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The Influence of the Immediate Manager on the Avoidance of Non-green Behaviors in the Workplace: A Three-Wave Moderated-Mediation Model

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Abstract

Although it has been recognized that employees regularly engage in non-green behaviors, little research has been conducted to explain how these behaviors may be avoided. Using data from a three-wave study, this study tested a moderated-mediation model in which trust in the immediate manager was expected to increase the indirect effect of supervisory support for the environment on nongreen behaviors through employee environmental commitment. While the findings showed, as predicted, that exchange relationships with the immediate manager reduce the tendency of employees to engage in non-green behaviors, the indirect effect of supervisory support on non-green behaviors through employee environmental commitment was moderated at a low level of trust in the manager, contrary to predictions. Though unexpected, this result seems less surprising when discussed in the light of negotiated exchange, suggesting that employee efforts to avoid non-green behaviors need to be seen as the result of a deal between managers and subordinates. The findings of this study contribute to the emerging literature on social exchange in an environmental context and have implications for organizations seeking to achieve environmental sustainability.

Keywords: Non-green behaviors, Supervisory support, Trust in manager, Employee environmental commitment, Longitudinal design.

Introduction

It is now difficult to deny the detrimental role of human activities on the natural environment (Goudie 2013). The influence of organizations is recognized in this regard as being particularly significant (Davis and Challenger 2009). Previous research on environmental sustainability in organizational settings has tended to neglect the individual level in favor of the institutional and organizational levels (Aguinis and Glavas 2012). Though limited, previous research among employees has focused almost exclusively on behaviors geared toward environmental protection (also called green behaviors) (Norton et al. 2015). However, using a large survey conducted in the USA (407 interviews in 249 firms) and Europe (208 interviews in 70 firms across 14 countries), Ones and Dilchert (2012) showed that workers recognized engaging in non-green behaviors on a regular basis.

Ohtomo and Hirose (2007) argued that, in general, ‘‘ecofriendly behaviors are often regarded as more effortful and costly than eco-unfriendly behaviors’’ (p. 123). Their study found that individuals’ willingness to engage in eco-unfriendly behaviors in their everyday life is a reflection not of their intention to go against established norms so much as an unwillingness related to situational considerations. By extension, in workplace settings, unintentional decision making leading to non-green behaviors may simply be explained by difficulties encountered by individuals that discourage them from behaving in eco-friendly ways. In other words, the findings suggest that employees are less likely to make efforts when they are not encouraged to act in an environmentally responsible way. By contrast, research has found that the likelihood of achieving environmental sustainability increases when employees are encouraged by their supervisor to behave in an eco-friendly way in their job (e.g., Bissing-Olson et al. 2013; Norton et al. 2015; Raineri and Paille´ 2016). Surprisingly, little research conducted in the workplace has explicitly focused on the extent to which immediate managers lead their subordinates toward the avoidance of non-green behaviors.

The purpose of this paper is to address this question. In so doing, current knowledge will be extended in two main ways. First, as predicted, it is shown that the combination of supervisory support for the environment with employee environmental commitment contributes to the avoidance of non-green behaviors. Second, this research shows that trust in the manager plays a role at low, but not high, levels. Though unexpected, this result is consistent with the

negotiated exchange process in which trust is typically low.

This paper also contributes to the flourishing debate about the fundamental role of care in organizational settings (Lawrence and Maitlis 2012). More particularly, the ethics of care has been advocated as an appropriate ethical guideline to achieve environmental sustainability in the workplace contexts (Paille´ et al. 2016; Sama et al. 2004; Sander-Staudt and Hamington 2011). According to Held (2006), ‘‘the central focus of the ethics of care is on the compelling moral salience of attending to and meeting the needs of the particular others for whom we take responsibility’’ (p. 10). Expressed as normative ethical theory (Gatzia 2011), the ethical care perspective stresses on a set of moral values that encourage the care givers (i.e., the immediate managers) to be attentive to the needs of the cared for (i.e., the subordinates) by giving them the means to develop their capabilities (Hawks 2011). In this regard, echoing an ethic of care, the immediate managers have the moral responsibility to build and nurture caring relationships with their subordinates through the development of their capabilities in order to help them avoid engaging in non-green behaviors.

The paper is structured as follows. First, the relevant literature is presented, and the hypotheses of the study are explained. Second, the methodology is presented. Third, the results are presented in detail. Finally, the main contributions and limitations of the study are discussed.

Theoretical Background and Hypotheses

Social Exchange in an Environmental Sustainability Context

Support, commitment and trust are usually examined from the point of view of social exchange theory (SET) in the prediction of work-related outcomes (e.g., Lavelle et al. 2007). Interestingly, care ethicists have also emphasized support, commitment and trust as important ingredients for shaping moral conducts in organizational context (Oxley and Wittkower 2011). Before reviewing the relevant literature (from which the hypotheses of this study derive), a brief overview of the key tenets of social exchange is provided.

According to Blau (1964), social exchanges refer to ‘‘the voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others’’ (p. 91). Exchange among partners can

be (a) negotiated when based on explicit agreement or (b) reciprocal when giving and receiving across time fosters relationships over time. In short, according to Molm et al. (2000), while in reciprocal exchange individuals ''initiate exchanges individually, by performing a beneficial act for another'' (p. 1399), in negotiated exchange they ''are agreed upon at the same time, and the benefits for both exchange partners are easily identified as paired contributions that form a discrete transaction'' (p. 1399). The remainder of this paper focuses on the specific form of reciprocal social exchange. The obligation to reciprocate is explained by the moral debt that arises in partnerships (Gouldner 1960), contributing to the mutual reinforcement of long-term relationships founded on the willingness of parties to maintain a sustainable collaboration (Ekeh 1974). Therefore, reciprocation between partners shapes longterm relationships based on continuity by which ''the output from a past transaction can be the resource exchanged in a future transaction'' (Cropanzano and Mitchell 2005: 889).

Social exchange has recently emerged as a useful framework in the environmental field. Interestingly, current research points to behavioral patterns similar to those found in other areas of research, including human resource management and organizational behavior (see Lavelle et al. 2007). In short, employees tend to reciprocate via extra efforts geared toward the environment that go beyond their job requirements when they feel supported to achieve sustainability objectives (e.g., Cantor et al. 2015). Prior research has focused on green behaviors. By contrast, non-green behaviors have yet to be examined from the point of social exchange. In this respect, SET also has the potential to further our understanding of the underlying social processes that lead organizational members to align their efforts to avoid non-green behaviors.

One final note has to regard whether individual efforts to avoid non-green behavior can be performed alongside other types of work behavior. Individuals are embedded in a social exchange network (Cole et al. 2002), and may initiate exchange relationships with numerous partners (or targets) at different levels (Lavelle et al. 2007) by returning favors through a wide range of work-related behaviors (Cropanzano and Mitchell 2005). Schaninger and Turnipseed (2005) have found that forms of exchanges are summative rather compensatory indicating that employees may achieve different work-related outcomes associated with separate sources of exchange. This finding has led Schaninger and Turnipseed (2005) to the conclusion that ''the

reciprocity is given at the same level to the donor'' (p. 216). In sum, this means that individual extra efforts in the avoidance of non-green behavior are not contingent to extra efforts undertaken in other activity domains.

Defining Non-green Behaviors

Ones and Dilchert (2012) define employee green behaviors as ''scalable actions and behaviors that employees engage in that are linked with and contribute to or detract from environmental sustainability'' (p. 87). This definition suggests that employees may not only behave in an environmentally friendly way in their daily life at work but may also perform actions that harm rather than protect the environment. According to Ones and Dilchert (2012), using raw materials from unsustainable sources, failing to separate trash despite containers being available, being unwilling to compromise one's own comfort to reduce energy use or leaving the office without turning off the lights are all examples of non-green behaviors that are common in the workplace.

Ones and Dilchert (2012) suggested that non-green behaviors should be viewed as a form of counterproductive work behavior (CWB). Although non-green behaviors can be examined from the perspective of previous research on CWBs, it is important to note that the literature is often presented as heterogeneous and as a framework in progress (Belot and Schro¨der 2013). With this caveat in mind, the aim here is to offer some benchmarks with a view to providing a better understanding of the reasons why nongreen behaviors can be associated with some forms of CWBs.

According to Robinson and Bennett (1995), CWB may be defined as ''voluntary behavior that violates significant organizational norms and in so doing threatens the wellbeing of an organization, its members, or both'' (p. 556). By crossing both the target (organization and members) and the degree of the offense (serious and minor), CWBs are typically arranged into four categories. Robinson and Bennett (1995) posited that CWB toward organizational members can be serious (e.g., personal deviance in the form of physical assault) or minor (e.g., political deviance in the form of gossip about others) and that CWB toward the organization can also be serious (e.g., property deviance in the form of sabotage) or minor (e.g., production deviance in the form of wasting resources). Personality traits are recognized as important factors in the prediction of CWBs. For example, Penney et al. (2011) argued that

‘‘highly conscientious employees are, in general, less likely to invest their energy, attention, and other resources in behaviors that consume resources without offering sufficient return in facilitating goal achievement’’ (p. 61). An appropriate framework for the conceptualization of nongreen behaviors is thus offered by the CWB literature, with harmful behaviors toward the environment being expressed in various degrees.

No research was found in the literature to date on employee intention to explicitly harm the natural environment. However, it seems reasonable to posit that nongreen behaviors may derive from an accumulation of individual misjudgment, reflecting a specific form of minor organizational CWBs, sometimes referred to as sloppy work (Belot and Schro¨der 2013), also akin to production deviance (Robinson and Bennett 1995). Recent research has shown that sloppy work is better explained by recurrent misbehavior deriving from a low level of effort rather than a lack of skills to perform a set of tasks well (Belot and Schro¨der 2013). Therefore, by drawing on the findings of previous work, non-green behaviors may be said to merely reflect an accumulation of minor behavioral deviations or minor individual decisions that detract from environmental sustainability (e.g., Lamm et al. 2013). Inappropriate environmental acts performed by individuals in their daily work, such as wasting energy, may therefore merely be a reflection of a lack of environmental concern at work without any purposeful intention per se to harm the natural environment. In this regard, lack of engagement may simply be caused, for instance, by a disregard for the environment as an important issue, insufficient knowledge, selfishness or lack of reflection on the consequences of one’s actions (e.g., Gifford 2011).

Therefore, by moving away from the sustainable performance expected by the organization, employees’ nongreen behaviors may be likened to CWB in the specific form of the so-called production deviance (Robinson and Bennett 1995). An overview of the environmental literature indicates that several key features may contribute to explaining non-green behavior as a form of production deviance. The study will now examine the extent to which these features are likely to affect the achievement of corporate environmental performance. Depending on the context, employees may experience different pressures stemming from how they perceive the extent to which their organizations have embedded and prioritized environmental issues. The findings of Harris and Crane (2002) support the idea that ‘‘the actions of stakeholders such as consumers,

pressure groups and regulators clearly have a role to play in molding managers' performance beliefs'' (p. 230). These environmental questions are typically incorporated within the organization at different levels, referring more often than not to institutional, organizational and individual considerations (Norton et al. 2015).

The first key feature to consider is the extent to which environmental sustainability issues are embedded into job descriptions. According to Motowidlo (2003), ''job performance is defined as the total expected value to the organization of the discrete behavioral episodes that an individual carries out over a standard period of time'' (p. 39). Most management researchers agree that job performance typically covers two sets of behaviors known as inrole and extra-role performance (or task and contextual performance, respectively). Miller et al. (2008) posited that ''while in-role performance encompasses the technical duties necessary for the successful execution of the job, extra-role performance involves the execution of acts not necessarily described in a job description'' (p. 212). Recent research on environmental sustainability in an organizational context has supported the distinction between taskrelated (in-role) and proactive (extra-role) green behaviors (e.g., Bissing-Olson et al. 2013; Dumont et al. 2016; Norton et al. 2014). However, the distinction between inrole and extra-role behaviors appears insufficient to understand how non-green behaviors should be considered in work settings. Tudor et al. (2007) reported that lack of time may affect the willingness of healthcare employees to engage in sustainable waste management actions in their jobs. Lamm et al. (2013) also suggested that employees may think it necessary to be constantly attentive to the integration of environmental sustainability in their jobs as a form of hindrance to the achievement of their job requirements. This leads to the question of employee discretion to make efforts toward achieving job greening. Employees may feel burdened if, in order to take care of the environment, they must tap into resources (such as time) assigned to their job tasks but not specifically allocated to environmental protection.

The second factor to consider is the degree to which non-green behaviors may be explained by low social norms or by the lack of a green work climate. Research in the sustainable environmental context has often emphasized the importance of the internalization of moral rules (i.e., personal norms), as well as the individual's alignment on what he or she believed that others expected in terms of attitude and behavior (i.e., social norms). The literature in

this area has often produced results indicating that when employees perceive these norms throughout the workplace they tend to engage in pro-environmental behavior (e.g., Greaves et al. 2013). Interestingly, it has been shown that social norms may stem from the existence of a green organizational culture that shapes employees' perception of the organization's and work group's green work climate and in turn positively influences task-related and proactive green behaviors, respectively (Norton et al. 2014, 2015). Conversely, this may indicate that non-green behavior such as not sorting waste in the appropriate bin or not switching the computer off when leaving the office could be explained by the absence of a green work climate or by low social norms in the workplace. Although these behavioral deviations may seem mundane when considered on a small scale (i.e., at an employee level), they can prevent, in the aggregate, the achievement of environmental sustainability (Lamm et al. 2013; Ones and Dilchert 2012; Raineri and Paille´ 2016).

Finally, the foregoing developments suggest that nongreen behaviors may be explained by the content of job descriptions and the degree to which personal and social norms shape the green climate within the workplace. Depending on their interpretation, managers may consider non-green behaviors such as the manifestation of counterproductive behaviors that can affect or impede the achievement of environmental performance. In this context, managers have an important role to play in the avoidance of non-green behaviors.

Supervisory Support for the Environment, Employee Environmental Commitment and Non-green Behaviors

Having defined and examined how non-green behaviors can affect the achievement of environmental performance, this section will consider how supervisory support for the environment and employee environmental commitment is related to non-green behaviors.

Research on environmental sustainability has extensively documented the extent to which managerial support encourages employees to engage in environmental initiatives (Cantor et al. 2012; Raineri and Paille´ 2016; Ramus 2001; Ramus and Steger 2000; Ramus and Killmer 2007). Ramus and Steger (2000) developed the concept of supervisory support (for the environment) by focusing on a specific set of managerial behaviors leading employees to perform individual-level initiatives in favor of the environment.

Ramus and Steger reported that ‘‘employees would be more likely to have tried to promote an environmental initiative if they perceived that their supervisors were using supportive daily behaviors’’ (p. 611). Drawing on the literature on both learning and empowerment, Ramus and Steger outlined the nature of the support provided by supervisors to achieve environmental sustainability, including practices such as innovation (i.e., encouragement of risk taking to implement new ideas), competence building (i.e., employee education and training), communication (i.e., fostering face-to-face communication), information dissemination (i.e., sharing decisions about selected policies), rewards (i.e., recognition of efforts made) and responsibilities (setting autonomy on the job). However, the most convincing definition is provided by Cantor et al. (2012), who proposed to define supervisory environmental support as ‘‘the employee’s belief that the supervisor provides subordinates with the resources and feedback needed to participate in environmental initiatives’’ (p. 35). In a social exchange context, support stems from the social approval through which individuals justify their decisions and actions toward others (Blau 1964). Approval may result from the manager’s decision to devote resources to bolstering environmental issues. Regardless of their own beliefs about the urgency to reduce the impact of human activities on the environment, immediate managers may or may not incorporate environmental issues into their decisions on a discretionary basis (Fineman 1997). Accordingly, this means that managers provide their subordinates with the approval they need by enabling them to use the resources allocated to act in an environmentally responsible way in their job.

Social exchange theorists contend that commitment serves as repayment for support (Cropanzano and Mitchell 2005). The role of employee commitment in achieving environmental sustainability has recently emerged as a topic of interest in the literature (e.g., Mesmer-Magnus et al. 2012; Raineri and Paille´ 2016). In the current literature, environmental commitment has been seen in two main ways, as either a behavioral form or an attitudinal form. In the first case, commitment results from interventions leading individuals to engage in pro-environmental behavior (e.g., Unsworth 2015). These interventions seek to induce long-term changes by modifying individual behavioral patterns (Werner 2013). Consistent with Salancik (1977), this form of commitment is behavioral and reflects the degree to which an individual is engaged by his or her act. The second form, i.e., the attitudinal form of environmental commitment, has emerged more recently.

Mesmer-Magnus et al. (2012) proposed to define individual environmental commitment as the ‘‘extent to which an individual is dedicated to environmental sustainability and is willing to engage in pro-environmental behaviors’’ (p. 159). More recently, Raineri and Paille´ (2016) defined employee environmental commitment as ‘‘a frame of mind denoting both a sense of attachment and responsibility to environmental concerns’’ in the workplace (p. 134). These definitions emphasize an important dimension: the degree to which an individual is dedicated to the environmental cause. To better understand how nature is value-laden by employees at their own level in terms of sustainability, it may be worthwhile to distinguish briefly between ecocentrism and technocentrism.

Sustainability ‘‘refers to a moral way of acting, and ideally habitual, in which the person or group intends to avoid deleterious effects on the environmental, social, and economic domains’’ (Ban˜on Gomis et al. 2011, p. 176), while ecocentrism ‘‘maintains that natural ecosystems possess value in their own right, independent of their value to humans’’ (Bell and Greene 2001, p. 30), and technocentrism ‘‘incorporates both an acceptance of market economy principles and the centrality of technology, planning and management, for the addressing of contemporary problems’’ (Henry and Jackson 1996, p. 19). According to these definitions, employees may work more or less sustainably depending on the extent to which they place the natural environment at the heart of their concerns. Gladwin et al. (1995) noted that, for different reasons, neither ecocentrism nor technocentrism have succeeded in integrating sustainability components (i.e., inclusiveness, connectivity, equity, prudence and security). They also argued that ‘‘a prosperous economy depends on a healthy ecology, and vice versa’’ (p. 893) and suggested that greening organizations is likely best achieved when individuals strive to implement sustainability criteria that achieve an adequate compromise between ecocentrism and technocentrism (what they refer to as the sustaincentric paradigm). Thus, drawing on the suggestion made by Gladwin et al. (1995), employees may best contribute to corporate greening when they base their environmental commitment on values that ensure a balance between ‘‘satisfying human needs’’ and ‘‘nature preservation’’.

In summary, based on the above and recent research pointing to a positive relationship between supervisory support and employee commitment to the environment (Cantor et al. 2015; Raineri and Paille´ 2016), it seems reasonable to assume that employee commitment increases

when employees perceive that their supervisor demonstrates concern about environmental issues by allocating appropriate resources (i.e., high supervisory support for the environment). Therefore, the following relationship can be expected:

Hypothesis 1: Supervisory support is positively related to employee environmental commitment.

Mesmer-Magnus et al. (2012) argue that individual environmental commitment is one of the three main pillars leading to environmental sustainability (the other two being employee commitment to the organization and organizational commitment to environmental sustainability). Drawing on the literature on employee commitment, Mesmer-Magnus et al. (2012) also found that ‘‘employees highly (affectively) committed to their organization are likely to adopt and act in accordance with organizational sustainability initiatives’’ (p. 167). In other words, environmental employee commitment increases their proneness to act in a pro-environmental way by performing green behaviors and decreases their likelihood to behave in an unfriendly way toward the environment in their job.

Subsequent research has only focused on the effect of employee commitment on green behaviors (Lamm et al. 2013; Paille´ and Boiral 2013; Temminck et al. 2015). Although a positive relationship has been found, it should be noted that in these studies employee commitment to the organization is based on Meyer and colleagues’ conceptualization referring to employee commitment as an ‘‘emotional attachment to the organization such that the strongly committed individual identifies with, is involved in, and enjoys membership in, the organization’’ (Allen and Meyer 1990, p. 2). Finally, the effect sizes reported range from .11 (Lamm et al. 2013) to .34 (Paille´ and Boiral 2013). These should be considered as medium (Bosco et al. 2015).

Lavelle et al. (2007) argued for consistency by recommending the adoption of the ‘‘target similarity effect,’’ which suggests that it is more appropriate to predict a work outcome directed toward an entity of interest by using predictors focused on the same entity. This suggests that green behaviors are in all likelihood better predicted by employee environmental commitment than by employee commitment to the organization. In this regard, significant positive effect sizes have been reported between employee environmental commitment and green behaviors, providing evidence for the relevance of the ‘‘target similarity effect’’

in the context of environmental sustainability (Cantor et al. 2012; Raineri and Paille´ 2016).

By contrast, little research has examined the effect of employee environmental commitment on non-green behaviors. However, based on prior findings showing a positive effect of environmental commitment on green behavior, it may be assumed that the greater the level of environmental commitment, the lower the tendency to engage in non-green behavior. Therefore, this study draws on findings from the general literature on employee organizational commitment and CWB to shape a hypothesis concerning the relationship between employee environmental commitment and non-green behaviors.

The meta-analytic findings of Dalal (2005) indicate a significant and negative relationship suggesting that highly committed employees are less likely to engage in CWB. Using the core premise of social exchange, Thau et al. (2007) reported that in a context of fair exchange subordinates tend to avoid counterproductive behaviors that go against the interests of their managers. By extension, it may be argued that employees who are highly committed to the environment tend as far as possible to minimize harmful actions that can have detrimental effects on environmental sustainability. Finally, it seems reasonable therefore to hypothesize an indirect effect of supervisor support on nongreen behaviors through employee environmental commitment. The following relationships are therefore expected:

Hypothesis 2: Employee environmental commitment is negatively related to non-green behaviors.

Hypothesis 3: Employee commitment to the environment mediates the relationship between supervisory support and employee non-green behaviors.

The Moderating Effect of Trust in a Manager

The final hypothesis involves testing the moderating effect of trust in the manager in the indirect effect of supervisory support on non-green behaviors through employee environmental commitment.

Tan and Tan (2000) proposed to define trust in a manager as ‘‘the willingness of a subordinate to be vulnerable to the action of his or her supervisor whose behavior and actions he or she cannot control’’ (p. 243). In the context of an exchange relationship between partners, vulnerability

and, more specifically, the willingness to be vulnerable refers to the acceptance by one party (i.e., the subordinate or the trustor) to be exposed to the decisions, gestures or actions of the other party (i.e., the manager or the trustee) by accepting the risk that the partner does not behave in the expected way. Vulnerability is the dominant perspective used in organizational research on trust (Nienaber et al. 2015).

In a social exchange context, trust is the underlying expression of the form of exchange linking partners. According to Gargiulo and Ertug (2006), trust is typically conceived as the signal that ''the trustor does not need to have any specific expectations about the intention of the trustee'' (p. 167). More specifically, in negotiated exchange trust between partners is minimized because the exact nature of obligations gives them the assurance that the transaction will be concluded. In reciprocal exchange, trust is emphasized since the donor is assured that the debtor will repay the moral debt at some point in the future (Blau 1964).

The topic of trust in an organizational context has been largely overlooked in the literature on environmental sustainability. Despite this, some research in the literature on both social psychology and business provides an initial insight into the role of trust in the context of environmental sustainability. For example, Blake (1999) sought ''to shed light on the value-action gap by asking the respondents themselves to identify the barriers or reasons that prevented them from carrying out particular environmental actions, despite a general concern for the environment'' (p. 265) in the context of local governance. Based on the results of face-to-face interviews, Blake found that individual action in favor of the natural environment can be affected by a lack of trust in partners (i.e., local government); even so, partners are still seen as the more appropriate actors for solving environmental problems. Interestingly, these results led Kollmuss and Agyeman (2002), in their theoretical ''model of pro-environmental behavior,'' to consider lack of trust as an important obstacle impeding individuals concerned with environmental questions from performing actions geared toward achieving environmental sustainability. In another study, Andersson et al. (2005) surveyed supervisors working in a multinational corporation to establish whether their perception of corporate commitment to sustainability, trust in top management, personal environmental beliefs and the degree to which they are committed to their firm motivate their behavioral support for corporate sustainability. The study found that the latter was only predicted by their perception of corporate commitment

to sustainability and did not find a significant effect for trust in top management or the other variables.

The research presented above tends to highlight situations in which one party (citizens and staff) has refused to be vulnerable to the decisions taken by another party (local government and top management), as well as circumstances in which partners (citizens and local authorities, and also top management and supervisors working for the same organization) have not yet accumulated sufficient interpersonal experience or have little or no interaction that would enable them to trust the partner's ability to manage environmental sustainability. Sustainability is often seen as an unfamiliar topic that assumes specific knowledge, requires alignment with a set of values, and also requires a willingness to make sacrifices at some levels (Davis et al. 2011). In the research referred to above, mistrust felt by one party might then likely be the expression of the perceived inability of another party to effectively address environmental issues. Accordingly, it is the contention of this study that trust in a manager plays an important role in the relationship between supervisory support for the environment and employee commitment to the environment, which, in turn, should reduce non-green behaviors. Specifically, subordinates who perceive their manager as a trustworthy partner who helps them to face obstacles are more likely to interpret support received as a form of encouragement to adopt a sustainable individual approach in daily work activities.

Nienaber et al. (2015) claimed recently that trust in a manager ''ensures enhanced performance of subordinates, and increases an organization's competitive advantage'' (p. 508). Drawing on this idea, the implication may be that if organizational representatives believe that a competitive advantage can be achieved through corporate greening, it would be useful to shed more light on the role of trust in a manager when the latter takes action in favor of the environment through support given to subordinates. Trust in a manager may be expected to interact with supervisory support for the environment to reinforce employees' environmental commitment and finally reduce their subsequent non-green behaviors. The following is therefore hypothesized:

Hypothesis 4: Trust in a manager will moderate the indirect relationship between supervisory support for the environment and non-green behaviors through employee environmental commitment such that this indirect relationship is stronger at high levels of trust in a manager.

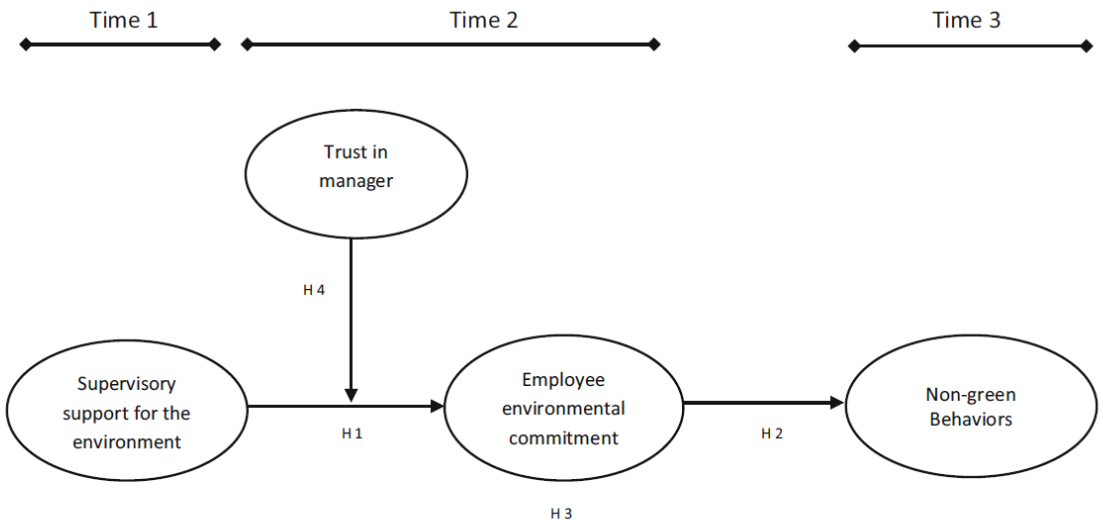

Fig. 1 Research model

Method

Sample, Procedure and Participants

As part of this study, a survey was conducted of employees previously enrolled in executive education programs of a major Mexican university. Participants were assured that information provided in the questionnaire would remain confidential and anonymous and would be used for research purposes only.

The study was designed to include temporal separation of measurement (Podsakoff et al. 2003). Participants were asked to complete three online surveys at three-month intervals. The first survey contained introductory information on the purpose of the study and a consent statement. The independent variable was measured at Time 1, the mediator and moderator variables were measured at Time 2 (3 months after Time 1) and the dependent variable was measured at Time 3 (3 months after Time 2). To control for method bias (e.g., retrieval of information from long-term memory, implicit theories), the survey at Time 2 did not include the independent variable and the survey at Time 3 included neither the independent variable nor the mediator and moderator variables (Podsakoff et al. 2003). Respondents were matched between surveys using a unique identifier linked to respondents' e-mail addresses. Matches between the unique identifier, and the corresponding e-mail address were destroyed at the end of the study to anonymize the data.

A pilot study was performed before sending out the questionnaire (N = 38). Because some items had never previously been used, the main aim of the pilot was to identify items that were unclear to avoid interpretation bias from interviewees.

Of the 500 individuals invited to participate, 342 individuals (68%) responded to the Time 1 questionnaire; of these, the responses of 33 participants were discarded because of missing data. The Time 2 questionnaire was completed by 206 individuals (67%), 165 of whom responded to the Time 3 questionnaire (80%). Five questionnaires were excluded because of insufficient data, limiting the final sample to 160 respondents. The majority of respondents were male (63.1%). Their age ranged from 22 to 66 years, with a mean of 43.1 (SD = 11.4). On average, respondents had 10.4 years (SD = 9.1) of organizational tenure. The sample was composed mainly of employees with a university degree (73.8%).

Measurements

Supervisory support for the environment was measured on a six-item scale comprising a set of statements identified by Ramus (2001) as being of value to employees (e.g., ‘‘My immediate superior makes sure that employees develop environmental skills’’; a = 96).

Employee environmental commitment was measured using the five-item scale developed by Raineri and Paille´ (2016). Sample items included ‘‘I really feel as if my company’s environmental problems are my own’’ and ‘‘I feel a sense of duty to support the environmental efforts of my own company’’ (a = 93).

Trust in the manager was measured using the three-item scale developed by MacKenzie et al. (2001; e.g., ‘‘I feel quite confident that my supervising manager will always try to treat me fairly’’; a = 88).

Because no measurement instrument was available in the literature to capture non-green behavior, six ad hoc items were generated based on theory and practice to assess employee behaviors that detract from environmental sustainability. The use of ad hoc constructs is a common practice in the study of environmental behaviors which are more often than not context-dependent (e.g., Delhomme et al. 2013). There is a consensus in the literature on environmental psychology broadly defined (i.e., conservation

psychology, green consumption, environmental workplace behavior) that activities that are harmful to the environment can be of two types. Individuals can either abstain from environmentally friendly actions (such as water and energy conservation) (Ohtomo and Hirose 2007) or actively harm the environment (such as polluting and destroying ecosystems) (Atkinson and Kim 2015). The items developed for the purposes of this study were designed to measure the former, i.e., employee disengagement from pro-environmental behaviors, since these were reported to be more prevalent and less risky (and thus less subject to social desirability and more amenable to quantitative analysis) than the latter (see Theotokis and Manganari 2015). This was consistent with the definition provided above in which non-green behaviors are seen as minor organizational CWBs, i.e., sloppy work deriving from an individual misjudgement about environmental sustainability. However, in order to be comprehensive, the scale was designed to include both relational and non-relational items. The expression of green behavior can be either direct (e.g., conservation behavior) or indirect (e.g., influencing others). Consequently, of the six items generated to measure non-green behavior at work, four items were designed to assess non-relational behaviors (i.e., ‘‘At work, I let others worry about environmental protection,’’ ‘‘I rely on technology to solve environmental problems at work, it’s not my business,’’ ‘‘I do not apply environmental standards that could slow my pace of work’’ and ‘‘In my workplace, I do not care about the consumption of water or electricity’’) and two items were designed to assess behaviors of a social nature (i.e., ‘‘In my work, I ask my collaborators and colleagues to prioritize productivity and not the environment’’ and ‘‘Whenever I have the chance, I tell my coworkers that environmental behaviors are a waste of time’’). While some items may represent somewhat more active behaviors than others, they all reflect disengagement from pro-environmental activities rather than intentional engagement in harmful behavior per se.

Exploratory factor analysis was performed to assess the reliability of the measures using principal-axis factor analysis with oblique rotation. The six items formed one distinct factor accounting for 47.2% of the common variance, with factor loadings ranging from .49 to .76. The measure yielded a reliability coefficient (Cronbach’s alpha) of .76, with corrected item-total correlations ranging from .42 to .63. These results are in line with the psychometric properties of well-established scales found in the environmental psychology literature, such as the New Ecological Paradigm (Dunlap et al. 2000) or general environmental

behaviors (e.g., Korfiatis et al. 2004), which are known to show suboptimal reliability, with Cronbach's alphas revolving around the .70 threshold value, due, for instance, to the broadness of the measures (Cordano et al. 2003). Thus, for a newly designed construct measuring a relatively general or broad concept, the psychometric properties of the non-green behavior scale proved satisfactory (Hair et al. 2010). Finally, Cronbach's alpha for the six-item scale is higher than the subscales reflecting ''non-relational behaviors'' and ''social nature'' (.67, and .64, respectively).

The scale ranged from 1 = strongly disagree to 7 = strongly agree. Finally, gender, age, organizational tenure and education were used as control variables because they are often assumed to influence employee sustainability practices (Klein et al. 2012).

Data Analyses

Consistent with the research model shown in Fig. 1, this study involved testing a moderated mediation by which the strength of the indirect effect of supervisory support for the environment (independent variable-IV) on non-green behavior (dependent variable) through employee environmental commitment (mediator) was contingent on the level of trust in the manager (moderator). The basic requirement for the mediation, as well as the conditional indirect effect, was that the confidence intervals (CIs) did not contain 0 (with n = 5000 bootstrap resamples). Before computing the product terms (supervisory support x trust in manager), standard skewness and kurtosis tests were performed to ensure the normality of each indicator. The IV and the moderator were then mean-centered to avoid multicollinearity (Cohen et al. 2003). Finally, the Sobel test (Sobel 1982) and the index of moderated mediation (Hayes 2015) were computed as inferential tests to assess whether the mediation and the conditional indirect effect were statistically significant.

Results

Confirmatory Factor Analyses

Confirmatory factor analyses were performed to examine the dimensionality of the data. The hypothesized four factors were compared with alternative measurement models that proposed combining some of the four factors into one factor. The difference Ch-square test and the difference AIC were used. The results reported in Table 1 indicate that the loading of the item ''I rely on technology

to solve environmental problems at work. It's not my business'' was below the standard cutoff of .5 (Hair et al. 2010). Thus, the measurement model was rerun by removing this item.

Table 1 Measurement model ($N = 160$)

	Loadings Standardized (unstandardized/standard error)
PSS-E (measured at Time 1) CR = .96	
My supervisor encourages environmental initiatives	.911 (1.17/.07)
My supervisor encourages employees to attend environmental training	.941 (1.12/.06)
My supervisor makes sure that employees have environmental competences needed to do their jobs	.895 (1.11/.07)
My supervisor openly engages in discussions around environmental topics	.882 (1.07/.07)
My supervisor gives complete and accurate information regarding environmental issues	.916 (1.13/.07)
My supervisor involves employees in environmental problems solving	.831 (1.00/.06)
Trust in manager (measured at Time 2) CR = .89	
I feel quite confident that my supervising manager will always try to treat me fairly	.680 (1.00/.14)
My supervising manager would never try to gain an advantage by deceiving his/her agents	.954 (1.57/.15)
I have complete faith in the integrity of my supervising manager	.914 (1.46/.14)
Employee environmental commitment (measured at Time 2) CR = .93	
I really care about the environmental concern of my organization	.786 (1.00/.09)
I really feel as if my organization's environmental problems are my own	.776 (0.99/.08)
I feel a sense of duty to subscribe to the environmental concern of my organization	.911 (1.12/.08)
I would feel guilty about not supporting the environmental efforts of my organization	.886 (1.09/.08)
I strongly value the environmental efforts of my organization	.927 (1.11/.08)
Non-green behavior (measured at Time 3) CR = .85	
In the workplace, I do not care about the consumption of water or electricity	.832 (1.04/.11)
At work, I let others worry about environmental protection	.797 (1.03/.13)
In my work, ask my colleagues to prioritize productivity and not the environment	.758 (1,02/.09)
Whenever I have the chance, I tell my coworkers that environmental performance is a waste of time	.669 (1,00/.08)
I do not apply environmental standards that could slow my pace of work	.617 (0.99/.12)
I rely on technology to solve environmental problems at work. It's not my business (removed)	.378 (0,85/.22)

CR composite reliability

Table 2 reported that the hypothesized four-factor model yielded a good fit to the data, v2 (220) = 343.54, p\.001, CFI = .95, RMSEA = .05, AIC = 455.5 and showed a better fit than the five other competing models. The distinctiveness of the variables of the study is thus supported. In addition, for all variables, the loading associated with each indicator was significant (p\.001).

Table 2 Confirmatory factor analysis

	χ^2	df	$\Delta\chi^2$	CFI	RMSEA	AIC
1. Four-factor model. Hypothesized model	343.5	200	–	.95	.05	455.5
2. Three factor model. Trust and support combined into one factor	648.0	224	304.5	.84	.10	752.4
3. Two-factor model 1. Trust, support and commitment combined into one factor	777.6	227	434.1	.79	.12	875.6
4. Two-factor model 2. Trust, commitment and NGB combined into one factor	974.7	229	631.2	.72	.14	1068.7
5. Two-factor model 3. Support, commitment and NGB combined into one factor	1366.5	229	1023	.58	.17	1460.5
6. One-factor model—this model combines the four variables into one factor	1594.6	230	1251.1	.49	.19	1686.5

$\Delta\chi^2$ indicate differences between the five-factor model and competing models

NGB non-green behaviors

Table 3 shows means, standard deviations and correlations among the variables of the study, as well as the average variance extracted (AVE) and Joreskog rhoˆ (q). AVEs and qs are above the recommended cutoff of .50 and .70, respectively (Hair et al. 2010). In addition, discriminant validity was evidenced since, for each pair of constructs, the average of their respective AVE was higher than their shared variance (i.e., the squared correlations reported in brackets).

Table 3 Correlation matrix

	1	2	3	4	5	6	7	8	AVE	ρ
1. Gender	–								–	–
2. Age	−.04 (.00)	–							–	–
3. Tenure	−.11 (.01)	.57 (.32)**	–						–	–
4. Education	−.03 (.00)	.09 (.00)	−.05 (.00)	–					–	–
5. Support	−.19 (.03)*	.23 (.05)**	.18 (.03)*	−.06 (.00)	–				.80	.96
6. Commitment	−.05 (.00)	.13 (.01)	.15 (.02)**	.01 (.00)	.41 (.16)**	–			.73	.93
7. Trust	−.13 (.01)	.06 (.00)	−.07 (.00)	.08 (.00)	.26 (.06)**	.26 (.06)**	–		.73	.89
8. Non-green behaviors	−.10 (.01)	−.11 (.01)	−.10 (.01)	−.04 (.00)	−.28 (.07)**	−.38 (.14)**	−.20 (.04)**	–	.56	.79
Mean	–	43.1	10.4	–	4.3	5.5	5.6	2.6	–	–
Standard deviation	–	11.4	9.1	–	1.6	1.0	1.3	1.1	–	–

** $p < .01$, * $p < .05$; Shared variances are given by the values in brackets

Hypothesis Testing

As shown in Table 4, the bootstrap analysis results indicate that Hypothesis 1 was supported by the data since supervisory support and employee environmental commitment are positively related (b = .15, SE = .04, t = 4.48, p\.001). As expected, Hypothesis 2 is also supported by the data since employee environmental commitment is negatively related to employee non-green behaviors (b = -.41, SE = .11, t = 3.78, p\.001).

Table 4 Results of hypotheses testing (Hypothesis 1, and Hypothesis 2)

Variable	Employee environmental commitment				Non-green behaviors			
	Coeff.	SE	*t*	*p*	Coeff.	SE	*t*	*p*
Control								
Gender (1 = male; 2 female)	−.04	.83	−.591	ns	−.11	1.07	−1.471	ns
Age	.19	.09	.890	ns	−.06	.12	−.285	ns
Tenure	.06	.09	−.289	ns	−.05	.12	−.246	ns
Education	.00	.48	.029	ns	−.03	.62	−.455	ns
Predictor								
Supervisory support (Hypothesis 1)	.155	.03	4.71	.001	−.088	.04	−1.92	.056
Trust in manager	.178	.09	1.98	.049	–	–	–	–
Environmental commitment (Hypothesis 2)	–	–	–	–	−.471	.10	−4.06	.001
Moderator								
Support × Trust	−.013	.00	−2.14	.033	–	–	–	–
F	$F(3, 156) = 14.72, p < .001$				$F(2, 157) = 16.11, p < .001$			
MSE	20.14				35.25			
R	.47				.41			
R^2	.22				.20			
ΔR^2	.18				.17			

Two-tailed *p* values lower than 0.05 were considered significant. Although one-tailed *p* value is below 0.05 for the effect of supervisory support on non-green behaviors (Coeff. = −.044; $p = 0.028$) (for details see Cho and Abe 2013), the direct effect (see Table 5) remains nonsignificant because the confidence interval straddles 0 (−.179; .002)

Hypothesis 3 predicted an indirect effect of supervisory support on non-green behaviors through employee environmental commitment. The standardized indirect effect was significant as the 95% CI did not contain 0 (b = -.07, SE = .02, 95% CI -.13, -.03). The result of the Sobel test (z = -3.28, SE = .02, p\.001) also confirmed that the indirect effect is significant. Thus, Hypothesis 3 was supported.

Hypothesis 4 predicted that trust in the manager moderates the indirect relationship between supervisory support and employee non-green behaviors through employee environmental commitment. The results are shown in Table 5. The product terms (supervisory x trust in manager) interacted negatively and significantly in the prediction of employee environmental commitment (b = -.013, SE = .01, t = -2.14, p = .033, DR2 = .02). Furthermore, whereas supervisory support and trust in a manager account for 19.8% of the variance of employee environmental commitment, the product terms account for an additional variance of 2%. To examine the interactive effect of supervisory support and trust in a manager on employee environmental commitment in greater detail, lines representing the relationship between supervisory support and employee environmental commitment were plotted at high and low levels of trust in a manager (±1 SD). The interaction effect is shown in Fig. 2. The relationship between supervisory support and employee environmental commitment is significant when trust in the manager is low (simple slope = .09, SE = .03, t = 2.89, p\.004) and

marginally significant when trust in the manager is high (simple slope = .05, SE = .03, t = 1.81, p = .07). The test measuring the difference between high trust and low trust indicated that a 95% bias-corrected bootstrap confidence interval was straddling 0 (-.009; .089), whereas a 99% bias-corrected bootstrap confidence interval did not contain 0 (.027; .052). Finally, Table 5 shows that the indirect effect of supervisory support on non-green behaviors through employee environmental commitment was significant both at high (-.04, 95% CI -.108, -.001) and low (-.08, 95% CI -.162, -.038) levels of trust in the manager. In addition, although the index of moderated mediation did not include 0 (Index: .0058, Boot SE = .0032, 95% CI .0001, .0128), the effect of trust in the manager (i.e., the moderator) on the indirect effect was marginally significant. In summary, as predicted by Hypothesis 4, these results indicate that trust in the manager does moderate the indirect relationship between supervisory support and employee non-green behaviors through employee environmental commitment. However, contrary to expectations, this indirect effect is weaker and not stronger at high levels of trust in the manager.

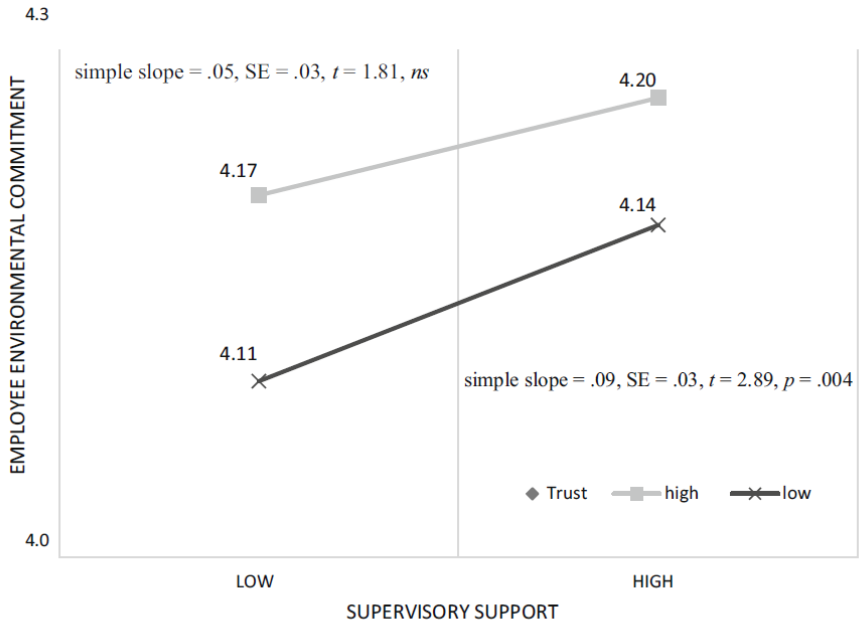

Fig. 2 Effects of supervisory support for the environment on employee environmental commitment at high and low values of trust in manager

Table 5 Results for conditional indirect effect at values of Trust in manager (Hypothesis 3, and Hypothesis 4)

	Coeff.	SE	95% CI	
			LL	UL
Direct effect of supervisory support on non-green behaviors	−.088	.04	−.179	.002
Indirect effect of supervisory support on non-green behaviors through environmental commitment (Hypothesis 3)	−.077	.03	−.139	−.029
Conditional indirect effect of supervisory support on non-green behaviors at values of trust (Hypothesis 4)				
Low trust in manager (−1 SD)	−.089	.03	−.162	−.038
High trust in manager (+1 SD)	−.041	.02	−.108	−.001

Discussion

Findings

The aim of this three-wave study was to examine the combined effect of supervisory support and trust in a manager on the avoidance of non-green behaviors in the workplace. The study found that the indirect effect of supervisory support on non-green behaviors through employee environmental commitment was moderated at a low level of trust in the immediate manager rather than at a high level as had been predicted. This research adds to the current literature by making several contributions.

The first of these concerns the role of trust in the manager in the area of environmental sustainability. Although trust has already been considered either empirically (Andersson et al. 2005; Blake 1999) or theoretically (Kollmuss and Agyeman 2002), the findings of this study extend prior research in the area. Consistent with expectations, the results indicate that trust in the manager had a moderating effect on the indirect effect of perceived supervisory support for the environment on non-green behaviors through employee commitment to the environment. A visual inspection of the plotted interaction provides further and important information. Figure 2 shows that, regardless of the level of supervisory support, environmental commitment was lower among employees with low trust in their manager and higher among employees with high trust in their manager. In addition, employee environmental commitment increased as a function of supervisory support only for employees who displayed low trust in their manager, since the slope for high trust in their manager was not significant. Though unexpected, the findings showing a stronger effect at a low level of trust seem nonetheless sensible, first when considering support and trust together and, second, when focusing on the form of social exchange (reciprocal and negotiated).

First, keeping the research design in mind, it is important to note that support was measured before trust, with a

time-lag of three months. The literature on trust posits that the level of trust is typically associated with risk taken and, as such, reflects the willingness to be vulnerable to the actions of another (Schoorman et al. 2007). Employees base their judgments about their managers' trustworthiness on their past actions and decisions (Dietz 2011). In addition, Molm et al. (2000) argued that ''repeated exchanges with the same partner also provide information about the other that reduces uncertainty and makes the other's behavior more predictable'' (p. 1405). Accordingly, employees' belief in their manager's ability to successfully support them may reduce the risk of behaving in an unfriendly way toward the environment. As such, it seems sensible to suggest that support received contributes to reducing employees' puzzlement about the intention of their manager to behave in an expected way toward environmental issues. Thus, the findings may suggest that a low of level of trust in managers tends to indicate that employees do not perceive themselves as taking a risk. Employees were confident that support for the environment is seen as an indicator of the ability of their supervisors to adequately take into account environmental sustainability. Finally, it may be speculated that supervisory support for the environment based on the accumulation of concrete actions and recurrent gestures gives appropriate information on managers' intentions and motivations toward environmental sustainability. As managers' intentions become clear over time, a low level of trust may suggest that subordinates feel no doubt about the support provided, and also feel confident about their ability to avoid nongreen behaviors.

Second, the form of exchange may explain the unexpected results relating to the role of trust in the context of non-green behavior avoidance. As noted above, the social exchange literature has found that relationships between partners can be based on either reciprocal or negotiated exchange. Social exchange is an emerging framework for the examination of employee engagement in the literature on environmental sustainability (Norton et al. 2015). Existing research in this area has focused more often than not on factors that encourage employees to engage in green behaviors. In accordance with the SET framework, and more particularly reciprocal exchange, research has shown repeatedly that employees are more likely to engage in green behavior through employee job attitudes when they feel supported by the organization or its members (e.g., Cantor et al. 2015; Lamm et al. 2013; Paille´ and Raineri 2015; Raineri and Paille´ 2016; Temminck et al. 2015).

Though intriguing, the findings are consistent with the literature on negotiated exchange, in which trust is typically low (Molm et al. 2000). As such, this study may be said to add to prior research on social exchange in the context of environmental sustainability. While it had been assumed that non-green behaviors were associated with reciprocal exchange, the findings suggest that in the context of the avoidance of non-green behavior a low level of trust in the manager may be interpreted as the manifestation of a negotiated exchange. Low trust is the individual expression of refraining to engage in extra efforts, whereas these are typically viewed as reciprocal exchange outcomes. This interpretation is consistent with Blau (1964), who contended that ‘‘trust between committed partners encourages them to engage in a variety of transactions’’ (p. 315). This may mean that employees tend to see the avoidance of nongreen behaviors as demanding. This context may have led them to negotiate (in the form of support received by their supervisor) the conditions under which they have accepted to roll with what they perceive to be a demanding transaction. This consideration may warrant further investigation in future research.

To this extent, the interest of this research is not only that it specifically addresses factors relating to the avoidance of non-green behaviors, but also that it provides findings suggesting that the role of trust signals that the avoidance of non-green behaviors has more to do with negotiated exchange than with reciprocated exchange. According to Gargiulo and Ertug (2006), exchange based on a high level of trust may place the trustor in a situation in which he or she tends to monitor the actions of the trustee less closely, which may in turn affect effective performance by reducing the alignment of interests and behaviors between partners. Extending this idea, it seems sensible to suggest that a low level of trust reflects the vigilance of employees toward how their managers support them in avoiding non-green behaviors.

One another contribution of this study relates to the measurement of non-green behaviors. According to the definition provided by Ones and Dilchert (2012), (non-)-green behaviors are scalable actions taken by individuals in their jobs. Whereas recent efforts have focused instead on the measurement of green behaviors (e.g., Boiral and Paille´ 2012; Erdogan et al. 2015; Temminck et al. 2015), it was surprising to find that no such measurement of non-green behaviors was available in the literature on environmental sustainability. It was felt therefore that a gap needed to be filled. To do so, a set of items was defined with the

intention of capturing several aspects of non-green behaviors. Overall, the newly developed scale provided adequate psychometric properties, even though the item ‘‘I rely on technology to solve environmental problems at work. It’s not my business’’ was removed from the analysis based on conservative standards (Hair et al. 2010).

Finally, ethicists interested in the environmental topic have repeatedly stated that being ethical toward the environment is to refrain from doing harm by doing what is good and appropriate (Becker 2012). In this regard, in the global context wherein care for the environment is posited as an end to contribute to a safer world, care ethicists have emphasized that organizations and their members have a critical role to play for achieving this end (Hawk 2011). In this paper we have addressed, although indirectly, how immediate managers may frame their relationship with their subordinates by enacting an ethical care perspective.

Practical Perspectives

This research has interesting practical perspectives for organizations seeking to become greener. Jackson et al. (2012) argued that organizations may achieve environmental sustainability by either implementing environmental management systems (EMS), greening organizational processes or greening the workforce. According to Palmer et al. (1995), it may be costly for an organization to implement EMS. All the organizations that want to become greener do not necessarily have the capacity to engage in such costly strategies. However, organizational greening can be achieved in other ways. When an organization has insufficient resources to set up EMS, environmental sustainability improvements may be achieved by helping employees to behave responsibly toward the environment. One way is to allow them to avoid non-green behaviors.

This research suggests that immediate managers may play a key role in the context of environmental sustainability. The findings suggest that employees are more likely to be committed to environmental issues and less likely to engage in non-green behaviors at work when they trust their immediate manager and when the latter provides appropriate support to achieve environmental sustainability. Cain et al. (2014) claimed that ‘‘the delegation of responsibilities is useful for promoting efficiency’’ (p. 522). Prior research conducted in an environmental context has shown that subordinates are more likely to legitimize support given by their supervisors when the former perceived that the latter are themselves supported by top

management (e.g., Paille´ et al. 2013). This means that top management may increase the latitude of immediate managers to ensure they are able to properly support their staff. Subordinates also tend to trust their supervisors when the latter demonstrate that they have some managerial skills, including ability, competence or benevolence (Nienaber et al. 2015). Trust among organizational members can be enhanced through the promotion of practices such as knowledge sharing (Mooradian et al. 2006).

Care ethicists have recurrently stressed the critical role of senior management to build a caring context within the organization. Corporations should be aware that the provision of care assumes, at minimum, rethinking some features of the traditional business functioning (Liedtka 1996). To be properly delivered, the immediate manager, as a care-giver, should have the necessary resources to engage care activities (Engster 2005), and the employees, as the cared for, should be placed at the center of attention in the decision process (Solomon 1998). This can be achieved by first developing a care community among organizational members (Sama et al. 2004) and, second, by enacting among them narrative practices (constructing histories of sparkling stories contextualizing struggles, and constructing polyphonic future-oriented stories) (Lawrence and Maitlis 2012).

Limitations and Future Research

Despite its contribution, this study is not without limitations. For example, the study merely envisioned trust in the manager without considering the potential role of interpersonal processes between supervisor and subordinates. Nienaber et al. (2015) suggested that the role of transformational and transactional leadership styles may influence the formation of trust in the manager. Although the role of leadership has already been examined in the context of environmental sustainability (Afsar et al. 2016), future research might extend the findings of this study by examining how these leadership styles foster trust in the immediate manager. Another limitation concerns the measurement of non-green behaviors. In this research, nongreen behaviors were seen as inappropriate gestures not intended to harm the environment deliberately. This indolence toward the environment was reflected by participants' statements. However, because of this choice, the study did not investigate specific behaviors. For example, failing to recycle is different from failing to follow up on cleanup effort since these negative events refer to different kinds of non-green behavior (see Ones and Dilchert 2012).

This means that non-green behaviors may be examined as a multidimensional rather than a unidimensional construct. Further research should take more account of the specificity of non-green behaviors to extend the current literature on individual-environment interactions in organizational settings. Finally, although the longitudinal design used in this study provides some guarantees, an underestimation of the effect of some factors cannot be entirely ruled out, including changing supervisor, new strategic orientations or a reduction in resources, all of which may have influenced the results. Future investigations might consider the effect of these factors.

There are at least three other possible directions for future research. First, the nature and individual intentions beyond the adoption of non-green behavior in the workplace warrants further investigation. A number of questions surrounding the emergence of non-green behaviors require attention. For example, Homburg and Stolberg (2006) and Paille´ and Meı´ja-Morelos (2014) introduced an interesting nuance by distinguishing between direct and indirect green behaviors. Green behaviors are direct when employees themselves engage in behaviors in favor of the environment. Green behaviors are indirect when employees take time and make efforts to motivate organizational members to behave in eco-friendly ways. Using a similar pattern of reasoning, future research could seek to better understand the factors that may explain the reasons why individuals tend to engage in direct or indirect non-green behaviors.

Second, the topic of non-green behaviors is supported by the CWB literature. However, CWBs may reflect different realities stemming either from an unwillingness to cooperate (Penney and Spector 2005) or from an accumulation of individual errors (Belot and Schro¨der 2013). Personality traits are often referred to as variables of interest in individual motivation to engage in CWBs (O'Boyle et al. 2012). Comparatively to other personality traits, CWBs have been found to be more strongly predicted by conscientiousness (e.g., Berry et al. 2007). Non-green behaviors may be linked to the level of conscientiousness. More research is needed to investigate the prevalence of conscientious employees in the context of environmental sustainability. In addition, Ciocirlan (2016) contributed significantly to improving our understanding of how environmental behaviors can be studied by positing the existence of a more complex behavioral pattern in the workplace. For instance, Ciocirlan suggested considering CWB as a responsible green behavior (described as environmental CWB), in particular when green employees

choose to disclose business activities or managerial decisions that are likely to detract from the natural environment. But individual carelessness, intention to deliberately harm the environment and environmental CWB appear to derive from different causes or motivations. Future research might consider these differences to provide a broader picture of the determinants of non-green behaviors. Finally, in this research the focus was at the employee level. For example, recent research has revealed that top management tends to legitimize the negative impact on the natural environment through a set of neutralization techniques, including blaming and denial (Talbot and Boiral 2015). Covering up a mistake intentionally is typically identified as a form of CWB (Robinson and Bennett 1995). Future investigations might consider further forms of CWB in a sustainability context.

Third, by demonstrating that the immediate manager plays a limited role in the avoidance of subordinates' nongreen behaviors, the findings of this study raise questions about the goodwill of subordinates. A useful distinction was made recently by Cain et al. (2014) between ''giving,'' referring to individual generosity without calculation, and ''giving in,'' which occurs when individuals ''comply with a request that they would otherwise prefer to avoid'' (p. 518). In half of the body of prior research reviewed in their study, Cain et al. found that altruistic behavior reflects giving in rather than giving. This distinction has important implications for research based on the tenets of social exchange theory. The implication is that employees may have different motivations for engaging in altruistic behavior toward the environment. This means that employees may be placed in situations in which they feel compelled to take into account sustainability considerations in their daily work activities and tasks even though they are not particularly concerned about the environment. According to Cain et al. (2014), when individuals feel forced to reciprocate by giving in, they may become reluctant to maintain their engagement in the behavior of interest in the long term, by contrast with those who are prone to give on a voluntary basis. Future research might take into account the distinction between giving and giving in and investigate their effects in the context of environmental sustainability.

Finally, the previous discussion leads to the suggestion that employee efforts to avoid non-green behaviors are better explained by supervisory support than trust in manager and suggests that these efforts have more to do with negotiation exchanges than reciprocation exchange.

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