Table 2 indicate that no problematic correlations ($> .7$) are observed between the listed variables (Field, 2009). Environmentally-specific transformational leadership, perceived environmental CSR, perceived organizational environmental support and leadership integrity are all significantly associated with green advocacy (i.e. dependent variable) and likewise share significant correlations between themselves.

<INSERT TABLE 2 ABOUT HERE>

4.2 | Multivariate analyses

The standardized coefficients are reported in this section; both the unstandardized and standardized coefficients are reported in Table 3. The standardized coefficients are argued to facilitate the interpretation of the analyses while the unstandardized coefficients can be used, for instance, to compare results across studies of different scholars using differing methods (Hayes, 2012).

<INSERT TABLE 3 ABOUT HERE>

First, the results show a significant relationship between environmentally-specific transformational leadership and green advocacy ($\beta = .550$, $p < .001$), indicating acceptance of

hypothesis 1. Second, results indicate that environmentally-specific transformational leadership is related to environmental CSR ($\beta = .341, p = < .001$), thus accepting H2a. In turn, environmental CSR is positively related to green advocacy ($\beta = .115, p = < .05$), resulting in acceptance of H2b. Hypothesis 2 is accepted, indicating that the positive mediating relationship between environmentally-specific transformational leadership and green advocacy via environmental CSR is significant ($\beta = .039, 95\% \text{ CI} = [.001; .087]$) as the bias-corrected bootstrap confidence interval (5,000 bootstrap samples) does not include zero. Third, findings indicate that environmentally-specific transformational leadership is positively related to perceived organizational environmental support ($\beta = .475, p = < .001$), thus accepting H3a. In turn, perceived organizational environmental support is positively related to green advocacy ($\beta = .189, p = < .01$), resulting in acceptance of H3b. Consequently, hypothesis 3 is accepted, because the positive mediating relationship between environmentally-specific transformational leadership and green advocacy via organizational environmental support is significant ($\beta = .060, 95\% \text{ CI} = [.023; .105]$) as the bias-corrected bootstrap confidence interval (5,000 bootstrap samples) does not include zero. Fourth, results indicate that environmental CSR and perceived organizational environmental support are indeed positively related ($\beta = .486, p = < .001$), therefore accepting hypothesis 4. Fifth, combined the findings above hypothesize for environmental CSR and perceived organizational environmental support to serially mediate the relation between environmentally-specific transformational leadership and employee' green advocacy. Our findings provide evidence for this serially mediated relationship ($\beta = .032, 95\% \text{ CI} = [.012; .059]$) as the bias-corrected bootstrap confidence interval (5,000 bootstrap samples) does not include zero (acceptance of hypothesis 5).

Sixth, further analysis indicates that the direct relationship between environmentally-specific transformational leadership and green advocacy is conditional upon leadership integrity ($\beta = .095, p < .05$) as the bias-corrected bootstrap confidence interval (5,000 bootstrap samples)

does not include zero. This moderating effect of leadership integrity is significant for diverse levels of leadership integrity (mean + 1SD, mean, mean – 1SD). Analysis of the slopes using standardized data (see figure 2) illustrates the relationship between environmentally-specific transformational leadership and green advocacy for diverse levels of leadership integrity (mean + 1SD, mean, mean – 1SD). The figure provides support for high levels of leadership integrity to strengthen the positive relationship between environmentally-specific transformational leadership and green advocacy ($\beta = .519, p < .001$). Mean levels of leadership integrity ($\beta = .424, p < .001$) and low levels of leadership integrity ($\beta = .329, p < .001$) are found to strengthen the positive relationship between environmentally-specific transformational leadership and green advocacy to a smaller extent than high levels of leadership integrity. Therefore, hypothesis 6 is accepted.

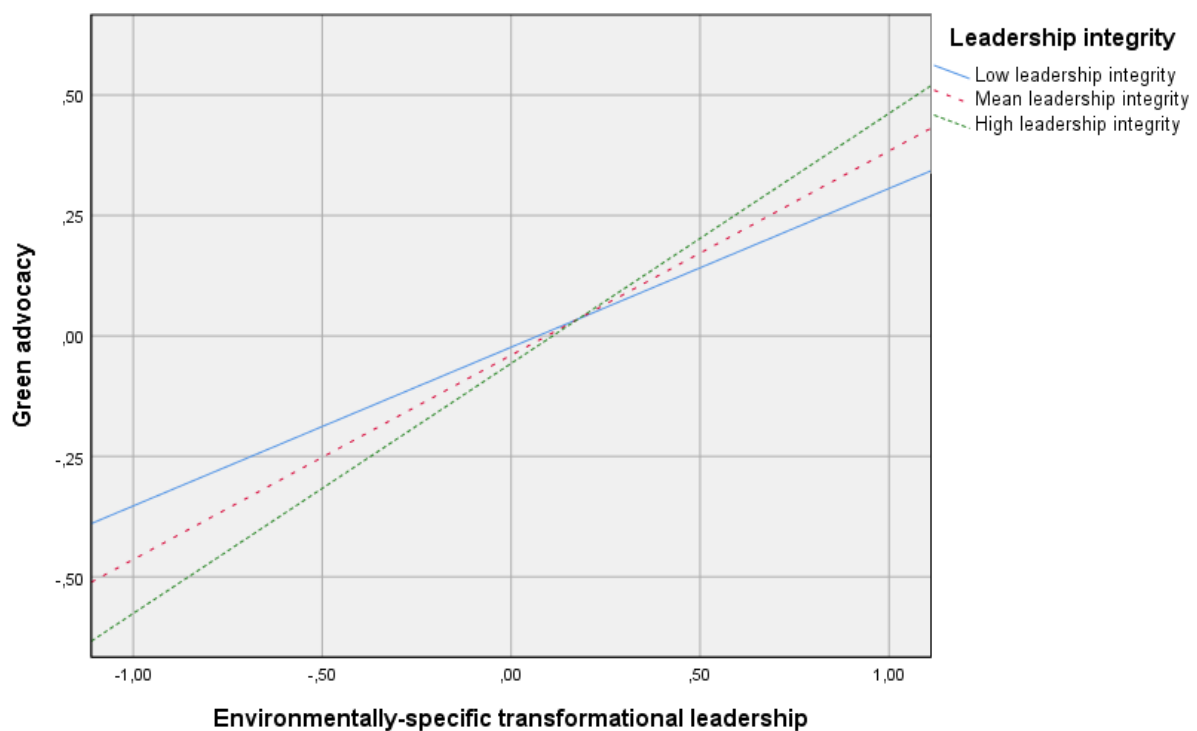


FIGURE 2 Moderating effect of leadership integrity on the relationship between environmentally-specific transformational leadership and green advocacy

Lastly, this research likewise hypothesizes that the serial mediational relationship between environmentally-specific transformational leadership and green advocacy, through environmental CSR and perceived organizational environmental support is conditional upon leadership integrity. In line with Aguinis, Dalton, Bosco, Pierce, and Dalton (2011), we use the 10%-significance level as an appropriate cutoff point for assessing interaction effects. Our findings indicate that leadership integrity significantly moderates the pathway between transformational leadership and environmental CSR ($\beta = .067, p < .1$). Also the index of moderated mediation is significant ($\beta = .006, 95\% \text{ CI} = [.001 ; .015]$), as the bias-corrected bootstrap confidence interval (5,000 bootstrap samples) does not include zero. The moderating effect of leadership integrity is significant for the various levels of leadership integrity (mean + 1SD, mean, mean – 1SD). Analysis of the slopes using standardized data (see figure 3) illustrates the different slopes (mean + 1SD, mean, mean – 1SD) of the indirect conditional relationship. The figure provides support for high levels of perceived leadership integrity to strengthen the positive relationship between environmentally-specific transformational leadership and green advocacy via environmental CSR and perceived organizational environmental support ($\beta = .030, 95\% \text{ CI} = [.009 ; .058]$). Mean levels of perceived leadership integrity ($\beta = .024, 95\% \text{ CI} = [.007 ; .047]$) and low levels of leadership integrity ($\beta = .018, 95\% \text{ CI} = [.001 ; .040]$) are found to strengthen the positive relationship between environmentally-specific transformational leadership and green advocacy to a smaller extent than high levels of leadership integrity. Therefore, hypothesis 7 is accepted.

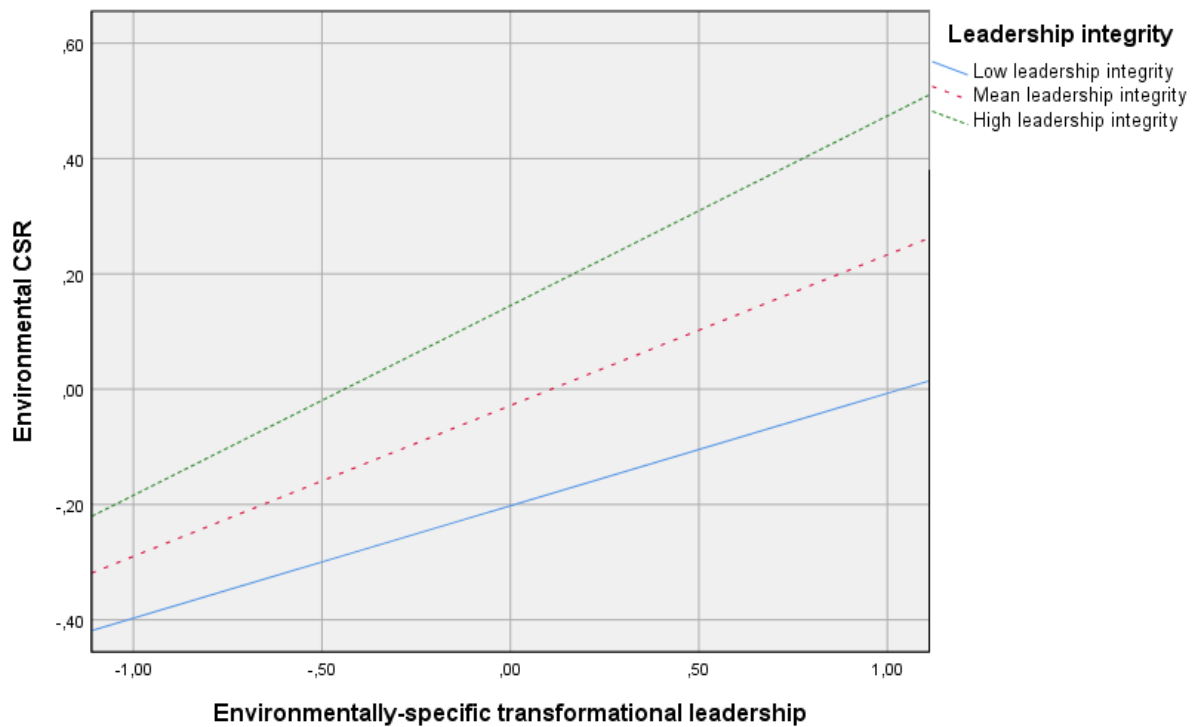


FIGURE 3 Moderating effect of leadership integrity on the relationship between environmentally-specific transformational leadership and environmental CSR

5 | DISCUSSION

Existing studies investigate the antecedents of employees' green behavior (Afsar, Shahjehan, et al., 2018; Ahmed et al., 2020; Besieux et al., 2018; Goswami et al., 2018; Kim et al., 2020; Robertson & Carleton, 2018; Saifulina & Carballo-Penela, 2017; Wang et al., 2018), but studies focusing on the role of leadership in fostering employees' green behavior, in general, and green advocacy, specifically, are still limited. Therefore, there are calls to study the impact of leaders on the broader concept of workplace green behavior, including those underlying mechanisms that explain this relationship alongside conditional factors influencing it (Afsar, Shahjehan, et al., 2018; Jones, Willness, & Glavas, 2017; Kim et al., 2017; Wang et al., 2018). In the present study, we answer these calls by investigating the impact of leaders on employees' green advocacy.

The results of our study, based on data collected among employees of a Belgian grocery retail company, confirmed the proposed theoretical model. The results indicate that there is a significant positive association between environmentally-specific transformational leadership and green advocacy. Additionally, the results show that environmentally-specific transformational leadership has an indirect impact, through environmental CSR and perceived organizational support, on green advocacy. The results indicating the indirect effect via environmental CSR are in line with previous empirical studies (Afsar & Umrani, 2020; Ahmad et al., 2020; Kim et al., 2017; Tian & Robertson, 2019). In addition, the results indicate that perceived organizational environmental support acts as a second mediating factor in the positive relationship between environmentally-specific transformational leadership and green advocacy. This finding is in line with both Glavas and Kelly (2014) and Raineri and Paillé (2016).

Furthermore, findings show that leadership integrity moderates the positive effect of environmentally-specific transformational leadership on green advocacy such that when leaders display high levels of integrity, their followers engage in green advocacy more often as a consequence of their perception of environmentally-specific transformational leadership. Thus, our results mark the convergence between environmentally-specific transformational leadership, leadership integrity, and green advocacy.

According to our findings, organizations that pursue an environmentally-specific transformational leadership style and inspire subordinates to internalize leaders' pro-environmental values by clearly communicating a cohesive environmental vision will trigger green advocacy among their employees.

Our results contribute to the existing literature by indicating that employees' perception of environmentally-specific transformational leadership has a positive effect on their green advocacy. This study extends previous empirical work on the direct effect of environmentally-specific transformational leadership on green advocacy (Kura, 2016; Peng et al., 2020; Wang

et al., 2018) by introducing leadership integrity as a moderator. Further, this study makes theoretical contributions as it responds to calls (Afsar, Shahjehan, et al., 2018; Jones et al., 2017; Kim et al., 2017; Wang et al., 2018) to study the impact of leaders on workplace green behavior, while also introducing environmental CSR and perceived organizational environmental support as underlying mechanisms that explain the relationship between environmentally-specific transformational leadership and green advocacy.

5.1 | Managerial implications

Due to the increasing importance of green behavior within companies, business leaders have realized that encouraging employees' green advocacy is a crucial asset in building an organization's competitive advantage. The main practical implication of this study is that in order to increase employees' green advocacy, businesses should be aware of the crucial role direct leaders play in fostering employees' green behavior, in general, and green advocacy, specifically. This is certainly the case in highly decentralized organizations, such as retail companies, because direct leaders act as intermediates between the corporate headquarters and the employees in the decentralized units, thus fulfilling an important role in encouraging the employees to carry out the central policies. Our results demonstrate that leaders should clearly communicate their pro-environmental values, essentially demonstrating an environmentally-specific transformational leadership style. However, it is important that the values and the behavior of the direct leaders themselves are in line with the pro-environmental values and behavior they promote. If this is not the case, employees receive inconsistent information from their direct leader, which may negatively influence employees' green behavior.

It is crucial for organizations that their leaders communicate and share environmental values with employees. Training programs could be designed to teach leaders how to transmit the

importance of green behavior to their subordinates. It may provide leaders with influencing tactics and persuasion skills, with which they can influence their employees to engage in green advocacy. Last, due to the indirect effect of environmental CSR and perceived organizational environmental support with environmentally-specific transformational leadership in fostering green advocacy, leaders should be trained to set an example in performing green behavior, stimulating and encouraging employee environmental initiatives from employees, and helping them engage in environmental practices.

5.2 | Limitations and further research

Our study has a number of limitations with implications for the interpretation of our results and for future research. First, the use of cross-sectional data does not allow us to make strong claims on the direction of the relationships. Although we built on well-developed theories to set up our conceptual model, we additionally tested the robustness of our results. The instrumental variable approach two staged least squares (2SLS) is used to test the relationships within the model, with particular concern for potential reversed causality (Maydeu-Olivares, Shi, & Rosseel, 2019). Longitudinal studies may provide additional insights on the impact of leaders on employees' green advocacy. Second, we measured all variables using single source self-reported scales. However, we made efforts to prevent common source bias and our data did not demonstrate common source bias. Nevertheless, presence of common source bias can never be eliminated completely. Thus, future research could make use of data using multiple sources or objective observations. Third, only employees of a single grocery retail company in Belgium were selected as participants. This doesn't allow to study the influence of organizational characteristics on employees' green behavior, such as the size or the attention for environmental issues of the organization the employees work for. Furthermore, the participants in our study

all have the same job description and have to perform the same tasks. Future research could therefore use a sample of employees performing diverse jobs and take into account job specific information. Finally, in order to generalize our findings, data could be collected from employees working in different countries, as research indicates that environmental beliefs, and attitudes vary around the world (Aoyagi-Usui, Vinken, & Kuribayashi, 2003).

Additionally, it could be interesting to study the impact of other leadership styles on employees' green behavior, as well as the impact of leadership styles on the several dimensions of the green five taxonomy. For instance, it would be interesting if future research investigates the negative influence certain leadership styles can have on employee green advocacy. Specifically, future research could investigate the possible negative impact of destructive leadership styles (Mackey, Ellen III, McAllister, & Alexander, 2020) on employee green behavior.

Despite its limitations, this study offers valuable theoretical and practical contributions by shedding light on the underlying mechanisms and contingency factors explaining the impact of leaders on employees' green advocacy.

REFERENCES

- Afsar, B., Badir, Y., & Kiani, U. S. (2016). Linking spiritual leadership and employee pro-environmental behavior: The influence of workplace spirituality, intrinsic motivation, and environmental passion. *Journal of Environmental Psychology, 45*, 79-88. doi:<https://doi.org/10.1016/j.jenvp.2015.11.011>
- Afsar, B., Cheema, S., & Javed, F. (2018). Activating employee's pro-environmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership. *Corporate Social Responsibility and Environmental Management, 25*(5), 904-911. doi:<https://doi.org/10.1002/csr.1506>
- Afsar, B., Maqsoom, A., Shahjehan, A., Afridi, S. A., Nawaz, A., & Fazliani, H. (2020). Responsible leadership and employee's proenvironmental behavior: The role of organizational commitment, green shared vision, and internal environmental locus of control. *Corporate Social Responsibility and Environmental Management, 27*(1), 297-312. doi:<https://doi.org/10.1002/csr.1806>
- Afsar, B., Shahjehan, A., & Shah, I. (2018). Leadership and employee pro-environmental behaviours. In *Research Handbook on Employee Pro-Environmental Behaviour* (pp. 185-209). Cheltenham, UK: Edward Elgar Publishing.
- Afsar, B., & Umrani, W. A. (2020). Corporate social responsibility and pro-environmental behavior at workplace: The role of moral reflectiveness, coworker advocacy, and environmental commitment. *Corporate Social Responsibility and Environmental Management, 27*(1), 109-125. doi:<https://doi.org/10.1002/csr.1777>
- Aguinis, H., Dalton, D. R., Bosco, F. A., Pierce, C. A., & Dalton, C. M. (2011). Meta-analytic choices and judgment calls: Implications for theory building and testing, obtained effect sizes, and scholarly impact. *Journal of Management, 37*(1), 5-38. doi:<https://doi.org/10.1177/0149206310377113>
- Aguinis, H., & Glavas, A. (2012). What We Know and Don't Know About Corporate Social Responsibility: A Review and Research Agenda. *Journal of Management, 38*(4), 932-968. doi:<https://doi.org/10.1177/0149206311436079>
- Ahmad, R., Ahmad, S., Islam, T., & Kaleem, A. (2020). The nexus of corporate social responsibility (CSR), affective commitment and organisational citizenship behaviour in academia A model of trust. *Employee Relations, 42*(1), 232-247. doi:<https://doi.org/10.1108/ER-04-2018-0105>
- Ahmed, M., Sun, Z. H., Raza, S. A., Qureshi, M. A., & Yousufi, S. Q. (2020). Impact of CSR and environmental triggers on employee green behavior: The mediating effect of employee well-being. *Corporate Social Responsibility and Environmental Management, 27*(5), 2225-2239. doi:<https://doi.org/10.1002/csr.1960>
- Allen, G. W., Attoh, P. A., & Gong, T. (2017). Transformational leadership and affective organizational commitment: mediating roles of perceived social responsibility and organizational identification. *Social Responsibility Journal, 13*(3), 585-600. doi:<https://doi.org/10.1108/SRJ-11-2016-0193>
- Anderson, N. H. (1965). Averaging versus adding as a stimulus-combination rule in impression-formation. *Journal of Experimental Psychology, 70*(4), 394-400. doi:<https://doi.org/10.1037/h0022280>
- Aoyagi-Usui, M., Vinken, H., & Kuribayashi, A. (2003). Pro-environmental attitudes and behaviors: An international comparison. *Human ecology review, 23*-31. Retrieved from <https://www.jstor.org/stable/24707084>
- Besieux, T., Baillien, E., Verbeke, A. L., & Euwema, M. C. (2018). What goes around comes around: The mediation of corporate social responsibility in the relationship between transformational leadership and employee engagement. *Economic and Industrial Democracy, 39*(2), 249-271. doi:<https://doi.org/10.1177/0143831X15614914>
- Bin Saeed, B., Afsar, B., Hafeez, S., Khan, I., Tahir, M., & Afridi, M. A. (2019). Promoting employee's proenvironmental behavior through green human resource management practices.

- Corporate Social Responsibility and Environmental Management*, 26(2), 424-438.
doi:<https://doi.org/10.1002/csr.1694>
- Blau, P. (1964). *Exchange and Power in Social Life*. New Brunswick: Transaction Publishers.
- Boiral, O., & Paille, P. (2012). Organizational Citizenship Behaviour for the Environment: Measurement and Validation. *Journal of Business Ethics*, 109(4), 431-445.
doi:<https://doi.org/10.1007/s10551-011-1138-9>
- Boiral, O., Raineri, N., & Talbot, D. (2018). Managers' Citizenship Behaviors for the Environment: A Developmental Perspective. *Journal of Business Ethics*, 149(2), 395-409.
doi:<https://doi.org/10.1007/s10551-016-3098-6>
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cantor, D. E., Morrow, P. C., & Montabon, F. (2012). Engagement in Environmental Behaviors Among Supply Chain Management Employees: An Organizational Support Theoretical Perspective. *Journal of Supply Chain Management*, 48(3), 33-51. doi:<https://doi.org/10.1111/j.1745-493X.2011.03257.x>
- Cheema, S., Afsar, B., & Javed, F. (2020). Employees' corporate social responsibility perceptions and organizational citizenship behaviors for the environment: The mediating roles of organizational identification and environmental orientation fit. *Corporate Social Responsibility and Environmental Management*, 27(1), 9-21.
doi:<https://doi.org/10.1002/csr.1769>
- Chen, L. F., & Khuangga, D. L. (2020). Configurational paths of employee reactions to corporate social responsibility: An organizational justice perspective. *Corporate Social Responsibility and Environmental Management*, 28(1), 389-403. doi: <https://doi.org/10.1002/csr.2056>
- Chen, Y. S., & Chang, C. H. (2013). The Determinants of Green Product Development Performance: Green Dynamic Capabilities, Green Transformational Leadership, and Green Creativity. *Journal of Business Ethics*, 116(1), 107-119. doi:<https://doi.org/10.1007/s10551-012-1452-x>
- De Roeck, K., El Akremi, A., & Swaen, V. (2016). Consistency Matters! How and When Does Corporate Social Responsibility Affect Employees' Organizational Identification? *Journal of Management Studies*, 53(7), 1141-1168. doi:<https://doi.org/10.1111/joms.12216>
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), 500-507. doi:<https://doi.org/10.1037/0021-9010.82.5.812>
- Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology*, 95(6), 1085. doi:<https://doi.org/10.1037/a0020858>
- El Akremi, A., Gond, J. P., Swaen, V., De Roeck, K., & Igalens, J. (2018). How Do Employees Perceive Corporate Responsibility? Development and Validation of a Multidimensional Corporate Stakeholder Responsibility Scale. *Journal of Management*, 44(2), 619-657.
doi:<https://doi.org/10.1177/0149206315569311>
- Farooq, M., Farooq, O., & Jasimuddin, S. M. (2014). Employees response to corporate social responsibility: Exploring the role of employees' collectivist orientation. *European Management Journal*, 32(6), 916-927. doi:<https://doi.org/10.1016/j.emj.2014.03.002>
- Favero, N., & Bullock, J. B. (2015). How (Not) to Solve the Problem: An Evaluation of Scholarly Responses to Common Source Bias. *Journal of Public Administration Research and Theory*, 25(1), 285-308. doi:<https://doi.org/10.1093/jopart/muu020>
- Favero, N., Meier, K. J., & O'Toole, L. J. (2016). Goals, Trust, Participation, and Feedback: Linking Internal Management With Performance Outcomes. *Journal of Public Administration Research and Theory*, 26(2), 327-343. doi:<https://doi.org/10.1093/jopart/muu044>
- Field, A. (2009). *Discovering Statistics Using SPSS (and Sex and Drugs and Rock 'n' Roll)*. London: SAGE Publications.
- Field, A. (2009). *Discovering statistics using SPSS:(and sex and drugs and rock'n'roll)(ed.)*. London, Royaume-Uni: Sage. doi:<https://doi.org/10.2753/MTP1069-6679190202>

- Gao, Y. Q., & He, W. (2017). Corporate social responsibility and employee organizational citizenship behavior: The pivotal roles of ethical leadership and organizational justice. *Management Decision*, 55(2), 294-309. doi:<https://doi.org/10.1108/MD-05-2016-0284>
- Gkorezis, P. (2015). Supervisor support and pro-environmental behavior: the mediating role of LMX. *Management Decision*, 53(5), 1045-1060. doi: <https://doi.org/10.1108/MD-06-2014-0370>
- Glavas, A., & Kelley, K. (2014). The Effects of Perceived Corporate Social Responsibility on Employee Attitudes. *Business Ethics Quarterly*, 24(2), 165-202. doi:<https://doi.org/10.5840/beq20143206>
- Gond, J. P., El Akremi, A., Swaen, V., & Babu, N. (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior*, 38(2), 225-246. doi:<https://doi.org/10.1002/job.2170>
- Goswami, A., O'Brien, K. E., Dawson, K. M., & Hardiman, M. E. (2018). Mechanisms of Corporate Social Responsibility: The Moderating Role of Transformational Leadership. *Ethics & Behavior*, 28(8), 644-661. doi:<https://doi.org/10.1080/10508422.2018.1467764>
- Graves, L. M., Sarkis, J., & Zhu, Q. H. (2013). How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China. *Journal of Environmental Psychology*, 35, 81-91. doi:<https://doi.org/10.1016/j.jenvp.2013.05.002>
- Groves, K. S., & LaRocca, M. A. (2011). An Empirical Study of Leader Ethical Values, Transformational and Transactional Leadership, and Follower Attitudes Toward Corporate Social Responsibility. *Journal of Business Ethics*, 103(4), 511-528. doi:<https://doi.org/10.1007/s10551-011-0877-y>
- Hair, J., Black, W., & Babin, B. (2010). *Multivariate Data Analysis (7 Ed)*. New Jersey: Prentice Hall.
- Hansen, S. D., Dunford, B. B., Boss, A. D., Boss, R. W., & Angermeier, I. (2011). Corporate social responsibility and the benefits of employee trust: A cross-disciplinary perspective. *Journal of Business Ethics*, 102(1), 29-45. doi:<https://doi.org/10.1007/s10551-011-0903-0>
- Hayes, A. (2012). *PROCESS : A Versatile Computational Tool for Observed Variable Mediation , Moderation , and Conditional Process Modeling 1*.
- He, J., Morrison, A. M., & Zhang, H. (2020). Being sustainable: The three-way interactive effects of CSR, green human resource management, and responsible leadership on employee green behavior and task performance. *Corporate Social Responsibility and Environmental Management*. doi:<https://doi.org/10.1002/csr.2104>
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *The Journal of environmental education*, 18(2), 1-8. doi:<https://doi.org/10.1080/00958964.1987.9943482>
- Jones, D. A., Willness, C. R., & Glavas, A. (2017). When Corporate Social Responsibility (CSR) Meets Organizational Psychology: New Frontiers in Micro-CSR Research, and Fulfilling a Quid Pro Quo through Multilevel Insights. *Frontiers in Psychology*, 8(520). doi:<https://doi.org/10.3389/fpsyg.2017.00520>
- Kim, A., Kim, Y., Han, K., Jackson, S. E., & Ployhart, R. E. (2017). Multilevel Influences on Voluntary Workplace Green Behavior: Individual Differences, Leader Behavior, and Coworker Advocacy. *Journal of Management*, 43(5), 1335-1358. doi:<https://doi.org/10.1177/0149206314547386>
- Kim, W. G., McGinley, S., Choi, H. M., & Agmapisarn, C. (2020). Hotels' environmental leadership and employees' organizational citizenship behavior. *International Journal of Hospitality Management*, 87, 12. doi:<https://doi.org/10.1016/j.ijhm.2019.102375>
- Kura, K. M. (2016). Linking Environmentally Specific Transformational Leadership and Environmental Concern to Green Behaviour at Work. *Global Business Review*, 17(3), 1S-14S. doi:<https://doi.org/10.1177/0972150916631069>
- Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of Management*, 43(6), 1854-1884. doi:<https://doi.org/10.1177/0149206315575554>

- Lamm, E., Tosti-Kharas, J., & King, C. E. (2015). Empowering Employee Sustainability: Perceived Organizational Support Toward the Environment. *Journal of Business Ethics*, 128(1), 207-220. doi:<https://doi.org/10.1007/s10551-014-2093-z>
- Lythreathis, S., Mostafa, A. M. S., & Wang, X. J. (2019). Participative Leadership and Organizational Identification in SMEs in the MENA Region: Testing the Roles of CSR Perceptions and Pride in Membership. *Journal of Business Ethics*, 156(3), 635-650. doi:<https://doi.org/10.1007/s10551-017-3557-8>
- Mackey, J. D., Ellen III, B. P., McAllister, C. P., & Alexander, K. C. (2020). The dark side of leadership: A systematic literature review and meta-analysis of destructive leadership research. *Journal of Business Research*. doi:<https://doi.org/10.1016/j.jbusres.2020.10.037>
- Maydeu-Olivares, A., Shi, D., & Rosseel, Y. (2019). Instrumental variables two-stage least squares (2SLS) vs. maximum likelihood structural equation modeling of causal effects in linear regression models. *Structural Equation Modeling: A Multidisciplinary Journal*, 26(6), 876-892. doi:<https://doi.org/10.1080/10705511.2019.1607740>
- Miller, L., & Miller, A. F. (2020). Innovative work behavior through high-quality leadership. *International Journal of Innovation Science*, 12(2), 219-236. doi:<https://doi.org/10.1108/IJIS-04-2019-0042>
- Moorman, R. H., Darnold, T. C., & Priesemuth, M. (2013). Perceived leader integrity: Supporting the construct validity and utility of a multi-dimensional measure in two samples. *The Leadership Quarterly*, 24(3), 427-444. doi:<https://doi.org/10.1016/j.leaqua.2013.02.003>
- Moorman, R. H., Darnold, T. C., Priesemuth, M., & Dunn, C. P. (2012). Toward the measurement of perceived leader integrity: Introducing a multidimensional approach. *Journal of Change Management*, 12(4), 383-398. doi:<https://doi.org/10.1080/14697017.2012.728746>
- Morgeson, F. P., Aguinis, H., Waldman, D. A., & Siegel, D. S. (2013). Extending corporate social responsibility research to the human resource management and organizational behavior domains: A look to the future. *Personnel Psychology*, 66(4), 805-824. doi:<https://doi.org/10.1111/peps.12055>
- Naidoo, M., & Gasparatos, A. (2018). Corporate environmental sustainability in the retail sector: Drivers, strategies and performance measurement. *Journal of Cleaner Production*, 203, 125-142. doi:<https://doi.org/10.1016/j.jclepro.2018.08.253>
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee Green Behavior: A Theoretical Framework, Multilevel Review, and Future Research Agenda. *Organization & Environment*, 28(1), 103-125. doi:<https://doi.org/10.1177/1086026615575773>
- Norton, T. A., Zacher, H., Parker, S. L., & Ashkanasy, N. M. (2017). Bridging the gap between green behavioral intentions and employee green behavior: The role of green psychological climate. *Journal of Organizational Behavior*, 38(7), 996-1015. doi:<https://doi.org/10.1002/job.2178>
- Ones, D. S., & Dilchert, S. (2012). Environmental Sustainability at Work: A Call to Action. *Industrial and Organizational Psychology-Perspectives on Science and Practice*, 5(4), 444-466. doi:<https://doi.org/10.1111/j.1754-9434.2012.01478.x>
- Ones, D. S., Wiernik, B. M., Dilchert, S., & Klein, R. (2015). Pro-environmental behavior. In *International Encyclopedia of the Social & Behavioral Sciences: Second Edition* (pp. 82-88): Elsevier Inc.
- Ones, D. S., Wiernik, B. M., Dilchert, S., & Klein, R. M. (2018). Multiple domains and categories of employee green behaviours: More than conservation. In *Research handbook on employee pro-environmental behaviour*. Cheltenham, UK: Edward Elgar Publishing.
- Onkila, T. (2015). Pride or Embarrassment? Employees' Emotions and Corporate Social Responsibility. *Corporate Social Responsibility and Environmental Management*, 22(4), 222-236. doi:<https://doi.org/10.1002/csr.1340>
- Paille, P., Chen, Y., Boiral, O., & Jin, J. F. (2014). The Impact of Human Resource Management on Environmental Performance: An Employee-Level Study. *Journal of Business Ethics*, 121(3), 451-466. doi:<https://doi.org/10.1007/s10551-013-1732-0>

- Paille, P., & Meija-Morelos, J. H. (2019). Organisational support is not always enough to encourage employee environmental performance. The moderating role of exchange ideology. *Journal of Cleaner Production*, 220, 1061-1070. doi:<https://doi.org/10.1016/j.jclepro.2019.02.192>
- Peng, J., Yin, K., Hou, N., Zou, Y. C., & Nie, Q. (2020). How to facilitate employee green behavior: The joint role of green transformational leadership and green human resource management practice. *Acta Psychologica Sinica*, 52(9), 1105-1120. doi:<https://doi.org/10.3724/SP.J.1041.2020.01105>
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of Method Bias in Social Science Research and Recommendations on How to Control It. *Annual Review of Psychology*, 63(1), 539-569. doi:<https://doi.org/10.1146/annurev-psych-120710-100452>
- Raineri, N., & Paille, P. (2016). Linking Corporate Policy and Supervisory Support with Environmental Citizenship Behaviors: The Role of Employee Environmental Beliefs and Commitment (vol 137, pg 129, 2016). *Journal of Business Ethics*, 137(1), 211-211. doi:<https://doi.org/10.1007/s10551-015-2548-x>
- Ramus, C. A., & Steger, U. (2000). The roles of supervisory support behaviors and environmental policy in employee "ecoinitiatives" at leading-edge European companies. *Academy of Management Journal*, 43(4), 605-626. doi:<https://doi.org/10.5465/1556357>
- Raza, A., Farrukh, M., Iqbal, M. K., Farhan, M., & Wu, Y. Corporate social responsibility and employees' voluntary pro-environmental behavior: The role of organizational pride and employee engagement. *Corporate Social Responsibility and Environmental Management*. doi:<https://doi.org/10.1002/csr.2109>
- Robertson, J. L. (2018). The Nature, Measurement and Nomological Network of Environmentally Specific Transformational Leadership. *Journal of Business Ethics*, 151(4), 961-975. doi:<https://doi.org/10.1007/s10551-017-3569-4>
- Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior*, 34(2), 176-194. doi:<https://doi.org/10.1002/job.1820>
- Robertson, J. L., & Carleton, E. (2018). Uncovering How and When Environmental Leadership Affects Employees' Voluntary Pro-environmental Behavior. *Journal of Leadership & Organizational Studies*, 25(2), 197-210. doi:<https://doi.org/10.1177/1548051817738940>
- Rupp, D. E., & Mallory, D. B. (2015). Corporate Social Responsibility: Psychological, Person-Centric, and Progressing. *Annual Review of Organizational Psychology and Organizational Behavior*, 2(1), 211-236. doi:<https://doi.org/10.1146/annurev-orgpsych-032414-111505>
- Rupp, D. E., Shao, R., Thornton, M. A., & Skarlicki, D. P. (2013). Applicants' and employees' reactions to corporate social responsibility: The moderating effects of first-party justice perceptions and moral identity. *Personnel Psychology*, 66(4), 895-933. doi:<https://doi.org/10.1146/annurev-orgpsych-032414-111505>
- Saifulina, N., & Carballo-Penela, A. (2017). Promoting Sustainable Development at an Organizational Level: An Analysis of the Drivers of Workplace Environmentally Friendly Behaviour of Employees. *Sustainable Development*, 25(4), 299-310. doi:<https://doi.org/10.1002/sd.1654>
- Shah, S. H. A., Cheema, S., Al-Ghazali, B. M., Ali, M., & Rafiq, N. (2020). Perceived corporate social responsibility and pro-environmental behaviors: The role of organizational identification and coworker pro-environmental advocacy. *Corporate Social Responsibility and Environmental Management*, 28(1), 366-377. doi:<https://doi.org/10.1002/csr.2054>
- Slovic, P. (1966). CUE-CONSISTENCY AND CUE-UTILIZATION IN JUDGMENT. *American Journal of Psychology*, 79(3), 427-&. doi:<https://doi.org/10.2307/1420883>
- Tian, Q., Liu, Y., & Fan, J. H. (2015). The effects of external stakeholder pressure and ethical leadership on corporate social responsibility in China. *Journal of Management & Organization*, 21(4), 388-410. doi:<https://doi.org/10.1017/jmo.2015.14>
- Tian, Q., & Robertson, J. L. (2019). How and When Does Perceived CSR Affect Employees' Engagement in Voluntary Pro-environmental Behavior? *Journal of Business Ethics*, 155(2), 399-412. doi:<https://doi.org/10.1007/s10551-017-3497-3>

- Tourigny, L., Han, J., Baba, V. V., & Pan, P. (2019). Ethical Leadership and Corporate Social Responsibility in China: A Multilevel Study of Their Effects on Trust and Organizational Citizenship Behavior. *Journal of Business Ethics*, 158(2), 427-440.
doi:<https://doi.org/10.1007/s10551-017-3745-6>
- Tudor, T. L., Barr, S. W., & Gilg, A. W. (2008). A novel conceptual framework for examining environmental behavior in large organizations - A case study of the Cornwall National Health Service (NHS) in the United Kingdom. *Environment and Behavior*, 40(3), 426-450.
doi:<https://doi.org/10.1177/0013916507300664>
- Van Aswegen, A. S., & Engelbrecht, A. S. (2009). The relationship between transformational leadership, integrity and an ethical climate in organizations. *SA Journal of Human Resource Management* 7(1). Retrieved from <http://hdl.handle.net/10019.1/96465>
- Vicente-Molina, M. A., Fernandez-Sainz, A., & Izagirre-Olaizola, J. (2013). Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of university students from emerging and advanced countries. *Journal of Cleaner Production*, 61, 130-138.
doi:<https://doi.org/10.1016/j.jclepro.2013.05.015>
- Wagner, T., Lutz, R. J., & Weitz, B. A. (2009). Corporate Hypocrisy: Overcoming the Threat of Inconsistent Corporate Social Responsibility Perceptions. *Journal of Marketing*, 73(6), 77-91.
doi:<https://doi.org/10.1509/jmkg.73.6.77>
- Waldman, D. A., Siegel, D. S., & Javidan, M. (2006). Components of CEO transformational leadership and corporate social responsibility. *Journal of Management Studies*, 43(8), 1703-1725.
doi:<https://doi.org/10.1111/j.1467-6486.2006.00642.x>
- Wang, X. D., Zhou, K., & Liu, W. X. (2018). Value Congruence: A Study of Green Transformational Leadership and Employee Green Behavior. *Frontiers in Psychology*, 9.
doi:<https://doi.org/10.3389/fpsyg.2018.01946>
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management Journal*, 40(1), 82-111.
doi:<https://doi.org/10.5465/257021>
- White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica: journal of the Econometric Society*, 817-838.
doi:<https://doi.org/10.2307/1912934>

TABLE 1 Constructs, items and factor loadings

Construct	Items	Factor loading λ_{yi}
Green advocacy (Kim et al., 2017)	I try to convince my group members to reduce, reuse, and recycle office supplies in the workplace	.717
	I work with my group members to create a more environmentally-friendly workplace	.753
	I share knowledge, information, and suggestions on workplace pollution prevention with other group members	.730
Environmentally-specific transformational leadership (Saifulina & Carballo-Penela, 2017)	My supervisor specifies the importance of having a strong sense of environmental purpose.	.870
	My supervisor talks about his/her most important values and beliefs regarding the environment.	.922
	My supervisor talks enthusiastically about what generally needs to be accomplished regarding the environment.	.896
	My supervisor gets me to look at environmental problems from many different angles.	.858
	<i>My supervisor helps me to develop my strengths.</i>	
	<i>My supervisor goes beyond self-interest for the good of the group.</i>	
Environmental CSR (Farooq et al., 2014)	My company participates to the activities which aim to protect and improve the quality of the natural environment	.737
	My company makes investment to create a better life for the future generations	.826
	My company implements special programs to minimize its negative impact on the natural environment	.782
	My company targets a sustainable growth which considers to the future generations	.837
Organizational environmental support (Saifulina & Carballo-Penela, 2017)	My organization has many programs and policies designed to promote environmentally friendly behaviour.	.729
	My organization makes an active effort to help employees be environmentally pro-active.	.749
	My organization puts money and effort into showing its support of ecology.	.799
	It is easy to find out about environmental support programs within my organization.	.716
	My organization provides its employees with useful information they need to behave in an environmentally friendly way.	.728
Leadership integrity (Moorman et al., 2012)	My leader acts to benefit greater good	.614
	My leader treats people fairly	.874
	My leader protects the rights of others	.821
	My leader treats people with care and respect	.831
	My leader serves to improve society	.696
	My leader is honest	.894
	My leader shows priorities he/she describes	.826
	My leader will do what he/she says	.780
	My leader conducts self by espoused values	.807
	My leader will do what he/she preaches	.776
	My leader delivers on promises	.804
	<i>Things my leader promised will happen</i>	
	My leader does right even when unpopular	.738
	<i>My leader stands by principles no matter the price</i>	
	My leader acts on values no matter the cost	.649
	<i>My leader is not afraid to stand up for his/her beliefs</i>	

TABLE 2 Correlation matrix

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Green advocacy	3.514	.769	(.777)							
2. Environmentally-specific transformational leadership	3.298	.857	.571**	(.936)						
3. Environmental CSR	4.119	.704	.403**	.347**	(.872)					
4. Organizational environmental support	3.788	.656	.493**	.491**	.602**	(.860)				
5. Leadership integrity	4.169	.636	.227**	.425**	.244**	.330**	(.954)			
6. Gender [‡]	-	-	-.100 [†]	-.001	-.127**	-.061	.053	-		
7. Age	39.833	10.458	.207**	.155**	.156**	-.178*	-.118*	.104*	-	
8. Tenure	5.25	4.528	-.020	-.102 [†]	.059	-.010	-.205**	.105*	.378**	-

If applicable, Cronbach's alphas are reported on the diagonal in parentheses.

[†] $p < .1$ * $p < .05$, ** $p < .01$, *** $p < .001$.

[‡]Gender was dummy coded as 0 = man, 1 = woman.

TABLE 3 Standardized and unstandardized regression outcomes

	Model 1 Green advocacy		Model 2 Environmental CSR		Model 3 Organizational environmental support		Model 4 Green advocacy	
	B (SE)	β (SE)	B (SE)	β (SE)	B (SE)	β (SE)	B (SE)	β (SE)
Constant	2.971*** (.160)	.001 (.051)	3.031** (.196)	.001 (.048)	2.375*** (.214)	.001 (.045)	1.928*** (.181)	-.028 (.052)
Gender [‡]	-.185* (.082)	-.116* (.051)	-.210** (.074)	-.143** (.050)	-.099 (.064)	-.073 (.047)	-.135* (.069)	-.140** (.050)
Age	.019*** (.004)	.258** (.055)	.006 (.004)	-.090 (.058)	.007*** (.003)	.111* (.049)	.008* (.004)	.120* (.059)
Tenure	-.018 (.009)	-.105 (.055)	.012 (.008)	.075 (.053)	.001 (.007)	.004 (.049)	-.005 (.007)	.080 (.053)
Environmentally-specific transformational leadership	.494*** (.039)	.550*** (.044)	.280*** (.045)	.341*** (.055)	.363*** (.039)	.475*** (.051)	.381*** (.056)	.424*** (.063)
Environmental CSR (M ¹)					.453*** (.047)	.486*** (.050)	.125* (.063)	.115* (.058)
Organizational environmental support (M ²)							.221** (.072)	.189** (.062)
Leadership integrity x Environmentally-specific Transformational leadership			.087† (.049)	.067† (.038)			.134* (.067)	.095* (.047)
Conditional direct effect	low (-1sd)		B = .296, 95% CI = [.137 ; .455] β = .329, 95% CI = [.150 ; .509]					
	mean		B = .381, 95% CI = [.270 ; .492] β = .424, 95% CI = [.299 ; .550]					
	high (+1sd)		B = .466, 95% CI = [.351 ; .581] β = .519, 95% CI = [.389 ; .649]					
Indirect effect	X - M ¹ - Y		B = .039, 95% CI = [.001 ; .079] β = .039, 95% CI = [.001 ; .087]					
	X - M ² - Y		B = .060, 95% CI = [.020 ; .096] β = .060, 95% CI = [.023 ; .105]					
	X-M ¹ -M ² -Y		B = .029, 95% CI = [.010 ; .053] β = .032, 95% CI = [.012 ; .059]					
Conditional indirect effect (X - M ¹ - M ² - Y)	low (-1sd)		B = .016, 95% CI = [.001 ; .035] β = .018, 95% CI = [.001 ; .040]					
	mean		B = .022, 95% CI = [.006 ; .042] β = .024, 95% CI = [.007 ; .047]					
	high (+1sd)		B = .027, 95% CI = [.008 ; .052] β = .030, 95% CI = [.009 ; .058]					
F	8.594***		13.948***		27.094**		33.054**	
R ²	.067		.155		.257		.424	

† $p < .1$ * $p < .05$, ** $p < .01$, *** $p < .001$.

‡ Gender was dummy coded as 0 = man, 1 = woman

