



Employees and Pro-Environmental Behaviors: Obstacles, Constraints, and Barriers

Abstract This chapter provides an original analysis of barriers to the adoption of pro-environmental behaviors by individuals. An overview of the literature on environmental issues shows that the study of obstacles to environmental engagement at the individual level has attracted limited attention compared to research on incentives and facilitators. This chapter provides an overview of the current state of knowledge on factors that limit the likelihood of employees adopting pro-environmental behaviors in the workplace. The chapter draws on Lewinian field theory as an analytical framework and examines the extent to which, depending on their degree of physical and mental proximity (whether real or perceived), employees feel hindered in their environmental engagement.

Keywords Obstacles · Levels · Lewinian field · Mental representation

7.1 OBSTACLES IN THE WORKPLACE: A BRIEF COMMENTARY ON THE CURRENT STATE OF KNOWLEDGE

An overview of the specialized literature on environmental behaviors might lead one to conclude that the study of obstacles is a relatively minor area of research in comparison to the number of studies devoted to incentives and facilitators. However, there have been a number of attempts over the years to rank and categorize obstacles. For the most part, these

have tended to focus on the study of obstacles, or barriers, to environmental commitment and engagement in nonwork settings (Gifford, 2011; Kollmuss & Agyeman, 2002; Lorenzoni, Nicholson-Cole, & Whitmarsh, 2007). Though not neglected, research on obstacles in a work context suffers from a lack of visibility that, in my view, can be explained by a lack of structure around the knowledge developed in this area rather than any real lack of interest in the question itself.

Individuals face a range of obstacles in the workplace. These can be grouped into four categories or levels: institutional, organizational, managerial, and individual (i.e., psychological). These four categories also provide a means of understanding the different reasons people give in order to justify their lack of environmental engagement.

7.1.1 *Institutional Level*

Institutional obstacles include normative constraints that are external to the organization and that govern, structure, and regulate the internal conduct of operational processes. The legislative framework creates obstacles related to the availability and clarity of information, the perceived ease of its applicability, and the flexibility of organizational characteristics and specificities (Jabbour et al., 2016). The management system relating to environmental standards can also give rise to obstacles if senior management is uncertain about the anticipated effects or results, if it believes that the costs and complexity associated with introducing standards outweigh the benefits of holding certifications, and if it believes that being certified might affect the competitiveness of the organization (Jabbour et al., 2016).

7.1.2 *Organizational Level*

Obstacles at the organizational level typically involve strategic and financial considerations and may refer to the costs associated with launching and maintaining sustainability initiatives, a lack of relevant resources in terms of capacity and knowledge, limited financial capacity for environmental investments, difficulties in measuring return on investment, and lack of support from senior management (Jabbour et al. 2016).

In a primarily descriptive study, Schmit, Fegley, Esen, Schramm, and Tomassetti (2012) interviewed 728 individuals in human resource management roles with a view to answering a number of questions aimed

at better understanding the role of the HR function in implementing an organizational policy for sustainable development. Their findings indicate that organizations resort to a whole range of obstacles designed to hamper efforts to put in place an organizational policy for the purpose of promoting the environment. The reasons invoked relate to the perception of the internal barriers identified by the respondents (369 out of 748) as being difficult to overcome within their organization. The reasons identified by the study point to relatively different justifications in terms of content. Several of them are clearly justifications of an accounting and financial nature, such as implementation costs (38%), the difficulty of measuring return on investment (35%), and the cost of maintaining facilities and installations (31%). Others relate to justifications of a strategic nature, such as lack of support for environmental matters from senior management (34%), the incompatibility between environmental considerations and the organization's primary objectives (21%), a perceived lack of competitive advantage (18%), and low shareholder support (5%).

7.1.3 *Managerial Level*

Obstacles at the managerial level hamper the action of managers differently according to the latter's position within the organizational hierarchy, but also according to their capacity to exert influence in management meetings so as to get their point across in drawing attention to the environmental question. A senior manager will probably have a greater capacity to exert influence than a line manager. Leadership in the context of environmental sustainability has attracted considerable attention in this respect (Robertson & Barling, 2015). Most research in this area has focused on environmental leadership, which, according to Egri and Herman (2000), refers to "the ability to influence individuals and mobilize organisations to realise a vision of long-term ecological sustainability" (p. 572). Through their capacity to influence, senior managers can encourage an environmental vision and are able to determine the allocation of the financial, technical, and human resources necessary for its implementation. Conversely, they may choose to relegate environmental issues as a matter of secondary concern or neglect them altogether by focusing their efforts on other organizational issues.

Zibarras and Ballinger (2011) conducted a survey among 147 human resource professionals in Britain working for public and private organizations. Their survey revealed that respondents believe the barriers

hindering their organization's commitment to environmental issues are explained in 65% of cases by unclear environmental leadership, strategies, and goals and in 57% of cases by the organization prioritizing commercial objectives above environmental considerations. In other words, a manager may have an interest in environmental matters but be limited in practice by their position within the organizational hierarchy (Cordano & Frieze, 2000), but also by the fact of having no outlet by virtue of not being a member of a management committee (Kane, 2011). The difficulties faced by managers in seeking to engage in environmental sustainability are explained mainly by the degree of complexity of environmental issues, managers' lack of environmental concern, and their tendency to focus on their main tasks (Andersson & Bateman, 2000).

7.1.4 *Individual Level*

A cursory glance at research on obstacles to the adoption of environmental behaviors shows that most scholars implicitly agree on the fact that individuals tend to formalize their own obstacles, the main roots of which are of an axiological, cognitive, moral, or attitudinal nature.

Gifford (2011) categorized the psychological barriers impacting individual decisions to engage in environmentally responsible behavior, such as limiting greenhouse gas-emitting behavior in the context of climate change. To do so, Gifford proposed a list of 29 psychological barriers grouped into the following seven categories: ideologies (i.e., people are confident that mankind has an appropriate solution for environmental problems); limited cognition (i.e., having a poor understanding of environmental issues); comparisons with others (i.e., individuals are prone to behave like members of their reference group); sunk costs (i.e., it is easier for people to avoid changing their habits and behaviors than to change them); discredence (i.e., those who raise alarm about environmental issues are not trustworthy); perceived risks (i.e., in comparison to maintaining one's standard behaviors, behavioral change is perceived as risky); and limited behaviors (i.e., performing only a few environmentally responsible behaviors with little energy). Based on their literature review on pro-environmental behavior in the private sphere, Steg and Vlek (2009) found that motivation, context and habit are the three main factors that positively influence individual environmental behaviors. Conversely, there is an assumption that apathetic individuals with little concern for environmental matters are likely to express the following traits: low moral concern

such that the individual tends to place his or her immediate interests above environmental values; a lack of concern about social approval when not engaging in ecological efforts; failure to search for solutions when appropriate facilities are lacking; and cognitive reasoning, according to which past behaviors tend to explain current behaviors toward the environment (e.g., if my habit is not to recycle, I tend to be consistent, regardless of the situation or circumstances).

These obstacles can be distinguished by considering intrapersonal processes (“between process”) and interpersonal processes (“within process”). Cervone (2005) discussed the usefulness of the distinction for research on personality. In line with Cervone, the aim is to determine the extent to which the individual variations apparent within a given group of individuals reflect the mental system of each of its members. By extension, intrapersonal processes account, based on moral, cognitive, and axiological grounds, for the roots or origins of the behavioral dynamics of a given individual relative to a given object. Interpersonal processes imply considering the variables associated with other people with whom that individual regularly interacts. These interactions are assessed in terms of quantity (for example, the amount of contact over the course of a day’s work) and quality (for example, the degree to which interactions involve reciprocity). The split between within and between processes seems appropriate for categorizing obstacles to the adoption of pro-environmental behaviors.

7.1.5 *Within Process*

A lack of knowledge, personal skills, and individual competencies in relation to environmental matters is often viewed as an obstacle (see Chapter 8). However, it is important to distinguish between basic and technical knowledge here. In discussing the implementation of environmental training practices, Milliman and Clair (1996) noted that a lack of basic skills (such as reading and writing) or a poor grasp of simple numerical operations may also create obstacles in cases where individuals struggle to understand the subtleties of a text and the associated nuances. To many people, functional illiteracy may seem to be a marginal explanation or even an exaggerated factor to be treated as an epiphenomenon when the unit of analysis is the workplace. The issue extends to our understanding of the content and meaning of the signs used to guide people in making the right environmental choices. For example, Price and Pitt

(2012) noted that “signs for recycling facilities have an important role but attention to the possible misinterpretation of signs is a factor to consider (p. 624).

7.1.6 *Between-Process*

Group values that are not strongly adhered to by team members and lack of engagement by others, whether leaders or colleagues, can act as obstacles (Plank, 2011). Other obstacles may involve the nature of the work carried out and lack of feedback about whether or not employees perform their job well (Plank, 2011). A perceived lack of resources devoted to environmental matters may reduce the capacity or tendency of employees to engage in eco-friendly behavior on the job (Tudor, Barr, & Gilg, 2008). Costs related to energy consumption have been found to act as an obstacle since energy appears to be more diffuse in work settings than in domestic settings and may explain why employees fail to engage in eco-friendly behaviors at work by, for example, seeking to reduce energy consumption or increasing paper recycling (Manika, Wells, Gregory-Smith, & Gentry, 2015; Siero, Boon, Kok, & Siero, 1989). Finally, it has recently been found that employees may refrain from behaving in eco-friendly ways when they believe that their employer has not adhered to the terms of the psychological contract (Paillé & Mejia-Morelos, 2014).

From an employee point of view, the list of obstacles is especially long. Classifying obstacles based on the four levels set out above provides a way of rethinking how they exert influence on employees’ environmental behaviors. Gaspar, Palma-Oliveira, and Corral-Verdugo (2010) argued that “people can construct their own reality through social and cognitive processes and thus, some aspect of people’s environment can work as a behavioral barrier if people perceive that aspect in such a way” (p. 272). Gaspar et al. emphasized the importance of individuals’ perception of the characteristics of their immediate environment. These characteristics act as obstacles structured according to their degree of materiality, from the most concrete to the most abstract. The degree of materiality can be based on the different levels described above. The position taken by Gaspar et al. implicitly raises the question of the structure of reality in the mental space of individuals, a question to which the authors provide no real answer.

To better understand how different obstacles exert varying degrees of influence on employees, a conceptual tool is needed to go further

in understanding how limitations affect individuals according to circumstances. Here, it is useful to draw on field theory as developed and refined by Lewin between and 1930s and the 1950s. The value of field theory for the study of environmental behaviors has recently been underlined by Tudor and Dutra (2018) and Endrejat and Kauffeld (2018) in research on behavioral change. The Lewinian theoretical framework also provides appropriate conceptual foundations for reconfiguring obstacles in the mental space of individuals.

7.2 AN APPROACH TO ENVIRONMENTAL OBSTACLES USING LEWINIAN FIELD THEORY

7.2.1 *Lewinian Field: Definition and Fundamental Principles*

7.2.1.1 *Defining the Notion of Lewinian Field*

In its initial version, the concept of Lewinian field represents, alongside Group Dynamics, Action Research and the 3-Step model of change, one of the four components of the general framework developed by Lewin for the study of social dynamics as a whole (Burns, 2004). The value of field theory here is that it points to various connections with border theory as developed by Clark (2000). For example, the principles of border impermeability or flexibility represent significant points of convergence between field theory and border theory. However, one significant difference is that, in field theory, borders are viewed as the expression of more or less conscious psychologized representations, whereas in border theory they are perceived by individuals as a reality which, though subjective, alters the objective conditions of their relation to domains.

Lewinian field theory is associated with a unique terminology drawn from the vocabulary of the physical sciences. According to Burns (2004), this largely accounts for the abstruse nature of the developments subtending field theory, which remains the least well understood area of Lewin's work. However, as noted by Burnes and Cooke (2013), the full meaning of the terminology borrowed by Lewin can only be grasped if we remind ourselves that Lewin's aim was to embed psychology in a solid scientific paradigm. The use of ideas and concepts drawn from the physical sciences is not really accompanied by any attempt to adapt them to the field of social science. Indeed, the main deficiency of Lewin's approach is precisely its lack of pedagogy. His determination to reduce concepts

to mathematical expressions is often given as a reason for both the lukewarm reception given to this aspect of his work and the relative success of field theory among the community of researchers in psychology (Burnes & Cooke, 2013).

Lewin (1951) defined the concept of field as “the totality of coexisting and interdependent forces” (p. 240). The totality of forces corresponds to interconnected events that determine “behavior *b* at time *t* which is a function of situation *S* at time *t*” (Lewin, 1943, p. 297). The situation refers to the *Life Space*, encompassing the individual and their psychological environment. The life space corresponds to the totality of forces that can influence a person’s behavior at a given time. The totality of forces and characteristics situated outside the life space constitutes the *Physical World*. Here, the notion of “fact” should be understood to mean any type of event (or variable), whether tangible (a concrete object) or intangible (for example, a belief), that may influence an individual’s behavior at a given point in time (Hall, Lindzey, & Campbell, 1998). It follows that a behavior may be understood outside the situation (*S*) and time (*T*) in which it is exhibited or performed.

7.2.1.2 *Time and Space*

In a Lewinian field, a behavior is contextualized in both time and space (Lewin, 1943). The spatial and temporal contextualization of behavior implies that, except for observations conducted in a closed system, a given behavior cannot be linked to a past or future behavior. Lastly, Lewin introduced the principle of contemporaneity to specify the role of time in shaping behaviors. Here, a distinction is drawn between the psychological past and the psychological future. Without explicitly saying so, Lewin appears to operate on the basis of a Bergsonian approach to time and its effects on current behavior. From a field theory perspective, behavior can be affected by the subjective dimension of time since personal experiences situated in the past can continue to influence behavior in the present. The future may be associated with the hope that enables an individual to project themselves into the future.

Finally, Lewin contends that present time compresses past and future time. Past and future time are thus inherent elements of an individual’s psychological field. Therefore, to understand the motives of present behavior, we need to take into account both past experiences and future expectations. Only the situation changes, not the behavior, implying that

the analysis of individual motivations for behavior first requires understanding the factors underlying the variability of the physical and social environment in which an individual operates. In an extreme case that may be regarded as hypothetical, a situation which remains unchanged provides no basis for influencing behavior. As a significant factor, the action of change must relate to the structure of the psychological field, not to the elements of the individual's mental structure. It is only once the structure of that field is modified that it is possible to put in place the conditions required for a change in behavior.

Based on these various elements, a Lewinian field involves three fundamental principles. The first is the principle of *proximity/distance*, which explains the degree of influence between two events. Two proximate events are likely to influence each other to a greater extent than two remote events. The second principle is the principle of *firmness/weakness* materialized by the porosity of borders between two events. The third principle is the principle of *fluidity/roughness* whereby the degree of influence of an event (or "force") remote from another depends on the ease with which another event acts or does not act as an intermediary.

7.2.2 *The Structure of Obstacles According to the Principles of the Lewinian Field*

7.2.2.1 *Topology as Metaphor*

The spatial representation of facts for understanding a behavior of interest is approached by Lewin in topological terms (Hall et al., 1998). In a Lewinian context, the idea of *topology* should be understood as the way in which the properties of the psychological field are distributed and positioned relative to each other in the form of a psychologized spatial representation.

Figure 7.1 proposes to adopt these general principles. Each potential obstacle to the adoption of an environmental behavior is located and associated with a region of the psychological field. Consistent with the approach adopted in this book, the reference point is the subjective perspective of the individual. Obstacles and their potential influence on the adoption of an environmental behavior are therefore examined from an employee point of view. Obstacles located in the *Within* region are psychologically closer to the individual than those situated in the *Legislation* region. Here, location is not to be understood in physical terms but in terms of the capacity to influence. For example, if environmental

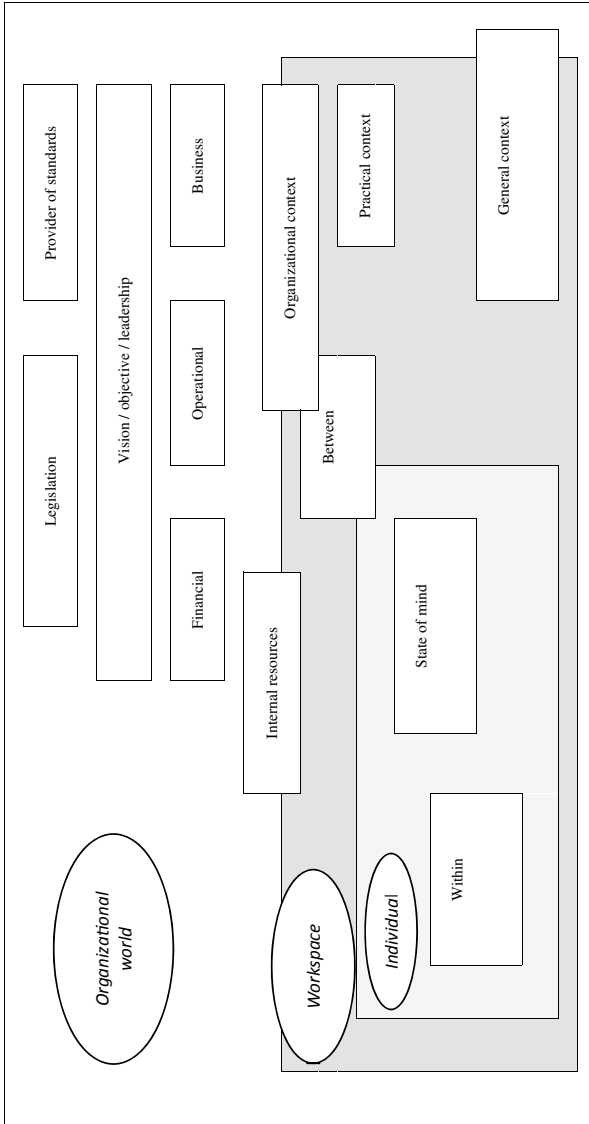


Fig. 7.1 Representation of obstacles based on the model of Lewinian field theory

legislation is not applied by an organization out of choice, it automatically represents a major obstacle with a potentially strong contingent effect on an employee concerned about environmental matters.

In what follows, I propose to maintain this idea. The main aim is to go some way toward providing a coherent explanation of how obstacles hamper employee environmental engagement. Lastly, for reasons largely related to the need to adapt the Lewinian principles to the organizational domain, in Fig. 7.1 I have opted to replace the terms “physical world,” “living space,” “personality,” and “facts” with the following terms: “organizational level,” “work environment,” “individual,” and “obstacles.” Based on one of the structuring characteristics of a Lewinian field, through interlocking, individuals are embedded in their work space, which is itself embedded in the organizational level. The individual, work, environmental, and organizational levels are separated by boundaries of varying permeability. Depending on their degree of permeability, boundaries cause obstacles to play a greater or lesser role in shaping environmental behaviors.

7.2.2.2 *Weak and Strong Situations*

I also contend that the permeability of boundaries depends to a great extent on circumstances and situations. In the Lewinian approach to fields, the situation is a central characteristic. My contention is that boundaries operate as obstacles that generate constraints or barriers that prevent employees from performing pro-environmental behaviors. In addition, boundaries are either material or immaterial and are perceived as being more or less permeable (see Chapter 6).

Mischel (1977) speculated that “situations” may be weak or strong depending on the degree of goal clarity, (un)shared objectives, and the presence or lack of relevant skills and habits to perform the behavior of interest. The distinction between strong and weak situations may be helpful in shaping the discussion of how boundaries operate as obstacles. Strong situations “lead everyone to construe the particular events the same way, induce uniform expectancies regarding the most appropriate response pattern, provide adequate incentives for the performance of that response pattern and require skills that everyone has to the same extent” (p. 347). By contrast, weak situations “do not generate uniform expectancies concerning desired behavior, do not offer sufficient incentives for its performance, or fail to provide the learning conditions required for successful genesis of behavior” (p. 276). The implication is that a strong

situation arises when organizational members have the same pattern of reasoning, share the same objectives and values, and hold the adequate skills at their own level to achieve these shared objectives.

- A strong situation concerns members who share the same view of ecology. In this case, ecology is a familiar issue for all members. The notion implies two individuals with a significant interest in, or concern for, environmental matters, but also two individuals with a limited interest in such matters. In both cases, the common denominator is convergence of opinion. Another implication is that a discrepancy regarding these previous characteristics may give rise to a weak situation that can have a detrimental effect on individual behaviors.
- A weak situation concerns all cases involving a divergence of opinion or a gap in skills, competencies or know-how. In this case, ecological matters are not a familiar topic for at least one of the two parties involved.

Weak and strong situations provide a useful and relevant basis for illustrating how and why obstacles play a critical role in shaping the relationship between familiar partners (e.g., an immediate supervisor and their subordinates, coworkers in a team, colleagues working in different services, departments or divisions, and so on) in a context where an (un)familiar issue occurs, such as corporate greening.

7.2.3 *Some Evidence from the Environmental Literature*

The principles of proximity/distance, fluidity/roughness and firmness/weakness are important characteristics of a Lewinian field. In what follows, I propose to illustrate the action of these three principles on employees by drawing on a range of evidence.

7.2.3.1 *Proximity/Distance*

In a Lewinian field, regions are interconnected, meaning that the sources of obstacles are interconnected from a topological point of view in the individual's mental space. This has a significant impact on the capacity of an individual to act pro-environmentally simply because the mutual influence of sources is not necessarily linked to their degree of proximity. The

proximity/distance principle enables an individual to locate the relative position of each obstacle by taking into account both their source and their degree of influence. Obstacles at the institutional and organizational levels are distant, whereas obstacles at the managerial and individual levels are close. From an employee perspective, proximate sources of obstacles in the mental space of an individual may not mutually influence each other. On the other hand, remote sources of obstacles may be interconnected and exert influence on environmental behavior. The key factor is the degree of firmness/weakness of the boundary separating different sources of obstacles. Here, the role performed by border crossers is critical (for a reminder, see Chapter 6).

This means, for example, that a lack of environmental vision at the organizational level or a lack of environmental leadership at a managerial level can impact the individual as an obstacle creating a barrier or a constraint. Research in this area has emphasized the role of leadership in predicting workplace pro-environmental behaviors. A number of different leadership styles have been examined in the recent environmental literature. For example, Graves, Sarkis, and Zhu (2013) investigated the role of environmental transformational leadership on employees' motivation to engage in pro-environmental behaviors. They suggested that when supervisors base their leadership on "a clear and coherent environmental vision for the area of responsibility" (p. 82), the latter may be perceived by their subordinates as an inspiring model by giving them the necessary motivation to make efforts beyond their job duties that contribute to environmental sustainability. The main findings of the study by Graves, Sarkis, and Zhu were that while environmental transformational leadership positively influences PEBs through autonomous motivation, it also moderates the effect of external motivation on PEBs such that under low environmental leadership external motivation tends to decrease PEBs and increase PEBs under high environmental leadership.

In a given sector of activity, the environmental vision of an organization informs rival organizations of its environmental leadership. For example, an organization with strong environmental leadership can inspire competitors in the sector to adopt, through a process of imitation, a similar strategic approach in order to achieve a competitive advantage over rivals in the sector. This principle is known as the mimetic effect, which refers "to the tendency of individuals [...] inclined to imitate the successful practices of others around them" (Zhang, Wang, Yin, & Su, 2012). The mimetic effect can act as a driver demonstrating an interest

in environmental matters on the part of the senior management of an organization which may face internal obstacles at the point of implementation. Zhu and Geng (2013) studied a sample of manufacturers to determine the extent to which external drivers (e.g., environmental regulations, the environmental preferences of customers or consumers, and the mimetic environmental practices of successful competitors in the sector) and internal obstacles (e.g., excessively high costs, such as eco-design costs, lack of commitment from senior managers, low energy-saving awareness among workers, no clear statement of responsibilities across different departments, lack of collection and analysis of material/energy flow data) determine the introduction of a saving and emission reduction (ESER) program encouraged at the institutional level by the local authorities.

Their results indicate, on the one hand, that imitation is the most important factor driving the decision to establish an energy consumption reduction program and, on the other, that internal obstacles impede sustainable purchasing but not sustainable customer cooperation in achieving energy saving and emission reduction targets. Unfortunately, internal obstacles were envisaged as a whole, and no details are provided about the actual role of the most influential obstacles when considered in isolation. However, the loadings reported by Zhu and Geng (2013) give a rough idea of the internal obstacles identified by the respondents by ranking them from the most influential to the least influential (see Table 3 in the study of Zhu and Geng). In descending order, we have:

- lack of internal expertise on environmental issues;
- lack of internal technological resources;
- low ESER awareness among workers;
- lack of R&D capability on ESER;
- no clear statement for responsibilities among different departments;
- lack of capabilities to solve internal ESER issues;
- high cost of using environmental packaging;
- high cost of producing ESER products;
- excessive costs (eco-design, etc.);
- lack of collection and analysis of material/energy flow data;
- no commitment from senior managers;
- no significant benefit (esp. short-term benefit);
- excessively high disposable cost for hazardous wastes.

In summary, the study by Zhu and Geng (2013) showed that the environmental vision can encounter a whole range of obstacles operating at different levels within an organization and that, ultimately, an employee motivated by environmental concerns may personally be confronted with obstacles that operate, depending on the circumstances, as barriers if their work premises are not adapted to protecting the environment or as constraints if, at their own personal level, the leeway needed to perform simple actions exists but is constrained by a limited capacity to act in environmentally friendly ways.

7.2.3.2 *Fluidity/Roughness*

This principle involves an intermediate region that acts as a connector between two regions. The connection between two remote regions is ensured or affected according to the capacity of the intermediate region to interfere. The application of this principle to the question of internal obstacles suggests, for example, that notwithstanding the absence of obstacles at the institutional level, employees may be hindered by the emergence of new obstacles at other levels. Put differently, the introduction of the conditions required for greening at a global level is no guarantee that employees will adopt ecologically responsible behaviors at their own level. A good example of this is the study by Zhu and Geng (2013), the results of which (discussed above) provide evidence for the role of internal obstacles at different organizational levels. Tudor et al. (2008) examined the individual motivations underlying waste management in a health organization. Their study found that despite the existence of environmental management practices, the level of employee engagement in medical waste recycling practices can be explained by a lack of resources and, more specifically, by a shortage of staff dedicated to the implementation of environmental practices.

The principle of roughness/fluidity also suggests that the existence of obstacles at the institutional level may not necessarily have an impact on the ability of employees to adopt pro-environmental behaviors. This can be attributed to the role of immediate supervisor support. Indeed, environmental studies have repeatedly demonstrated the influence of immediate supervisor support on environmental behaviors—not least because, through such support, the immediate supervisor signals their approval of their subordinates' environmental actions. Approval can take many forms, including emotional support (sympathy, listening and

caring), instrumental support (material or concrete assistance), informational support (knowledge and advice), and appraisal (giving appropriate feedback) (Rostila, 2011). Immediate supervisors may be impeded in their commitment to support their subordinates in acting responsibly toward the environment. A supervisor who is not supported by their line managers on environmental matters will be faced with a direct obstacle, the effects of which will impact their subordinates. The contexts of strong and weak situations play an important role in this regard.

In the case of a strong situation (mutual understanding and sharing of environmental concerns), subordinates will be faced with a barrier if their actions require their immediate supervisor to be able to provide the resources they need to be environmentally engaged. An immediate supervisor with no real power to protect the environment will have limited room for maneuver, thereby affecting their ability to support subordinates keen to promote greening in their workplace, even if the latter feel that their own supervisor is supported by their organization (Paillé, Amara, & Halilem, 2013). However, if support for actions does not require any specific material resources, simple support practices in the form of encouragement can enable subordinates to overcome day-to-day obstacles (Humphrey, Bord, Hammond, & Mann, 1977).

In the case of a weak situation, the gap between the pro-environmental values held by the immediate supervisor and their subordinate operates as a barrier to action if no material support is provided, such as a lack of appropriate recipients or containers for recycling. Environmental studies conducted in work settings have reported that difficulties in accessing appropriate facilities tend to be experienced by employees as an obstacle (Price & Pitt, 2012). A lack of environmental support will act as a constraint in cases where the immediate manager does not take into account environmental concerns in managing their subordinates' work. Lamm, Tosti-Kharas, and King (2015) argued that "if employees fear looking like they are wasting company time, a good performance evaluation may trump environmental values" (p. 210). Lack of time is often put forward by employees as an obstacle to environmental engagement (Yuriev, Boiral, Francoeur, & Paillé, 2018).

In another study (Jabbour et al., 2016) conducted in the Brazilian manufacturing sector, the authors found that obstacles at the institutional level (i.e., lack of flexibility in compliance with legal deadlines, difficulties associated with the environmental legislation application and monitoring process, and lack of flexibility in compliance with legal demands) have

no influence on the introduction of production practices that respect environmental constraints, while obstacles at the organizational and managerial levels (senior managers' limited environmental awareness, resistance by senior managers to changes in work habits) and at the individual level (limited environmental awareness at the employee level) tend to significantly affect their implementation. Therefore, the introduction of environmentally respectful production practices was found to have a significantly greater effect on environmental performance than on operational performance. In Jabbour et al. (2016), it is interesting to note that the obstacles that were psychologically closest to employees appeared to replace psychologically remote institutional obstacles. Though it is difficult to draw any conclusions, and while they provide no direct evidence, these findings appear to be an indicator of how the principle of roughness/fluidity operates in practice.

7.2.3.3 *Firmness/Weakness*

In a Lewinian field, the firmness/weakness principle determines the role of boundaries between two regions. Here, the implication is that the degree of influence of obstacles depends on the porosity of borders. In this case too, the immediate manager performs an important role, not least because he or she acts as a border crosser. In discussing the work of Clark in Chapter 6, I noted that boundaries are either symbolic or physical. For example, leading is a way of helping subordinates to cross a symbolic boundary. Robertson and Barling (2013) showed that subordinates are more prone to engage in PEBs when their managers communicate their passion for the environment and behave in environmentally friendly ways. More recently, Afsar, Badir, and Kiani (2016) examined spiritual leadership in the context of environmental sustainability by arguing that this style “is one of the most effective approaches when it comes to influence [sic] the employees to display pro-environmental behavior” (p. 80). The basis for their contention is that the supervisor, through his or her spirituality, helps subordinates to develop their environmental awareness not only for the sake of ensuring a sustainable workplace but also for protecting the environment for future generations. The authors found that spiritual leadership has a positive indirect effect on employee pro-environmental behaviors through workplace spirituality, environmental passion, and intrinsic motivation for those employees who are high both in perceived organizational support and in environmental awareness.

The principle of firmness/weakness can also be expressed among peers. In a study focusing on the role of intervention practices aimed at improving paper recycling practices, Brothers, Krantz, and McClanahan (1994) reported a substantial improvement (from 85 to 94%) in the total amount of recyclable paper being recycled. While recognizing the importance of appropriate facilities and measures, the authors argued that “[t]he addition of these employees increases the significance of the maintenance data, especially because these participants were not present when memos were distributed. Although it is possible that senior colleagues communicated the definition of recyclable paper to these new employees (i.e., in the same way that one might expect them to communicate other policies and procedures), it seems quite likely that local containers were relevant discriminative stimuli for recycling” (p. 157). More recently, Paillé, Amara, and Halilem (2018) showed that mutual support among colleagues determines the conditions under which environmentally friendly behavioral attitudes are disseminated in workplace settings. These studies indicate that the quality of relationships between colleagues tends to act as a catalyst of support and encouragement. Yet, paradoxically, peer encouragement can also generate obstacles. Chen, Chen, Huang, Long, and Li (2017) inferred from their results that individuals who are relatively close in the professional sphere can nonetheless experience verbal prompts and encouragements by their peers to act in environmentally friendly ways as a form of interference resulting in the opposite effect of that intended—i.e., environmental disengagement.

Some concluding remarks

Having an individual belief about the need to care for the environment does not appear to be a sufficient guarantee that people will transfer their goodwill from the private domain to the work domain. Research conducted in organizational settings has also shown that internal obstacles may impede employees’ willingness to behave in environmentally friendly ways. In this chapter, the matter was approached from an employee perspective to explain two key ideas. On the one hand, obstacles can be ordered or structured according to different levels: the institutional, organizational, managerial, and individual levels. On the other hand, obstacles are psychologically distributed in the mental space of an employee according to a topological logic characteristic of a Lewinian

field. In taking this approach, this chapter provided an original interpretation of the inhibiting effects that constrain the environmental engagement of employees.

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