



Greening the Workplace Through Employees: An Integrative Model

Abstract This chapter continues the discussion begun in previous chapters. The existing literature focuses mainly on the individual, managerial, and organizational conditions governing the adoption of pro-environmental behaviors in the workplace. Alongside this, albeit to a lesser extent, part of the literature has also acknowledged the existence of non-environmental behaviors by seeking to describe their causes. This chapter presents a new integrative model designed to bring together pro-environmental and non-environmental behaviors, pressures, constraints, and incentives to workplace greening.

Keywords Integrative model · Environmental inaction · In(appropriate) action · Decision-making pathways

8.1 DEVELOPMENT OF THE MODEL: THEORETICAL FOUNDATIONS

8.1.1 *Structuring Elements*

Very few models have sought to describe the cognitive and attitudinal factors of inertia and inaction alongside (in)appropriate environmental behaviors in workplace settings. Figure 8.1 offers a visual representation of the proposed integrative model incorporating all three elements.

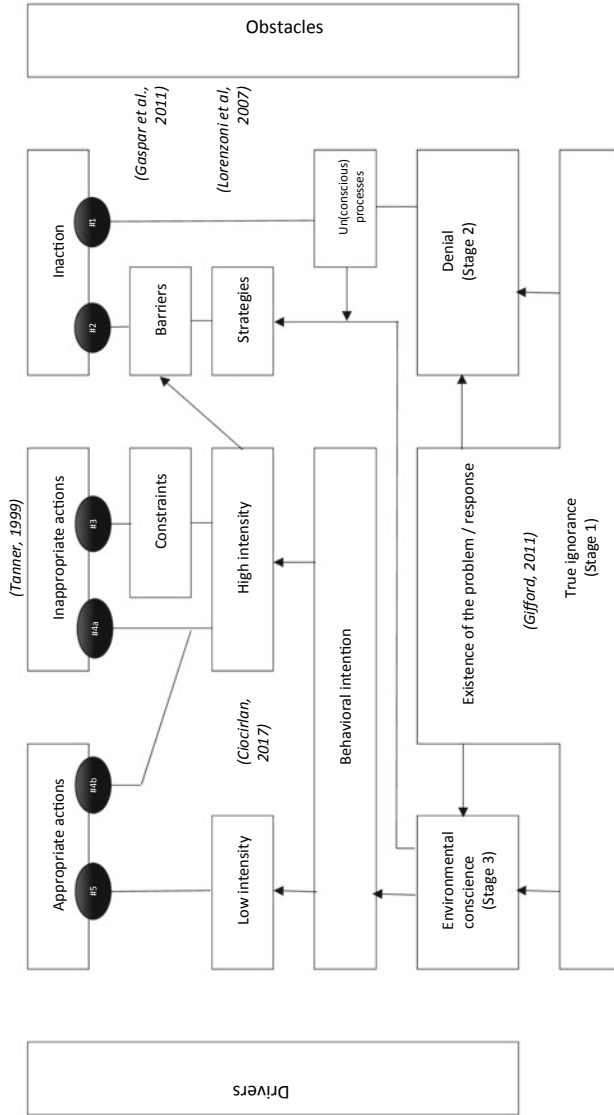


Fig. 8.1 The integrative model

The model essentially involves using and integrating a range of structuring elements drawn from a series of studies published over the course of the last twenty years (Ciocirlan, 2017; Gaspar, 2013; Gifford, 2011; Lorenzoni, Nicholson-Cole, & Whitmarsh, 2007; Tanner, 1999). In what follows, I will be providing a brief description of these structuring elements. Each study proposes more substantial developments that will be introduced and used at a later stage when a range of alternatives leading employees to adopt (or not adopt) pro-environmental behaviors in the workplace will be considered and described.

8.1.1.1 Ignorance, Denial, and Awareness

The first structuring element of the model is provided by Gifford (2011). In the opening lines of his paper, Gifford strongly suggests that genuine ignorance of the causes and consequences of climate change is a powerful factor of inertia that serves to limit any type of action likely to result in a positive contribution to the environment at an individual level. Gifford indicates that while ignorance tends to confirm and maintain an individual in an attitude of denial toward environmental matters, ignorance does not definitively confine the individual to inaction and inertia. Indeed, in some circumstances, ignorance can give way to environmental awareness, leading individuals to take action in order to limit environmentally harmful behaviors.

8.1.1.2 Individual Denial Strategies

The second structuring element is provided in a paper by Lorenzoni et al. (2007) in which the authors list a range of factors that inhibit the action of individuals despite their desire to act in environmentally friendly ways. These inhibitors are categorized according to whether their origin is linked to a perceived individual inability or to perceived social and institutional obstacles or impediments. In their study, some factors of inhibition at the individual level are seen as individual strategies whereby individuals are able to justify the reasons for their environmental inaction. From this point of view, individual strategies offer a means of understanding the consequences of the process of denial.

8.1.1.3 Obstacles, Constraints, and Barriers

The third structuring element is drawn from a conceptual study by Gaspar (2013) in which obstacles to the adoption of pro-environmental behaviors

are examined with the aim of going beyond merely descriptive explanations in favor of a model of reasoning that focuses on the processes by which an individual comes to behave in an environmentally friendly (or unfriendly) way. Gaspar makes a distinction between the notions of obstacle, barrier and constraint, the three terms generally used to describe the factors that hamper or affect the ability or willingness of individuals to adopt pro-environmental behaviors. He proposes to define an obstacle according to whether it constitutes a barrier or a constraint. The difference between the two terms revolves around the scale or magnitude of individual responses. A barrier inhibits action while a constraint interferes in individual decisions. The term “obstacle” is used as an umbrella term to denote the general idea of a hindrance or impediment to individual action. Far from being a mere semantic trick, Gaspar’s proposal provides a way of better understanding the reasons why individuals force themselves to act in environmentally friendly ways.

8.1.1.4 Required Intensity

The fourth structuring element is provided in a study by Ciocirlan (2017). The aim of the paper is to refine the definition of pro-environmental behaviors by introducing a set of characteristics so far neglected in the reference literature. Among these characteristics, Ciocirlan introduces the idea of the level of intensity as an indicator for assessing the degree of risk when individuals engage in environmental behaviors. Individual risk is a function of the following three characteristics: (1) the degree of uncertainty associated with achieving results, (2) the resulting individual costs, and (3) the individual consequences borne by the individual promoting these behaviors.

8.1.1.5 (In)appropriate Nature of Individual Actions

The final structuring element is provided by Tanner (1999). Tanner’s paper applies the premises of ipsative theory to driving habits. The theory posits that while individuals may have a generally positive attitude toward a singular behavior, they may be led to make choices which, in some cases, do not altogether reflect their initial intention because of a perceived lack of relevant alternatives. Depending on the combination of these various factors, individuals will tend toward inaction or engage in appropriate or inappropriate behavior.

8.1.2 *Prelude to Individual Decision-Making Pathways*

The integrative model proposes to explain employee willingness to engage in (in)appropriate actions and their propensity toward inaction. The various structuring elements described above underpin six individual decision-ambling pathways. Each of these pathways proposes to explain how individuals behave from an environmental point of view in workplace settings depending on how they perceive, decode and interpret the characteristics of their organizational context.

Two studies will be used to develop the foundations upon which I propose to formalize decision-making pathways in an environmental context. Ohtomo and Hirose (2007) sought to explain decision-making as a response to a social context, while Amel, Manning, and Scott (2009) set out to provide an account of decision-making in terms of cognitive processes.

8.1.2.1 *The Individual Significance of Contextual Constraints*

Ohtomo and Hirose (2007) posited that a pro-environmental behavior is theoretically influenced by two distinct decisional processes. The first process is attitudinal intention, which combines the idea of personal environmental concern and normative injunction, i.e., the perceived judgment of members of the relevant social group in the event of inaction. The second process is perceptual and involves a combination of the prototypical image, i.e. the mental representation of a person who adopts a socially undesirable behavior (in the case of the study, a person who does not recycle), and the descriptive norm, i.e., the alignment of the individual with the dominant behaviors of the reference group (friends, colleagues, etc.). Based on an examination of the individual motivation to recycle, the main finding of Ohtomo and Hirose (2007) was that “prosocial motivations to perform eco-friendly behavior are at odds with pro-self motivations to accept eco-unfriendly behavior” (p. 123). One of the implications of their study is that a socially (un)desirable behavior may be (non)intentional and be explained by the social characteristics of the context. Put differently, the context prevails over action. For example, the results of a study by Ohtomo and Hirose (2007) suggest that in a context in which recycling is neither valued nor encouraged, the intention to recycle may not trigger recycling behavior. By contrast, in a context in which recycling is valued and encouraged, an individual may adopt recycling behaviors in spite of their intention not to recycle (this situation also

raises the problem of the persistence of behaviors over time). By extension, what this implies is that, in a given situation, an individual may (or may not) adopt a pro-environmental behavior that is inconsistent with their actual intention by accepting a choice that does not reflect their actual decision-making.

8.1.2.2 *The Power of Individual Routines*

Focusing on decision-making routines, Amel et al. (2009) explained why, against a backdrop of information overload that provides numerous opportunities for refining one's knowledge and improving one's skills and know-how, there is much evidence of ecological behaviors that are not consistent with the degree of environmental awareness reported by individuals. According to Amel et al., in a given situation and faced with a range of possible choices, an individual will tend to choose the least constraining option. The implication is that an individual will tend to prefer the choice that impacts their comfort the least. The routinization of decisions will tend to favor one behavioral action more than others, however difficult it may be to justify it to oneself and others. Finally, Amel et al. (2009) suggested that the routinization of our daily actions prevails over the sense of responsibility toward the environment.

Based on the two studies discussed above, in a context of environmentally responsible behavior, the evidence suggests that individuals are required to navigate between behavioral inertia and contextual pressures.

8.2 DEVELOPMENT OF THE MODEL: INTEGRATION

8.2.1 *Stage 1. Ignorance: Its Reasons and Effects*

Gifford (2011) argued that ignorance strongly determines an individual's ability to make efforts to minimize their carbon footprint in their day-to-day life. Van de Poel (2011) proposed to define ignorance as a "situation in which we do not even know what could go wrong, resulting in unknown hazards" (p. 285). Ignorance may stem from a lack of objective knowledge about a particular fact or phenomenon but may also be explained by deliberate short-sightedness designed to conceal a reality which, though possible, is difficult to conceptualize. The key role of individual knowledge is a recurring theme in the environmental literature. The level of knowledge can help or hamper individuals in making the link between their understanding of the issues associated with environmental

matters and their efforts to minimize their impact on the environment. Whether total or partial, ignorance has many explanations. In any event, it cannot be solely attributed to an individual's level of education, nor is it correlated to the level of available information.

In a study focusing on the reasons why individuals limit their efforts to combat climate change in everyday life, Lorenzoni et al. (2007) showed that inertia stems from a blindness justified by the difficulty faced by respondents in materializing the harmful consequences of climate change, a process seen as occurring over the long term. Official government and international bodies publish reports that often include forecasts and projections over long periods. For example, the report of the 48th session of the Intergovernmental Panel on Climate Change held on October 6, 2018 in Incheon (Republic of Korea) includes the following sentence: "Global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate" (p. 4). This excerpt contains two key items of information that perfectly illustrate the reasons why it can be difficult for some individuals to grasp the scale of the effects associated with climate change.

- The first relates to the average increase in global temperatures on Earth. A piece of information such as this may lead to an erroneous understanding based on a perception that short-term variations in a given location are greater than the average increase expected over the long term. The principle of the "local effect" (Li, Johnson, & Zaval, 2011) may, in this case, contribute to difficulties in understanding. Studies suggest that the immediate experience of perceived temperature variability is a more significant factor in shaping individual perceptions of the reality of climate change (Zaval, Keenan, Johnson, & Weber, 2014). What this suggests is that, for individuals, the informational content of this type of information is particularly weak.
- The second item of information offers scenarios by providing indications about temporary occurrence. At the time of publication of the report, the lower bound was set at 12 years, while the upper bound was set at around 25 years. This corroborates one of the observations of Lorenzoni et al. (2007), according to which, at the individual level, climate change poses threats which, for many people, remain difficult to conceptualize or substantiate because they are perceived as being remote in time.

Lorenzoni et al. (2007) also showed that a lack of knowledge is sometimes explained by how difficult it can be to find relevant information (Lack of knowledge about where to find information). Knowledge presupposes having access to knowledge media. Information and knowledge can be accessed by many means:

- Academic journals, popular books, and public lectures can be used by anyone to access the very latest knowledge.
- Major international agencies and NGOs usually provide access to reports and summary notes, which anyone can download for free.
- The written press, television, radio and, more recently, tablets and smartphones also play an important role. In this respect, it is interesting to note that the ownership rate globally has been constantly increasing in recent years. According to the Statistica website, in 2020 nearly 2.9 billion people throughout the world used a smartphone.
- An increasing number of celebrities from the worlds of politics and entertainment are becoming involved in the cause of climate change, acting as opinion leaders. Documentaries such as those produced by Leonardo DiCaprio (*Before the Flood*, 2016) and directed by Al Gore (*An Inconvenient Truth*, 2005; *An Inconvenient Sequel*, 2017) are aired on TV and are sometimes available online.

In other words, there is a huge amount of widely available information about climate issues. The forms and media used allow for an ever-wider audience to be reached. Therefore, on the face of it, it seems difficult to argue that ignorance can be explained by a lack of available information. However, there is also a cognitive cost associated with access reflected, paradoxically, by an overabundance of information, further complicating the process of forming a clear opinion about a subject as complex as climate change insofar as the matter involves numerous interpretive frameworks.

The sources of ignorance are also sometimes to be found in the production of academic knowledge and its dissemination among a specific audience or public. Research produces knowledge that requires specific processing operations before being disseminated among the reference community. When knowledge leaves the strictly academic domain to reach out to the general public, a process of popularization is needed

to make research findings intelligible. The challenge is to pare academic communication down to its simplest form without thereby reducing its informative quality. The acquisition of knowledge can be disrupted by another key factor. The same object of study is sometimes examined by researchers operating in different disciplines. A good example is the question of sustainable development, an umbrella term covering three main fields (the environmental, social, and economic fields) of interest to researchers working in a wide range of disciplines and exploring an almost infinite number of issues. These fields are often compartmentalized, with little overlap between them. For example, business research in the environmental field concerns management, accounting, marketing, supply chain management, strategy, and many other areas. In addition, each of these fields is structured around specialized academic events (workshops, conferences, etc.). Finally, methods of inquiry, concepts, and approaches also differ profoundly between disciplines. These divergences add an additional layer of cacophony, causing the messages that academics wish to convey to become inaudible.

The structure and organization of research can sometimes create its own obstacles despite the fact that it should, as noted above, facilitate understanding of complex phenomena and thereby contribute directly to raising environmental awareness among the greatest possible number. Research is, by necessity, a slow process that is not simply temporal but also requires a consensus to emerge among the reference community before a phenomenon is considered to be an established fact in accordance with the structuring elements of a paradigm at a given time. By their very nature, research activities generate results that crystallize discussions around specific points which, though important to researchers (and rightly so), can seem futile to the general public.

Academic research activities generate knowledge that forms part of a more or less long-lasting paradigm. Existing paradigms are designed to be challenged by the emergence of new paradigms that provide more refined solutions to the issues under study. The history of science provides much evidence of this process. For example, it would be difficult for a contemporary physicist to offer an explanation of the universe based on Aristotle's geocentric model. Knowledge develops and evolves as new theoretical approaches emerge, analytical methods are improved, and new data are collected. Direct observations reported by researchers can sometimes prove to be contradictory. The retreat of glaciers is an interesting example in this regard. Before-and-after photo montages provide a visual

insight into the effects of climate change (this example is drawn from the November 26, 2019 issue of the French regional daily newspaper *Ouest-France*). While overall the process of glacier terminus retreat is taking place at a constant rate, some observations suggest that the size of some glacier snouts in Greenland is tending to decrease at a slower rate (source: D. Altendorf, Sciencepost.fr of 7 April 2019). Although this apparent improvement is presented as temporary, a finding such as this can contribute to feeding doubts about scientific data and information, despite the fact that, in this case, the matter at hand is a local phenomenon that does nothing to undermine the reality of the phenomenon more generally.

In summary, ignorance about environmental matters can be attributed to many factors. Gifford (2011) argued that while environmental ignorance is one of the main impediments to environmental action combined with, moreover, a strong propensity to favor inaction, it also provides a degree of comfort that enables individuals to overlook any data or information that may be perceived as disruptive. Amel et al. (2009) contended that encountering an unmanageable volume of information can cause individuals to opt for routine decision-making as a coping mechanism. If we agree with the idea, the implication is that ignorance should be seen not only as a gap in knowledge or knowledge that is difficult to access, but also as something reflective of knowledge that is not mobilized on account of the activation of the decision-making pathways typically mobilized to respond to a given situation. In what follows, I propose to explore the effects of this process in the context of environmental inaction.

8.2.2 *Stage 2. Beyond Ignorance: Denial and Environmental Inaction*

8.2.2.1 *The Causes of Inaction*

The integrative model posits that what lies at the root of inaction is a personal denial of the issues surrounding environmental questions. Vitousek, Daly, and Heiser (1991) define denial as “any consciously or unconsciously motivated omission, concealment, or misrepresentation of behaviour or internal experience” (p. 648). Following Gaspar, Palma-Oliveira, and Corral-Verdugo (2010), identifying the degree of environmental awareness provides a means of determining the role of obstacles in environmental inaction. The authors make a distinction between conscious obstacles, which are intentional and controllable, and

unconscious obstacles, which unwittingly influence a person's choice. This distinction is also useful for describing how individuals deal with the question of the environment at an individual level.

8.2.2.2 *Pathway #1*

This decision pathway refers to what we might call pure denial. In this case, denial ensures that the reality of environmental facts remains beyond individual awareness. The discontinuous line indicates that there is no causal relationship, implying that denial intentionally produces inaction in the sense that the individual might act with the aim of deliberately harming the environment (see the chapter on counter-productive behaviors). On the one hand, it seems easier to argue that individuals do not know that they are acting in an environmentally friendly way—or at least, to put it differently, that they are not aware of their inaction. In this case, environmental inaction operates through unconscious obstacles (Gaspar et al. (2010)). How should we interpret this situation? The mechanism of repression described by Freud provides some clues. The situation can be illustrated by drawing on the results of a number of studies that have reported how individuals come to favor environmental inaction despite the fact that everything in their immediate environment facilitates the circulation of information. Of course, the methodological foundations on which these studies are based have nothing in common with the method of psychoanalysis. The method of access to the empirical material used is also very different. Freud describes repression as a method of treatment for an impulse. In this respect, repression plays an important role in the Freudian psychological economy. In a sense, an impulse is to the field of psychology what excitement is to the field of physiology. An impulse is a tensing process involving the activation of a need to be satisfied. The outcome of an impulse is the sensation of pleasure. Repression is involved when, rather than providing pleasure, an impulse causes displeasure. The anxiety generated by displeasure is relegated to an unconscious realm by repression and is kept at a distance from the conscious realm. Repression thus involves subtracting from consciousness any sensuous experience that might contribute to causing displeasure rather than pleasure.

Maiteny (2002) reports that the anxiety caused by the societal effects of climate change can cause individuals to seek refuge in the satisfaction afforded by compulsive consumption. Focusing on consumption, Maiteny (2002) showed how people manage the anxiety created by the conflict between their awareness of the increasing social problems raised

by the environmental question and their consumption habits when these are perceived as being in conflict with environmental matters. The data indicate that individual accommodation to anxiety is expressed in three different ways: avoidance, adaptation and transformation (the two latter forms of accommodation are discussed below). Through avoidance, individuals seek to divert the effects of anxiety by activating an unconscious process of denial accompanied by an attempt to satisfy their consumption needs through impulse buying behavior. Here, denial replaces anxiety by neutralizing the most disruptive effects on the individual. It is important to acknowledge, however, that a consumption situation differs significantly from a work situation, even though it may be possible to identify several attitudinal and behavioral invariants. Nevertheless, the results of Maiteny (2002) are interesting insofar as they provide a heuristic basis for identifying the different possible responses to anxiety arising from the social issues raised by climate change.

Doherty and Clayton (2011) concluded that environmental anxiety is a form of emotional response arising in relation to a range of threats that individuals perceive as being either real, hypothetical, or fantasized. Through its structures, an organization can perform a neutralizing role by appeasing individual anxiety. This point can be illustrated by a study carried out by Enriquez (1992), who used a Freudian psychoanalytic approach to show that organizational structures serve to channel individual anxiety. Drawing on the results of several field studies, Enriquez set out to show that the structure of social life in an organizational context is shaped by impulses embodied by and in several unconscious authorities (i.e., individual, instinctual, institutional, mythical, group, organizational, and socio-historical authorities). For reasons of space, a detailed overview of the conclusions of Enriquez's study is not possible here, but the key point is that each of these authorities contributes to the channeling of individual anxiety.

Based on the results set out above, we may argue that it is possible for the feeling of environmental anxiety to be channeled by organizations. I propose to explore this idea further. It is now widely acknowledged that, compared to households, organizations play a hugely significant role in environmental degradation, primarily because of the hugely energy-intensive practices required by their administrative, commercial, and industrial activities. The studies discussed in previous chapters showed that individuals can sometimes struggle to transfer their environmental habits from the private sphere to the professional sphere. A solution

to this dilemma arises when people with high environmental awareness work for an organization that places the protection of the environment at the heart of its vision. It seems unrealistic to expect organizations to subordinate their activities to the environmental imperative by seeking to achieve a zero-carbon footprint. This raises the question of the regulation of environmental anxiety within organizations where the protection of the environment is not a priority. Here, a sort of compromise emerges between the organization and its members. Through its structures, the organization provides the tools of neutralization that serve to liberate its members from the anxiety inflicted on them by the torments of climate change. However, individuals can find themselves caught in an internal conflict involving a tension between the reassurance provided by the management of their anxiety by organizational structures and the fact that, by virtue of the nature of its commercial and industrial activities, their organization inevitably impacts the environment. In this kind of situation, it may be hypothesized that repression acts as the means by which individuals are able to reconcile the irreconcilable—in other words, to relieve themselves of the burdensome weight of the environmental anxiety associated with the effects of climate change while accepting to ignore the environmental constraints that their work activities impose on the environment.

8.2.2.3 *Pathway #2*

Pathway #2 involves a justification stage between denial and inaction in the decision-making process. This enables individuals to rationalize their environmental inaction in order to achieve some degree of coherence and consistency. The process of rationalization involves individual strategies aimed at avoiding the burden of discomfort associated with the reality of environmental facts brought to the attention of individuals. This contention is, on the one hand, consistent with the arguments put forward by Gifford (2011), who emphasized that ignorance of climate problems is compatible with a perception of their concrete realities, and, on the other hand, with those of Doherty and Clayton (2011) when emphasizing psychological defenses alongside the principle of social justification to explain how climate change denial makes a lack of concrete response possible.

Lorenzoni et al. (2007) highlighted several individual denial strategies that enable individuals to justify the reasons for their environmental inaction. These strategies operate as neutralization techniques aimed at

concealing or obscuring any sense of personal responsibility when individuals catch themselves in the act of being apathetic despite the climate emergency. The various strategies that express denial in a significant way are listed below.

- **Emphasis on the inaction of authorities and industries.** According to the survey conducted by Lorenzoni et al. (2007), nearly 7 out of 10 respondents believe that it is up to governments to take the necessary measures to tackle the issues surrounding the fight against climate change. More than 8 in 10 respondents even believe that, as the chief culprits, industries should take responsibility for the fight against climate change. According to the survey, what this implies is that, at the individual level, inaction is justified by the shouldering of responsibility by political regulatory bodies or by the remedial actions of the main emitters of environmental pollution.
- **Relying on technology.** As a sign of the times, the environment is a topic of choice in science fiction. What movies such as *Soylent Green*, *Interstellar* and *Geostorm* have in common is that they all depict different aspects of the salutary role of technology in helping mankind to cope with an ecological disaster. Relying on technology simply means discharging oneself from any personal responsibility by transferring the burden of finding a solution to a crisis to scientific advances and the resulting technological applications.
- **Skepticism, fatalism, and distrust of information sources.** Faith in science and technology lies in sharp contrast to skepticism. Skepticism and its corollary, distrust of information sources, translates into doubts being expressed about the findings of official reports. Lorenzoni et al. (2007) reported that nearly one in two respondents held the view that the media tend to exaggerate climate change issues.
- **Invoking lack of time.** Time as an obstacle is among the reasons most commonly cited by individuals to justify their inaction. In the case at hand, a question that arises is what people actually mean when they claim to lack time.

Each of these individual strategies is used to justify environmental inaction in different ways, acting as barriers insofar as they are clearly viewed as the reasons why respondents make no effort to reduce their environmental impact.

8.2.3 *Stage 3. Beyond Ignorance*

8.2.3.1 *Awareness and Its Consequences*

While ignorance promotes denial, Gifford (2011) argued that it does not condemn individuals to perpetual blindness. According to Gifford, awareness can replace ignorance and cause an individual to take a different path involving responsabilization. However, what remains to be understood is how this substitution process occurs. Stage 3 proposes to give a plausible explanation for how consciousness arises among people with little or no awareness of environmental matters.

Ritter, Borchardt, Vaccaro, Pereira, and Almeida (2015) defined environmental consciousness as “the ability to reshape habits to minimize environmental effects and is affected by cognitive, attitudinal and behaviour components” (p. 509). Based on this definition, depending on whether individuals agree or refuse to significantly alter their way of life, the emergence of consciousness can lead to two different responses. I propose to refer to these responses as inertia and drive. My contention is that a response based on inertia does not lead to a significant change in the way of life, while drive facilitates a reconfiguration of life choices leading to a genuine growth in awareness.

Inertia can be illustrated by a study conducted by Salmela and Varho (2006) on the motivations underlying the use of green electricity (defined by the authors as electricity generated from renewable energy), the results of which highlight an interesting paradox. The authors surveyed a sample of highly educated individuals, pointing implicitly to a high ability to access knowledge, and with a significantly greater interest in environmental matters than their reference group. The respondents indicated that a lack of environmental awareness is often identified as an important barrier in the decision to use green electricity. Salmela and Varho (2006) found no evidence of a strict causal relationship between environmental awareness and consumption behavior. What this finding shows is that a state of environmental awareness is not necessarily reflected by corresponding actions. The personal costs borne as a result of changing consumption modes, the complexity of understanding required on account of the abstract nature of the concept of renewable energy, and institutional policies all act as obstacles that serve to promote inaction. Despite the relatively high degree of environmental awareness observed among the sample surveyed, the authors reported that the participants did not always opt for green electricity. This suggests, on the one hand,

that being aware may not be sufficient by itself to trigger the drive necessary for a significant change in habits and routines (which represents the main difference with decision pathways #3, 4a, 4b and 5, which involve a willingness or desire to take concrete action in response to a new awareness). In other words, being aware of a range of environmental issues at a global level does not necessarily result in individuals acting accordingly in their everyday life. What may seem to be a paradox at first glance can be satisfactorily explained when we look at the individual denial strategies used by individuals to overcome their contradictions.

Drive may stem from the experiential shocks that cause individuals to reassess their assumptions and beliefs and to alter their environmental habits (Maiteny, 2002). Lee and Mitchell (1994) noted that “the social and cognitive context that surrounds the experienced shock provides a frame of reference within which employees interpret the shock (i.e. a decision frame)” and “is part of an ongoing context, and the examination of this context helps an employee to interpret the shock along some key dimensions (e.g. novelty, favorability, threat, or anticipation)” (p. 61). Many events can cause an experiential shock capable of altering people’s attitudes toward the issue of climate change. Recurrent wildfires, heatwaves, hurricanes, and intense cold waves (to name but a few) are increasingly seen as clear evidence of global warming. These events are anything but new, forming part of the dynamics of our planet. However, according to many experts, what does appear to be a recent phenomenon is that these events have increased in intensity. For example, a recent report by the European Commission found that wildfires are associated with the significant average temperature increase observed across the regions affected by wildfires (San Miguel-Ayanz et al., 2019). Events such as these are having a direct impact on the lives of an ever increasing number of people. They are also tending to encourage growing support for the environmental cause among citizens. Events such as the global climate strikes of September 27, 2019 have become a key vehicle for issuing warnings, or at least for attempting to encourage a new awareness of ecology and environmental matters. It is also interesting to note that businesses accustomed to managing risks are now starting to become concerned about the impacts that such events have on their commercial and financial activities. These developments can be illustrated by the following quote from a report by the International Association of Insurance Supervisors, which includes the following comment: “It is difficult to reliably assess the return period for certain extreme weather

events. Insurers may consider that such event risks could only emerge over the long term, allowing for optionality to mitigate through repricing or transfer risk through financial channels (including reinsurance). More evidence/investigation is required to explore the potential for more extreme weather scenarios over short-term timeframes” (p. 40). In my view, it seems reasonable to argue that economic operators combined with the recurring calls for citizen action can contribute to the transition from ignorance to a newfound awareness of the environmental cause.

Personal attitudes toward the environment can act as an obstacle when, in seeking to justify their inaction, individuals emphasize arguments such as temporal or spatial distance. In a study devoted to individual climate change denial strategies, Lorenzoni et al. (2007) reported that 16.3% of the individuals surveyed believed that climate change will affect people in the Third World, 15.6% believed that it will affect the poor, and 7.4% believed that it will mainly impact people living in coastal areas. However, it may be hypothesized that distances diminish with concrete experience, making the climate threat a highly plausible reality and causing previously ignorant individuals to reconsider environmental matters and to take such matters more seriously. Spatial and affective proximity may thus be said to facilitate changes in habits often identified as an obstacle to pro-environmental action (Lorenzoni et al., 2007).

Though necessary, awareness does not appear to be sufficient in itself to trigger individual action. Several variables appear to act as facilitators in this regard. Adopting a macroeconomic approach, Duroy (2005) set out to examine a range of economic and social variables with a view to identifying those with the greatest influence on environmental awareness. Duroy concluded that environmental awareness is most sensitive to psychological and social characteristics defined in terms of subjective wellbeing and the desire to reconnect with nature and appears to be less explained by economic characteristics such as the level of per capita income. However, the results of Duroy’s study contrast sharply with other studies indicating that economic costs are often seen as an obstacle that significantly explains environmental inaction (Carrico & Rimer, 2011).

Let us return briefly to the study by Maiteny (2002) on modes of accommodation to environmental anxiety. The mode of accommodation based on denial enables people to free themselves of the tensions generated by irresponsible consumption habits in a context of environmental concern. Maiteny identified two other forms of accommodation. The first involves a logic of adaptation, while the second is based on a logic of

transformation. Adaptation is the process by which people aim to reduce their anxiety through a change in purchasing criteria by introducing the principle of ethically and morally responsible choices without substantially changing their consumption habits. Transformation is the process by which people respond to societal issues not only by drastically changing their consumption habits but also by profoundly altering different aspects of their way of life. What Maiteny's findings suggest is that, ultimately, people are able to find within them the necessary psychological and motivational resources to enable them to respond to social injunctions by moving from inertia to action.

8.2.3.2 *Behavioral Intention*

At this stage, I propose to introduce the notion of the mechanism of behavioral intention combined with the degree of required intensity by way of offering a plausible explanation for understanding how growing environmental awareness leads a person to adopt environmental behaviors. However, as noted in previous chapters, individuals may engage in anti-environmental behaviors more as a result of clumsiness or a lack of awareness than because of a deliberate intention to cause harm. In other words, an appropriate action is defined as the expression of an environmental behavior, while an inappropriate action is defined as the expression of a non-environmental (or anti-environmental) behavior.

Behavioral intention is generally assumed to be the best predictor of behavior. This is because intention carries within it the seeds of action. High intention increases the likelihood that a behavior will be performed, while low intention significantly reduces the likelihood of performance. Studies that have used the theory of planned behavior as a theoretical framework has shown that the predictive capacity of intention for behavior is affected by the degree to which individuals feel that they control the physical and social characteristics of the context in which the behavior is performed. In other words, an intention to behave in an environmentally friendly way does not guarantee that an individual will adopt the associated pro-environmental behavior. The context generates a range of obstacles that hamper individuals' ability to translate their intention into behavior (Plank, 2011). Depending on their nature, obstacles may act as barriers or as constraints.

8.2.3.3 *The Reasons for (In)appropriate Environmental Action*

As set out in the integrative model, an environmental action can be either appropriate or inappropriate. Decision pathways #3 and #4a apply to individuals who engage in inappropriate environmental actions, while decision pathways #4b and #5 relate to individuals who engage in appropriate environmental actions.

In Chapter 9, I will show that, depending on the nature of job tasks and their type, pro-environmental behaviors depend on employees' degree of decision latitude. However, pro-environmental behaviors also presuppose combining decision with the degree of intensity required. Ciocirlan (2017) noted that engagement in high-intensity environmental behaviors generates high short-term individual costs that may nonetheless be beneficial for the organization in the long run. However, in the case of low-intensity environmental behaviors, Ciocirlan remained relatively vague about both the costs borne by the individual in the short term and the long-term benefits that the organization can expect to reap. By extension, it seems reasonable to assume, however, that low-intensity behaviors generate low short-term individual costs, with, nonetheless, tangible long-term organizational effects. Before going any further, it is important to consider further what the principle of the costs potentially borne by the individual implies and to reiterate what the principle of beneficial effects for the organization might suggest.

The individual cost of required intensity can be assessed in two ways. First, the required intensity is closely related to the principle of inclusion of the behavior in job tasks. For example, Ciocirlan (2017) noted that recycling is a low-intensity activity when it is not a task included in the workload (extra-role) but is defined as a high-intensity activity when it is included in the workload (in-role). Consistent with the management literature, this is explained by the sanctions to which employees may be exposed when they fail to correctly fulfil the job tasks implied by their role and position, unlike tasks performed beyond those which are prescribed, for which no sanction can reasonably be imposed. As noted previously in discussing the results of the study by Chen, Chen, Huang, Long, and Li (2017) on behavioral persistence, the individual cost can also be explained by the risk of generating negative effects on social relationships with peers in a work setting. Lastly, the individual cost can be explained by the potential moral sanctions resulting from social control (see Ohtomo & Hirose, 2007).

An organization may reap benefits from an environmental performance point of view when members behave in environmentally responsible ways (see Chapter 9). For example, an employee's contribution to environmental performance is effective when he or she chooses to attend a meeting remotely via videoconference rather than by travelling to the office (Ones & Dilchert, 2012) or whenever he or she makes a practical contribution to the improvement of environmental practices (Boiral & Paillé, 2012), when he or she contributes to reducing pollution loads or to improving energy efficiency (Di Norcia, 1996), or when he or she communicates, disseminates and shares his or her point of view and ideas on environmental matters (Temminck, Mearns, & Fruhen, 2015).

8.2.3.4 *Pathway #3*

Decision pathway #3 involves situations in which individuals are driven to act in an environmentally responsible way when they engage in behaviors that involve a high degree of intensity and face obstacles which, depending on the circumstances, operate either as constraints or as barriers. Echoing Chapter 3, inappropriate environmental behavior is viewed more as a matter of behavioral clumsiness that develops over time as a routine rather than the result of a specific intention to act in ways that are deliberately harmful to the environment.

Pathway #3 will be illustrated using the results of Laudenslager, Holt, and Lofgren (2004) and Greaves, Zibarras, and Stride (2013). Both studies are of interest here since they examine several environmental behaviors among the same group of respondents. They are particularly enlightening in that they help to formalize the degree of constraint imposed by the organizational context. If the context does not vary, and if the respondents are the same, the implication is that we need to examine the role of another variable, and that variable is required intensity. The intensity required to behave in an environmentally responsible way at work provides a key for understanding the adoption of appropriate or inappropriate behaviors.

Laudenslager et al. (2004) tested the relevance of the theory of planned behavior in seeking to provide answers to (unsuccessful) attempts by the US Department of Defense to encourage its employees to follow environmental protection programs, the chief aim of which was to improve staff recycling practices across the agency. To this end, the authors examined recycling, but also energy conservation and carpooling practices. Their study provides two findings of interest. The first relates

to the level of behavioral intention, which is significantly higher in the case of recycling and energy conservation than it is for carpooling. The second finding relates to the fact that the respondents reported having greater decision latitude over carpooling (by virtue of their significantly higher degree of perceived control) than over recycling and energy conservation practices, while normative pressures to recycle and conserve energy were perceived as being stronger when compared to carpooling. Though requiring low intensity and high decision latitude, the practice of carpooling appears to have acted as a barrier on employees.

Greaves et al. (2013) examined intention to switch off personal computers whenever leaving the desk, intention to use videoconferencing in place of travel, and intention to recycle waste at work. Because the authors limited their study to intention, it is not possible, based on their results, to predict whether the three environmental behaviors studied were indeed affected by contextual characteristics. However, it seems reasonable to argue that, in the case of recycling, lack of recycling facilities and lack of time both acted as obstacles. However, lack of recycling facilities is not the same as lack of time. Lack of facilities acts as a barrier, while a lack of facilities prevents employees from realizing their intention to recycle. On the other hand, lack of time appears to be a constraint that predisposes employees to adopt inappropriate behaviors because of their inability to act in accordance with their intentions. In the case of videoconferencing, the booking process, the number of facilities and the difficulty of using equipment appears to have acted as barriers rather than as constraints. Finally, in the case of energy conservation (switch off PC), leave on for others, risk of forgetting something and short time taken to switch on were found to act less as barriers and more as constraints.

8.2.3.5 *Pathways #4a and #4b*

Pathways #4a and 4b involve pro-environmental behaviors requiring high-intensity engagement on the part of employees. Pathway #4a is a variant of Pathway #3. The difference lies in the fact that the required intensity, though perceived as high, generates neither a constraint nor a barrier. Employees are able to perform appropriate environmental behaviors in their workplace when overcoming constraints (Pathway #4a). However, even if a workplace is equipped with systems and procedures designed to favor greening, more demanding habits may paradoxically be necessary, such that individuals may perceive constraints (Pathway #4b).

For example, studies have demonstrated the role of the physical distance between the physical location of the workstation and a waste facility. Price and Pitt (2012) reported that “frequent recyclers are highly influenced by the “proximity of the facilities” while non-recyclers are influenced by the “distance of facilities” (p. 627). The distance to be traveled appears to be less important than the intention to perform the act itself. In this case, distance is not perceived as a constraint. Employees therefore engage in appropriate environmental actions—i.e., recycling correctly. In the case of employees who are little inclined to recycle, the physical distance to be covered in order to perform the action is used by employees to rationalize their lack of environmental engagement. Based on the findings of this study, it seems reasonable to argue that, for recyclers, intention leads to action because the intensity required by the action is not disrupted by physical distance, while for non-recyclers the distance to be covered requires high intensity, the effect of which is to require a transition from intention to action.

8.2.3.6 *Pathway #5*

Pathway #5 involves pro-environmental behaviors that require employees to combine both high decision latitude and low-intensity engagement. For the most part, this concerns behaviors that can be performed relatively discretely without the use of any particular system or technology. Behaviors in this category include direct environmental behaviors such as reduction (double-sided printing), reuse (rough paper), repairs of basic work tools and devices, and energy conservation.

Some concluding remarks

In this chapter, an original model was proposed with the aim of describing the decision-making basis for environmental inaction and (in)appropriate environmental action. The integrative model developed here is based on five structuring elements forming the main architecture of the model. Based on these key elements, six individual decision pathways were discussed with a view to providing an account of the various social and cognitive processes that explain employees’ predisposition to behave responsibly (or otherwise) toward the environment in a workplace setting.

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