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Understanding the Influence of Personality Traits on Emotional and Behavioral Reactions to Corporate Social Irresponsibility (CSiR).

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Chapter 1. Introduction

In a world where questions of corporate social responsibility occupy a prominent place in public and professional debate, we note that companies are also increasingly scrutinized by stakeholders on this subject (Yoon et al., 2006). We have noticed that there are many studies on the subject of CSR, and it is a subject that we have studied a lot during our university studies, so we wanted to look at the opposite behavior, called irresponsible behavior. Indeed, behaviors perceived as irresponsible on the part of companies can have serious repercussions on their reputation, their relationship with consumers, and their position on the market (Yoon et al., 2006). We therefore asked ourselves the following question: *"What determines how these behaviors are perceived and interpreted by the public?"*

Based on this question, we explored in greater depth the different emotional and behavioral reactions of individuals to CSiR situations, in particular on the basis of research by Hericher & Bridoux (2023). We first looked at the various emotions that these situations can produce, such as anger, guilt, sympathy, or pride. We then examined the behaviors that result from these emotions, such as punitive behavior and compassion. Once we had identified these emotional and behavioral reactions, we wanted to understand why some people react with anger, while others feel sympathy, for example. At this point, we oriented our research towards personality traits, more specifically using the Big Five model, comprising the following personality traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism (DeYoung et al., 2007). Our central hypothesis is that personality traits play a determining role in the way individuals react emotionally and behaviorally to CSiR situations.

To successfully conduct the research on our subject, we developed a rigorous quantitative study by collecting the necessary data ourselves. Our methodology involved designing and distributing a detailed questionnaire, starting with a personality test and then a situation simulation designed to assess the emotional and behavioral reactions to various CSiR situations. We collected 101[1] responses during this survey.

[1] We collected responses from a total of 202 participants. Among these responses, 101 were complete.

Chapter 2. Literature review

2.1. Overview of the literature

2.1.1. Corporate Social Responsibility

Corporate Social Responsibility (CSR) includes a set of initiatives and organizational strategies adapted to the context, taking into account stakeholders' expectations and integrating economic, social and environmental dimensions into a global balance sheet (Gond et al., 2017). These initiatives go further than the interests of the company and exceed what is required by law (Mcwilliams & Siegel, 2001). This field has seen an increase in research, particularly in the areas of CSR, human resource management and organizational behavior, reflecting a growing interest in these topics (Gond et al., 2017).

We can see companies as being social entities that bring together a variety of individuals whose goal is the collective pursuit of organizational objectives (Greenbaum et al., 2020). Employees, as members of these organizations, benefit from financial security and opportunities for growth and development. They also play an essential role in the implementation of CSR initiatives (Greenwood, 2007).

Faced with growing public consciousness of CSR, companies are seeking to play a greater role as social actors, responding to society's needs while targeting sustainable competitive advantage (Lin et al., 2022). Employees, as stakeholders, have significant power and the legal right to influence company decisions (Greenwood, 2007). They therefore play an essential role as drivers and beneficiaries of CSR initiatives (Lin et al., 2022). In addition, we can observe that employees' positive perceptions of CSR have a positive influence on their attitudes at work (Lin et al., 2022). When employees recognize their organization's pro-social actions towards multiple stakeholders, they may develop a stronger psychological attachment to it (Lin et al., 2022).

CSR refers to corporate actions that go in addition to financial and legal interests, aimed at promoting social good (Mcwilliams & Siegel, 2001). It includes socially useful initiatives that advance social improvement (Lin et al., 2022). CSR initiatives can be seen as effective organizational routines aimed at promoting social value by generating positive externalities or preventing negative externalities (Lin et al., 2022). An example of a positive externality for a

company would be the use of renewable energy and clean fuels that reduce global warming and air pollution. Meanwhile, an example of a negative externality would be civil penalties for breaches of employee safety and security (Lin et al., 2022).

2.1.2. Moral emotion

Moral emotions help individuals understand what is right or wrong according to societal rules. They also assist in judging behavior, whether one's own or that of others, in terms of positive contribution or impediment to the proper functioning of the world. These emotions are crucial for preventing behaviors that go against societal moral norms and for promoting positive actions towards others (Greenbaum et al., 2020). We also observe that individuals with a less pronounced moral identity, where moral values are less prominent and less relevant for processing social information, show relatively less interest in CSR in their daily lives. In contrast, those with a stronger moral identity who perceive their organization as socially responsible are more inclined to react positively to CSR by expressing job pursuit intentions and engaging in organizational citizenship behaviors (Gond et al., 2017).

According to Gond and al. (2017), we can identify 3 essential elements that form the basis of previous studies on how CSR affects individuals. The first element is the **driver**, which is the motivation to participate in CSR, whether reactively, where individuals feel they have to get involved in CSR, often without any prior desire to do so, or proactively, when people voluntarily decide to get involved in CSR. Then, the second element is **evaluations** which are cognitive and emotional processes during which individuals gather and structure information about organizations' CSR initiatives. This allows them to form judgments about these initiatives, to feel emotions arising from their perceptions, and to attribute reasons to these emotions. The last element is **reactions** to CSR actions.

2.1.3. Corporate Social Irresponsibility and Deonance Theory

In this master thesis, we will focus on **Corporate Social Irresponsibility** (CSiR). The relationship between CSR and CSiR is their apparent opposition. CSiR is conceptualized as "a moral judgment that a specific organizational action is intentional, violates a moral standard and causes harm" (Hericher & Bridoux, 2023, p. 1533).

This definition of corporate social irresponsibility is supported by the theory of deonance. This theory stands for the idea that people can be morally motivated when "an actor behavior brings

to bear beliefs regarding the relevance of moral norms even if this occurs outside conscious awareness" (Hericher & Bridoux, 2023, p. 1535) (Folger, 2012; Folger & Shukla, 2020). Accordingly, the judgment of an act as immoral is based on the subjective judgment of the observer that the wrongdoer has acted in a way *he would not have* acted had he followed the moral standards deemed applicable in the given situation (Folger, 2001). It describes people's emotional and behavioral reactions to those who intentionally fail to adhere to moral standards of interpersonal conduct, which the person making the judgment believes should never be transgressed. An organization's socially irresponsible actions can lead to adverse consequences, given that the success and even survival of the organization depends in part on meeting the normative expectations of its environment. Additionally, we tend to spend more time thinking about negative behavior compared to positive or neutral behavior. More research is done to obtain concrete information, and the resulting judgments, conclusions and actions tend to be more extreme (Lange & Washburn, 2012).

CSiR as defined by Hericher and Bridoux (2023), is related to “a specific, time-bound action of the organization” (Hericher & Bridoux, 2023, p. 1539). According to this conceptualization, CSiR assumes a moral judgment on the part of stakeholders, whereas CSR, as currently measured, is a perception of the organization's practices and policies, which may or may not elicit a moral judgment. This notion of moral judgment is particularly important in our study, as it is linked to individuals' own morality, and is therefore by definition unique to each individual. However, moral judgment can be linked to personality, and thus trends can be highlighted (Smillie et al., 2021). The perception of CSiR varies between generations, as shown by Abbasi et al. (2024) (based on the definition established by Hericher and Bridoux), which further proves that despite the personal nature of the moral judgment, trends can be identified on the basis of differentiating characteristics between different groups.

To understand how CSiR impacts employees, we must understand how this concept is framed by the two authors. Indeed, they base themselves on the theory of deonance, a theory of fairness established by Folger, which conceives individual motivations for fairness as plural, thus excluding all visions that would understand fairness only as the satisfaction of self-interest or as altruism (Gilliland et al., 2001). In addition, it applies effectively to understanding how employees react to CSiR, as it explains the emotional and behavioral responses of individuals when confronted with others who deliberately violate moral values that they feel should not be transgressed. Deonance theory also explains that, because of moral emotions, behavioral

reactions to reprehensible behavior can be automatic, appearing irrational from a short-term economic point of view, and sometimes followed by an end in itself. According to this theory, there are three components that together determine the reprehensibility of an actor's behavior (Hericher & Bridoux, 2023).

The first component is the **perception** that the organization's behavior violates ethical principles (Hericher & Bridoux, 2023). This means that the organization's action is perceived as inconsistent with the norms, values, or principles that guide moral behavior in a given context (Folger, 2012). For example, an organization that engages in fraud, corruption, or discrimination may violate the moral standards of honesty, fairness, or equality.

The second element is **harm**: we note that the majority of irresponsible behavior by an organization leads to harm. The more damage the organization's action causes, the more irresponsible that action is deemed to be. We consider that any stakeholder, individual or collective, can be a victim of CSiR (Hericher & Bridoux, 2023). For instance, an organization that pollutes the environment, exploits its workers, or misleads its investors may cause harm or negative effects to others.

The third component is **intentionality**, meaning that the organization intentionally violated a moral principle and caused harm. In effect, when the agent acted, he or she was aware that the action could result in prejudice (Hericher & Bridoux, 2023). This refers to the degree to which the organization's action is deliberate, planned, or volitional, rather than accidental, coerced, or unavoidable (Folger, 2012). For example, an organization that knowingly sells defective products, evades taxes, or violates human rights may act intentionally. The more of these conditions an organization's action meets, the more morally reprehensible it will be judged to be (CROPANZANO et al., 2003; Folger et Shukla, 2020).

2.1.4. Emotional and Behavioral Reactions to CSiR

Moreover, we note that CSiR also generates 4 feelings: pride, anger, sympathy, and guilt. These feelings in turn lead to two behaviors: punishment behavior and compensation behavior (Hericher & Bridoux, 2023).

Punishment behavior can be driven by feelings such as pride or anger, while compensation behavior can result from feelings of anger, sympathy, or guilt. Depending on whether they are

positive or negative and directed towards others or oneself, moral emotions are grouped into other-praising (gratitude, moral elevation), other-condemning (anger, contempt, disgust), self-condemning emotions (guilt, shame), and other-suffering (sympathy) (Hericher & Bridoux, 2023).

The compensating behavior shows that when we witness mistreatment, we not only punish the abuser, but also take measures to compensate the victim, in order to restore harmony. Moreover, we see that the compensating behavior does not have as pronounced a direct impact on the organization as the punishment behavior, it can still have positive effects by helping to restore the victim's trust in the organization and its members (Hericher & Bridoux, 2023).

These emotional responses are particularly relevant in the context of organizational dynamics, where employees react negatively to their organization's irresponsible behavior due to moral emotions established in biological cabling, past experiences, and social learning. When leaders fail to anticipate these reactions, it can lead to detrimental consequences, including negative employee feedback and decreased productivity. We see that for employees, managers must therefore not attempt to hide, ignore, or minimize CSiR. They must try to work out with the employees and the victim on how to repair the damage suffered (Hericher & Bridoux, 2023). However, we notice that most of the already conducted studies on CSiR focus primarily on the organization rather than on individuals (Gond et al., 2017). Then, we also observe that when individuals are mentioned, they are not distinguished in terms of gender, social class, culture, etc. Neglecting these nuances poses a risk to oversimplify the complexities of CSiR and its impact on diverse groups within organizations.

Further, we also note that there are few studies looking at feelings of guilt in detail. Guilt is a conscious, negative emotion elicited by the assessment of a behavior as morally wrong and/or as causing harm to others. Specifically with regard to guilt, individuals can feel collective guilt generated by the actions of other members of a social group with which they identify. Therefore, the feeling of belonging to a collective can lead to shared guilt, whereby group guilt is equivalent to personal guilt. Given that most employees see themselves as part of their organization, we anticipate that they may experience shared guilt in response to their organization's socially irresponsible actions (Hericher & Bridoux, 2023).

2.1.5. Link between moral judgement and personality traits; Big 5 theory

In a study by Smillie et al (2020), researchers investigated the relationship between personality traits based on Big Five theory and moral judgments. The study examined the complexities of moral decision-making using the CNI model, which quantifies sensitivity to consequences (C), sensitivity to moral norms (N) and general preference for inaction over action (I) in moral dilemmas (Smillie et al., 2021).

Moral judgments, as explored in the study, involve the resolution of dilemmas that weigh overall consequences for the common good against adherence to moral norms and duties. In particular, there is considerable disagreement between individuals as to which course of action to take in moral dilemmas (Smillie et al., 2021).

Deontic moral judgments pertain to determining what actions one should take or what is considered morally right or wrong based on specific rules or principles. On the other hand, consequentialist judgments involve assessing what actions one should take or what is morally right or wrong based on the outcomes or consequences of those actions (Smillie et al., 2021).

Deontological and consequentialist moral assessments offer distinct approaches to evaluating the ethical nature of actions. Deontological assessments center on the inherent value of actions themselves, guided by universal principles or duties. In contrast, consequentialist assessments focus on the outcomes or results of actions, emphasizing the maximization of good or happiness (CROPANZANO et al., 2003). The deontic theory of justice, a subset of deontological ethics, is particularly relevant in organizational settings. It posits that individuals bear a moral responsibility to uphold principles of justice, such as fairness, equality, and respect, irrespective of the consequences for themselves or others.

According to this theory, justice is esteemed for its intrinsic worth, and individuals experience a sense of moral discomfort known as "deonance" when confronted with or involved in acts of injustice. Cropanzano, Goldman, and Folger (2003) present a framework for deontic justice that incorporates three psychological processes: the application of justice rules, cognitive empathy, and affective empathy. The utilization of justice rules involves the use of normative standards to evaluate the fairness of events or circumstances. Cognitive empathy pertains to the capacity to comprehend the perspectives and emotions of others, while affective empathy involves

sharing or resonating with the feelings of others. The authors argue that these processes interact to shape the development and manifestation of deontic justice judgments.

According to Smillie et al. (2020), deontic and consequentialist judgments are influenced by distinct aspects of an individual's personality. The researchers suggest that deontic judgments are connected to politeness, a facet of agreeableness that signifies adherence to social norms and etiquette. Conversely, consequentialist judgments are linked to intellect, a facet of openness to experience that reflects inquisitiveness and cognitive engagement. In their studies, the authors conducted two experiments to examine their hypotheses, utilizing various measures to assess personality traits, moral judgment, and moral reasoning. The results consistently indicated that intellect was positively associated with a tendency towards consequentialist judgments, while politeness was positively associated with a preference for deontic judgments. These relationships remained significant even after accounting for variables such as education, religion, and moral identity.

Furthermore, Smillie et al. (2020) found that moral reasoning styles mediated these associations, with intellect being linked to more utilitarian reasoning and politeness being linked to more deontological reasoning. The authors propose that these findings have implications for understanding moral judgment theories and how an individual's personality can influence their ethical decision-making processes. However, they acknowledge certain limitations in their studies, including the use of self-report measures, reliance on hypothetical scenarios, and the absence of cross-cultural and longitudinal data. They call for further research to delve into the causal mechanisms and limitations of the personality-morality connection. In addition, the study highlighted the importance of examining the generalizability of these associations across diverse samples for the reproducibility of psychological findings.

2.2. Contributions

In terms of theoretical contributions, we help to extend the application of Big Five theory to the context of corporate social irresponsibility. By analyzing how each personality trait influences emotional and behavioral reactions to CSiR situations, we enrich the understanding of Big Five dimensions beyond traditional contexts. Therefore, our research improves the understanding of the deonance theory. By examining how this theory interacts with personality traits in the work environment. We are exploring individuals' reactions when confronted with CSiR actions, we

explore how deonance theory, which is induced by behaviors perceived as contrary to ethical norms (Hericher & Bridoux, 2023), varies according to personality traits.

In terms of practical contribution, companies could use the results of our research to better anticipate consumer and employee reactions to behavior that is perceived as irresponsible. Indeed, companies could develop more effective communication strategies adapted to their audience thanks to an understanding of the different personality traits influencing these behavioral and emotional reactions. This would help them to communicate their messages in a personalized way according to the dominant personality traits of their audience. For example, for people with a high conscientiousness score, a message focusing on justice and transparency would be appropriate.

2.3. Research question

The relationship between a perceived irresponsible event and the subsequent reaction of employees has recently been established in the literature (Hericher & Bridoux, 2023). This reaction can be punitive or compensatory and is directly linked to the moral emotion triggered by the transgressive event. We will focus on the emotions of anger, guilt, sympathy, and pride, which have been shown to be involved in individuals' reactions to CSiR. Our study introduces a novelty by linking an individual's morality, reaction to CSiR and personality traits based on Big Five theory.

Our research is based on two main themes. On the one hand, we will build on the link that has been established by Hericher and Bridoux (2023) between CSiR, moral feelings and behavioral responses to moral standards transgression. On the other hand, we will build on the link established between a person's personality traits and its inclination to make moral judgments on a deontological rather than consequentialist basis. We seek to establish the link between personality traits (domain-level and aspect-level) derived from Big Five theory and behavioral reactions in relation to CSiR. Research has shown that people whose personalities are characterized by politeness and compassion are more likely to make deontological judgments. It is therefore reasonable that people with these personality traits should react in the way described by Hericher & Bridoux (2023) to CSiR.

Our research question is formulated as follow:

How do personality traits derived from the Big Five theory, particularly, influence an individual's emotional and behavioral responses to perceived Corporate Social Irresponsibility (CSiR)?

2.4. Theoretical Framework

Moral emotions play a fundamental role in our human experience, especially in our social interactions and moral behavior. These feelings generally emanate from our actions that transgress existing social or moral norms and may generate intense emotions (Tangney et al., 2007). Similarly, Hutcherson & Gross (2011) highlight that these self-conscious emotions are relevant to sociomoral emotions, as they involve evaluations of oneself as a social or moral entity. Therefore, the study of these emotions offers valuable insight into how we navigate the moral and interpersonal world, influencing our daily choices and interactions.

In addition, we will add a section on Big Five Aspect Scales which is a theory of personality traits. Personality is a complex combination of characteristics that influence the way a person thinks, feels and behaves in different situations. It is both stable over time and dynamic, as it can change and evolve (McAdams & Pals, 2006). We note that personality changes tend to happen in different stages of life, from childhood to late adulthood, and in different forms (Nguyen et al., 2023). Personality refers to different aspects such as traits, characteristic adaptations, and life stories (McAdams & Pals, 2006).

2.4.1. Moral Emotions

2.4.1.1. Anger

Anger is often generated by situations that are perceived as unfair, intimidating, frustrating or offensive. It is an intense emotion characterized by feelings of frustration, rage or resentment. Anger is a moral emotion experienced when one perceives mistreatment by other stakeholders (Hericher & Bridoux, 2023). We can also see that anger can be used to signal a need for change, to protect interests or to express disagreement with behavior. Hutcherson & Gross (2011) highlight that anger can play an important role in regulating social interactions by signaling potential problems or conflicts and encouraging corrective action. However, inappropriate or excessive expression of anger can also have negative consequences for interpersonal

relationships and social cohesion. We can see that anger is used to signal a need for change or to protect one's interests, but it can also have negative consequences if it is expressed inappropriately or excessively. The moral anger felt when witnessing harm done to others motivates two different courses of action. The first is to punish. The second is to help and support the victim, offering a form of compensation for the harm caused by the transgressor (Hericher & Bridoux, 2023).

2.4.1.2. Disgust

Disgust is a complex emotion, often associated with a deep aversion or feeling of repulsion against something disagreeable, disgusting, or offensive. It is often generated by situations that are considered dirty, smelly, dangerous, or socially unacceptable. We can also see that disgust plays an important role in maintaining social and moral norms. By signaling what is perceived as unacceptable, disgust can help to regulate social behavior and reinforce standards of cleanliness, safety, and ethics. Disgust is an essential part of individual protection against potential dangers, as well as maintaining social and moral standards (Tangney et al., 2007).

2.4.1.3. Contempt

Contempt may be more strongly linked to an assessment of incompetence. It can result from a variety of factors, such as perceived social, cultural, intellectual, or moral differences between the individual feeling contempt and the person or thing despised. This emotion can be used to reinforce a feeling of superiority or to express a profound disagreement with the values, actions, or characteristics of the other party. It tends to manifest itself in the avoidance of interaction with people who are considered inferior or less competent, particularly if they are not intentionally hostile. Contempt occurs when these people are considered as not making a significant contribution to the group. This can lead to a description of events that is impersonal and without social or moral considerations (Hutcherson & Gross, 2011).

2.4.1.4. Relation between anger, disgust, and contempt

Anger and moral disgust are often closely related, potentially because the terms 'anger' and 'disgust' are used interchangeably by people (Simpson et al., 2006; Hutcherson & Gross, 2011). Similarly, contempt and disgust are frequently confused in research. In some cases, these emotions appear to describe different intensities of the same underlying negative emotion (Hutcherson & Gross, 2011). In addition, experiences of contempt and disgust share a common feature: they both predict a tendency to withdraw from an antagonistic social group rather than confront it directly, suggesting a similar function in the regulation of social interactions (Mackie

et al., 2000). Moreover, we note that these negative emotions are manifested simultaneously to express coherent disagreement with the actions of moral transgressors (Grappi et al., 2013).

2.4.1.5. Shame

Shame is an unpleasant and painful emotion that occurs when we evaluate ourselves or our person as a whole in a negative way. Faced with this feeling, our first reactions generally involve actions such as avoiding eye contact with important people, escape, dissimulation or even the desire to hide ourselves metaphorically. We notice that people who feel ashamed close in on themselves to protect and repair their self-image. It implies a wound at the heart of the ego and a devaluation of ourselves. (Bagozzi et al., 2018).

This avoidance or escape mechanism may arise, for example, after a moral failure. In this case, a feeling of shame may emerge, involving an experience of negative self-evaluations based on anticipated or actual depreciation by others due to a failure to meet behavioral standards. These self-evaluations tend to encourage the author of the incorrect action to avoid the source of distress and, rather than solving the problem, to run away from it. (Bagozzi et al., 2018).

Concerning the desire for reparation, this happens in particular in the context of corporations, we will have irresponsible management actions, which will give rise to a feeling of shame. (Bagozzi et al., 2018). It is called proactive shame, and it is a behavior targeted at repairing the damage caused to the company's stakeholders (Xie et al., 2015). Consequently, this generates a desire to repair the damage caused. For example, by promoting transparency, seeking solutions to problems, collaborating and advocating for changes in standards and/or policies (Bagozzi et al., 2018).

People who care a lot about others are likely to react more strongly to the shame they feel. This is because social expectations and moral standards can influence their behavior. On the other hand, those who attribute less importance to other-oriented values are less affected by shame. They are more inclined to take measures to repair mistakes, because they don't need to protect their self-esteem as much by running away from embarrassing situations. Instead, by acting positively, they reinforce their self-esteem (Bagozzi et al., 2018).

In the final analysis, we realize that people focus on other people's evaluations because of the shame they feel, and not the opposite (Smith et al., 2002).

2.4.1.6. Guilt

Guilt is an emotion deeply rooted in our moral conscience, and it also plays a fundamental role in the regulation of our ethical and social behavior. Guilt is a self-conscious emotion. It arises when we reflect on ourselves and evaluate our actions (Tangney et al., 2007). Contrary to shame, which tends to lead to reactions of retraction and dissimulation, guilt often generates an approach mechanism, encouraging repair behavior and positive change (Bagozzi et al., 2018). We note that guilt motivates actions such as apologizing, increasing commitment and offering reparation to the injured parties. This helps to reinforce the desire for justice and to generate moral behavior, thanks to proactive behavior (Bernhard, 2022). These actions result from self-evaluations marked by a sincere concern not to harm others, combined with a feeling of personal responsibility for the acts committed. Guilt is characterized by negative emotions and feelings of regret, tension and remorse. It has also been associated with negative workplace outcomes (Boekhorst et al., 2021).

In addition, guilt motivates problem-focused coping and therefore it tends to encourage people to take reparation measures (Agrawal & Duhachek, 2010).

2.4.1.7. Relation between shame and guilt

The first difference between guilt and shame is that shame involves a negative evaluation of the overall self, while guilt involves a negative evaluation of a specific behavior (Tangney et al., 2007).

We could also suggest that guilt is more 'ego-centered', as individuals are more concerned about how their behavior might harm others, we could describe this as personal guilt. Meanwhile, shame is more "other-centered", as individuals are more concerned about how others might perceive the negative consequences of their behavior. Feelings of shame are more likely to arise when someone else points out irresponsible behavior (Chan & Septianto, 2024).
Then, we can also see a difference in intensity. Indeed, shame is often considered to be the most painful emotion because it affects the person themselves, not just their behavior. It leads to a feeling of inferiority and devaluation, making the person who feels ashamed vulnerable and exposed. On the other hand, guilt is generally less intense, because it concerns a specific behavior rather than the whole person. People who feel guilty reflect on their actions and their consequences, often feeling remorse and regret for their mistakes (Tangney et al., 2007).

The distinction between shame and guilt is clear in both our basic emotional dispositions and our momentary emotional states. Studies of our emotional dispositions show that the tendency to feel guilty is consistently linked to our ability to see things from the point of view of others and to feel empathy. On the other hand, the tendency to feel shame is either unrelated or even inversely related to our sensitivity towards others and is instead associated with focusing on our own distress (Tangney et al., 2007).

Furthermore, there is a difference in self-assessment after irresponsible behavior. If we think " I am a horrible person", we tend to feel a sense of shame. Meanwhile, if we think "What I did was horrible", we tend to feel a certain degree of guilt. For example, when we are very preoccupied with showing that we are qualified in front of others, meaning that we perform well, this can accentuate feelings of shame in the event of a negative self-assessment. Similarly, situations that involve our personal pride, such as judging audiences, can reinforce these feelings of shame (Vess et al., 2014).

Finally, the only similarity between guilt and shame is that they are both negative emotions of self-consciousness. We can see that, when they are experienced, these emotions cause individuals to feel that an event is important but at variance with their personal goals. They highlight the importance of the self in a social environment and are often triggered by mistakes or violations of moral or social norms (Chan & Septianto, 2024).

2.4.1.8. Sympathy

Sympathy is an emotion in which we feel sadness or concern for another person's well-being, but this is not exactly the same emotion felt by that person. Psychologists claim that sympathy can influence our moral behavior, so it can drive us to act in an altruistic way by helping the other person (Calvet Christian & Alm, 2014). Indeed, we have noticed that when we are feeling sympathy, we understand someone else's emotional state, and this leads us to feel concerned for that person. Furthermore, this emotion is often strongest towards people close to us, but it can also manifest itself towards strangers (Eisenberg et al., 1991). This can be explained by the fact that we are programmed to take care of others. For example, when someone is vulnerable or suffers an injury, this can provoke our sympathy and make us want to help them feel better. Basically, we become the carer, and that person becomes the object of our care (Dijker, 2010; Haidt, 2003). This reaction manifests itself in feelings of sadness or concern about the other person (Hericher & Bridoux, 2023).

2.4.2. Big Five Personality Traits

The Big Five Aspect Scales, developed by DeYoung, Quilty, Peterson and Gray in 2007, represent a significant advance in the study of personality traits, based on the fundamental five-factor model (FFM) or Big Five. The FFM, established by Costa and McCrae in the 1980s, identified five personality dimensions: Openness to Experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism (OCEAN). While the FFM has been widely accepted and used in personality research, the Big Five Aspect Scales refine and extend this framework by introducing a more subtle and nuanced perspective (DeYoung et al., 2007; Smillie et al., 2021).

The dimension of Openness, with its two aspects of openness to experience and intellect/imagination, offers a sharper understanding of an individual's preferences for novelty, intellectual curiosity, creativity, and imaginative thinking. DeYoung and his colleagues emphasize the importance of distinguishing these two facets in order to grasp the richness of the openness trait. On the one hand, we have speed, ingenuity, and ideas for the intellect, and on the other, we have aesthetics, imagination and fantasy for the openness side (DeYoung et al., 2007).

The second dimension, Conscientiousness, is described as including both proactive and inhibitory aspects. The proactive aspect involves traits such as a desire for achievement and a strong engagement in work, while the inhibitory aspect includes characteristics such as moral preoccupation and prudence. Conscientiousness is also considered through the aspects of Industriousness and Orderliness. Industriousness assesses work ethics, diligence, and goal-oriented behavior, while Order looks at organization, precision, and detail-oriented behavior. This dual approach provides a comprehensive assessment of conscientious tendencies in individuals (DeYoung et al., 2007).

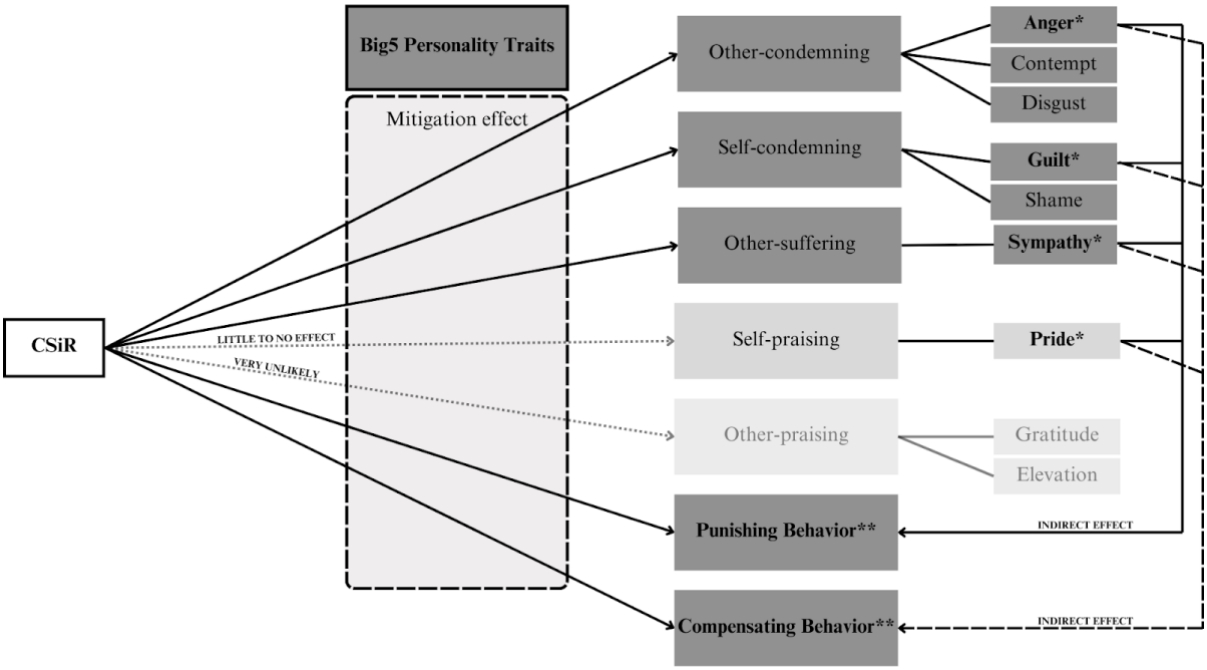
The Extraversion dimension is segmented into enthusiasm and self-affirmation. Enthusiasm refers to how a person interacts socially with the world around them. It measures a person's social energy, affirmation, and positive emotionality. While self-affirmation refers to a person’s self-perception and behavior in social situations. It focuses on confidence, dominance, and assertiveness in social situations. This nuanced perspective recognizes the multifaceted nature of extraversion, going beyond a simple dichotomy (DeYoung et al., 2007).

In the area of Agreeableness, the Big Five Aspect Scales break this trait down into compassion and politeness. On the one hand, compassion reflects a person's propensity to put themselves in other people's shoes, to recognize and respond to their emotions. It assesses empathy, kindness, and concern for others. On the other hand, politeness measures a person's inclination to avoid conflict, maintain social harmony and behave cooperatively. This shows how a person can interact in a diplomatic way in society (DeYoung et al., 2007).

The Neuroticism dimension is explored through the aspects of withdrawal and volatility. Withdrawal captures an individual's susceptibility to negative emotions, including anxiety and depression, while Volatility measures emotional instability, irritability, and propensity to anger. In addition, we note that perfectionism is also a facet of neuroticism (DeYoung et al., 2007).

The introduction of these aspects enriches our understanding of personality by providing a more detailed and nuanced assessment. Although the Big Five Aspect Scales have their roots in the FFM, they offer a more nuanced approach that has been valuable in a variety of fields, including psychology, sociology, and organizational behavior. Researchers and practitioners appreciate the increased precision and depth that these aspect scales bring to the study of personality traits.

Figure 1: Diagram presenting the various theoretical elements reviewed and their logical ordering in relation to our research thematic.



Note: Selection of the most relevant moral emotions (*) and behavioral reactions (**) for studying CSiR derived from the work of authors Hericher & Bridoux (2023).

2.5. Research hypothesis

Once our theoretical framework has been established, we are ready to formulate hypotheses concerning our research question. To this aim, we have chosen to formulate two hypotheses for each personality trait. The first hypothesis establishes a link between the personality trait and a moral emotion (Model a), while the second hypothesis establishes a link between the personality trait and a behavioral response (Model b).

To test these hypotheses, we propose the following models:

Model a: *Moral Emotion = Intercept + CSiR + Trait + CSiR x Trait + Error*

Model b: *Comportemental Reaction = Intercept + CSiR + Trait + CSiR x Trait + Error*

These models will allow us to analyze the interaction between the personality traits and corporate social irresponsibility (CSiR) on both moral emotions and behavioral responses.

2.5.1. Hypotheses on Openness to Experience

Based on the fundamental characteristics of the "openness to experience" trait, people who have a high score on this trait tend to be more imaginative, curious and open-minded. They strongly value diversity of thought and experience, which makes them more empathetic and sensitive to the difficulties of others (DeYoung et al., 2007). This empathetic nature is the base of our first hypothesis (1a), as these individuals are likely to show greater sympathy towards the victims of corporate social irresponsibility (CSiR).

***Hypothesis 1a**: Employees with high openness to experience will show stronger sympathy towards victims of CSiR due to their sensitivity to diverse experiences and perspectives.*

In addition, people who are open to experiences are generally more willing to consider and implement new approaches to solving problems, including seeking constructive and compensatory actions in ingenious ways rather than punitive measures (DeYoung et al., 2007). We note that they tend to be motivated by a desire to improve situations in order to achieve positive results, which makes them more inclined to adopt compensatory behaviors. Our second hypothesis for this trait is based on their penchant for new and creative solutions.

***Hypothesis 1b**: Employees with high openness to experience are more likely to engage in compensating behaviors, preferring constructive solutions over punitive actions.*

2.5.2. Hypotheses on Conscientiousness

Concerning the personality trait "Conscientiousness", DeYoung et al. (2007) show us that people with a high score on this trait are generally diligent, responsible and have a strong commitment to work. As seen in the theoretical framework, these are people who tend to be guided by moral concern and prudence (DeYoung et al., 2007). We can deduct from the importance of their sense of responsibility and the moral values that they are more likely to feel guilty if confronted with CSiR.

***Hypothesis 2a**: Employees with high conscientiousness will experience stronger feelings of guilt when faced with CSiR, particularly if they identify closely with their organization.*

With regard to reaction behavior, we linked the Conscientiousness trait to Punitive behavior. Indeed, their predisposition to order and discipline is the source of our second deduction for this trait. They tend to want structure and rules, so they support measures that encourage ethical behavior and punish CSiR actions, to ensure that the company meets their high moral standards (DeYoung et al., 2007).

***Hypothesis 2b**: High conscientiousness in employees leads to a higher likelihood of advocating for ethical policies or stricter controls as a form of punishment to the company.*

2.5.3. Hypotheses on Extraversion

We can see that Extraversion has been shown to include Enthusiasm and Self-Affirmation. Highly enthusiastic people are more likely to have strong emotional reactions, including anger, particularly when confronted with situations that have negative social implications (DeYoung et al., 2007). This strong emotional response guided us to the following hypothesis:

***Hypothesis 3a**: Employees high in extraversion will experience more intense anger in response to CSiR, due to their strong emotional responses and discomfort with negative social implications.*

Concerning reaction behavior, we were rather guided by the Self-Affirmation side of Extraversion. Indeed, Self-Affirmation shows that the individual will have good self-confidence (DeYoung et al., 2007) which can lead him to behave in a punitive behavior rather than in a compensatory behavior.

***Hypothesis 3b**: Extraverted employees are more likely to engage in public activism or vocal criticism as a form of punishment to the company.*

2.5.4. Hypotheses on Agreeableness

For people with a high score in the Agreeableness trait, linking them to the moral emotion of Sympathy was natural. According to DeYoung et al. (2007), this trait is divided into 2 aspects, one of which is Compassion. This link between Agreeableness and Sympathy is therefore supported by the empathetic and compassionate nature inherent in these individuals.

***Hypothesis 4a**: Highly agreeable employees are more likely to feel sympathy for those harmed by CSiR, driven by their empathetic and compassionate nature.*

In addition to being characterized by strong compassion, these people tend to avoid conflict (DeYoung et al., 2007). Both particular aspects of this personality trait tend, in our view, to favor compensatory reaction behavior. Their compassion drives them to seek solutions that repair the harm caused, while their desire to avoid conflict encourages them to favor peaceful, harmonious solutions (DeYoung et al., 2007).

***Hypothesis 4b**: Agreeable employees are more inclined to engage in supportive actions or advocate for restitution to compensate the victims of CSiR.*

2.5.5. Hypotheses on Neuroticism

Finally, for people with a higher score for the "neuroticism" personality trait, we could see that they tended to experience negative emotions including anger in the Volatility aspect of neuroticism, more intensely and more frequently than people with low levels of neuroticism (DeYoung et al., 2007). Consequently, we have deduced that when they are confronted with CSiR behavior, they are more susceptible to react with anger.

***Hypothesis 5a**: Employees with high neuroticism are likely to experience heightened anger in response to CSiR due to their propensity to feel negative emotions more intensely.*

In addition, we have linked this trait to punitive behavior. These are people who tend to focus on the negative aspects of a situation (DeYoung et al., 2007). We therefore deduced that they were predisposed to seek revenge through punishment, rather than compensation behavior.

***Hypothesis 5b**: Neurotic employees may exhibit punitive behaviors towards the company, focusing on negative aspects of the situation.*

Table 1
Summary of Hypothesized Relationships

	Openness	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Emotional Reaction					
Anger			**X**		**X**
Guilt		**X**			
Sympathy	**X**			**X**	
Pride					
Behavioral Reaction					
Punishment		**X**	**X**		**X**
Compensation	**X**			**X**	

Chapter 3. Methodology

3.1.Type of research

The approach that we have chosen is the deductive or also called hypothetico-deductive approach. We note that this is currently the dominant approach in management studies (Johnson, 2015). This approach begins with the development of a theoretical framework, from which a number of alternative hypotheses can be deduced (Locke, 2007). The deductive approach is the opposite of the inductive approach. Induction involves observing an interesting phenomenon, often expressed in the form of a question to which no partial or complete answer has yet been found (Woiceshyn & Daellenbach, 2018). There are therefore no fundamental hypotheses (Locke, 2007). We can clearly see that deductive and inductive research have distinct roles in the advancement of knowledge and follow different methods; they also have different consequences at each stage of the publication of results (Woiceshyn & Daellenbach, 2018).

3.2. Quantitative method

Afterwards, we decided to conduct quantitative research. This method focuses on the collection and analysis of numerical data to answer specific research questions and test hypotheses. This will allow us to use a statistical model to quantify the relationships between our variables and to generalize our results to a larger population. This approach often involves surveys, controlled experiments and quantitative data analysis to obtain objective and measurable conclusions (Walter & Andersen, 2013). To evaluate our hypotheses, we decided to use an online questionnaire. This approach makes it possible to collect data cheaply and quickly, to create surveys easily and to facilitate the subsequent analysis of the data (Schonlau et al., 2002). We conducted our survey on the Qualtrics platform.

Once we finished building the test, we had to choose the means of distribution. We opted for sharing on social media such as Facebook, Instagram and LinkedIn and by email in order to reach as many people as possible. We kept the test open over a period of 24 days. According to Galesic (2006), the disadvantage of online surveys is the high drop-out rate during the questionnaire. Indeed, it was a challenge we had to reckon with. Among the 202 people who started the test, only 101 finished the test, so this represents a drop-out rate of 50%. In the group of people who abandoned the survey in progress, there were 2 places with a high abandonment

rate. The first is at 8% completion of the questionnaire, in other words, just after reading the introduction to our test, 39 people stopped the questionnaire. The second is at 31% completion of the survey, which means that just after responding to the personality test, 37 people stopped answering at this point.

3.3. Questionnaire

Before participants completed the questionnaire, we included an introduction text to provide them with the necessary context. We explained the subject and objective of our survey. In addition, we provided an indication of the estimated time needed to complete the questionnaire, which was around ten minutes, so that participants could be sure that they had enough time to respond in optimum conditions. Our survey was anonymous, it was composed of 87 questions divided into three parts (Appendix 1): a personality test, a CSiR test and demographic questions. The first two parts were two surveys that have already been executed and validated in other research projects.

The first section involves the personality test. We used the Big Five Inventory which in our case contains 45 items (John & Srivastava, 1999). The results are calculated by averaging the responses to the items associated with each personality trait. Each item is scored using an interval metric scale, which is a Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). There is also the option of indicating indifference, in order to give respondents, the freedom of neutrality. Then, the choice is said to be ‘forced’, because this questionnaire does not give the option of not answering by indicating ‘Don't know’. Next, for certain items marked with an ‘R’ (for Reverse), it is essential to reverse the scores to ensure that the measures are compatible with the dimensions they assess. Consequently, a score of 1 becomes 5, a score of 2 becomes 4, a score of 3 remains 3 and inversely (John & Srivastava, 1999). The average scores thus obtained for each group of items are used to generate latent variables, which correspond to the participants' scores for each personality trait (John & Srivastava, 1999).

The second part uses the elements of a vignette-based experiment developed by Hericher & Bridoux (2023) with the aim of evaluating the moral emotion felt following irresponsible behavior by a company and the behavior in response: punishing or compensating behavior. In choosing this test, we therefore had to limit our research to 4 moral emotions: anger, guilt, sympathy and pride. In this section, participants were randomly assigned to one vignette or the other. One vignette proposes a low CSiR scenario and the other a high CSiR scenario. An

experiment involving the use of vignettes exposes participants to accurately developed and authentic scenarios with the goal of assessing various variables such as intentions, attitudes, and behaviors (Aguinis & Bradley, 2014). The development of these scenarios allows us to check the manipulation, which we develop in the analysis section. We chose to use different scenarios from those used by Hericher & Bridoux (2023) in their survey, as these scenarios focused on Covid-19. Given that this topic is no longer relevant, we decided to focus on a subject linked to the energy sector and echoing more closely current events. In this regard, we have closely reproduced the structure of the original vignettes, modifying only the subject matter. After reading their vignette, respondents were asked to answer 38 questions. This part is made up of 3 blocks of questions. The first block tests the moral emotions felt after reading the vignette. The second block assesses the respondent's behavioral reaction. And finally, the third block measures the respondent's perception of CSiR. In the same way as for the first part of the questionnaire, each item is scored using an interval metric scale, with the difference that in this part the Likert scale runs from 1 (Strongly Disagree) to 7 (Strongly Agree). There is also the possibility to be indifferent, but not the option “Don't know” (Hericher & Bridoux, 2023).

The third part focuses on demographic issues in order to have control variables in our statistical model. A control variable ensures that the results are not influenced by factors other than those being studied. This will help to clarify the relationships between important variables by eliminating undesirable effects. There were 4 questions, and they were about the respondent's gender, age, profession, and number of years of professional experience.

For greater efficiency and in order to target as many people as possible, we decided to publish our questionnaire in French. Concerning the personality test, Big Five Inventory, we used a translated version (BFI-Fr) that has been verified by Plaisant et al (2010). The similarity of the scores and standard deviations between the French students and the initial English study indirectly indicates that the tools used are comparable. This confirms the validity of the translation and demonstrates that the French test produces scores similar to those of the original test (Plaisant et al., 2010). While for the CSiR test (Hericher & Bridoux, 2023), we decided to translate the test into French ourselves. We used the Cronbach's Alpha coefficients to check that the internal validity of the test was maintained, which we developed in the questionnaire reliability analysis section.

3.4. Description of the sample

Excluding incomplete responses safeguards data integrity and completeness, which are crucial for robust statistical analysis, especially when examining complex relationships between variables such as personality traits and reactions to CSiR (AAPOR, 2016). Incomplete responses can introduce significant biases, as they often stem from a lack of interest or understanding, which can skew results (Coste et al., 2013). By excluding these responses, we reduce non-response bias, ensuring that our sample accurately represents the relevant population (Coste et al., 2013). Incomplete responses can introduce significant biases, as they often stem from a lack of interest or understanding, which can skew results (Coste et al., 2013). By excluding these responses, we reduce non-response bias, ensuring that our sample accurately represents the relevant population.

We received 202 responses to our questionnaire. Of that number, 50% completed the questionnaire in full. We chose to exclude respondents who did not answer the questionnaire in full (>95%). This rather drastic exclusion criterion is explained by the need to have complete responses for our analysis. Indeed, for each respondent, we needed both the results of the personality test and the results of the CSiR, which, as we mentioned, included the 12 manipulation check items as well as questions relating to participants' reactions to the fictitious case presented to them (random vignette).

After exclusion, our sample is composed of 101 respondents (N = 101). In this sample, we have 68 women, 29 men, 1 person who chose the ‘other’ option, which we decided to add to our test for the purposes of inclusiveness, and 3 respondents who decided not to specify their gender. Although this sample size is relatively important given that we recruited our respondents on a voluntary and unpaid basis, it is rather limited given the complexity of the effects we wanted to test. This limitation necessitated an adaptation of our analytical methods. In addition, the questions and the vignettes were written in an inclusive language. We can therefore see that the majority of our sample is made up of women. The average age of our sample is 37 years old, and the median age is 32 years old. In terms of years of professional experience, the average was 14 years and the median 10 years. We have calculated the median for this information because it tends to be less sensitive to extreme values than the mean. These values are satisfactory, as we were targeting an adult and working public. However, we notice that 2

people did not provide information on their age and gender. There is also one participant who did not answer any of the demographic questions.

In terms of the distribution of vignettes, we have 55 people who received the low CSiR scenario and 46 people who responded to the high CSiR scenario.

3.5. Questionnaire reliability analysis

As explained in the previous section outlining our methodology, we constructed our questionnaire by assembling several components that had demonstrated good statistical properties. However, we tested the internal consistency of the scales used to ensure the reliability of our measurement scales (Likert 5 for the BFI-Fr and Likert 7 for the second part CSiR). To ensure that this assembly did not undermine the internal consistency of the questionnaire, we checked the internal consistency of each group of items measuring a common variable, using Cronbach's alpha coefficient and SPSS software (Tavakol & Dennick, 2011).

The Cronbach test, also referred to as Cronbach's alpha, is a measure of the internal reliability of a questionnaire, which is particularly useful in social sciences. It is used to assess the consistency of responses to various questions designed to evaluate a given concept. A high Cronbach's alpha (generally greater than .70) suggests a significant correlation between the items, indicating that they are consistently measuring the same phenomenon. It is essential to carry out this test to ensure that the different questions from different sources work together smoothly. This confirms the reliability of the measurement scales used, in particular the 5-point and 7-point Likert scales and ensures that the responses are consistent and interpretable (Bonett & Wright, 2015).

Cronbach’s alpha compares the variance of individual scores with the variance of total scores. If the items are well correlated with each other, the variance of the total scores will be greater than the sum of the variances of the individual items, producing a high alpha.

Table 2
Reliability Statistics

Variables[a]	Cronbach 's Alpha[b]	Number of Items[a]
Part 1: Personality test		
BFI-Fr (45 items)		
Openness	.745	10
Conscientiousness	.818	9
Extraversion	.839	8
Agreeableness	.736	10
Neuroticism	.847	8
Part 2: CSiR		
Manipulation Check (12-item scale)		
Harm	.833	3
Moral violation	.891	3
Knowledge of consequence	.868	3
Discretion	.808	3
Reactions Measurement (26 items)		
Anger	.876	4
Guilt	.850	4
Pride	.907	4
Sympathy	.734	4
Compensating behavior	.811	5
Punishing behavior	.854	5

Note: [a]All variables are latent, i.e. they are not directly observed but inferred from several observed variables.
[b]A Cronbach's alpha greater than .700 indicates good internal consistency, values between .700 and 0.9 are considered acceptable and above .900 are excellent.

The analysis of the results of the Cronbach's Alpha tests we obtained reveals significant insights. Our questionnaire, constructed in two parts, made it possible to assess both the dimensions of the Big Five Inventory in French (BFI-Fr) and participants' reactions to cases of CSiR, using separate but complementary scales.

In the first part of our study, dedicated to the Big Five Inventory in French (BFI-Fr), the results of Cronbach's Alpha coefficients show satisfactory internal consistency. The values obtained for the five dimensions are as follows: Openness (.745), Conscientiousness (.818), Extraversion (.839), Agreeableness (.736) and Neuroticism (.847). These results indicate high reliability for all dimensions, each exceeding the acceptable threshold of .70. This compares with data from the original validation study of the BFI-Fr by Plaisant et al (2010), which reported coefficients of .74 for Openness, .80 for Conscientiousness, 0.82 for Extraversion, .75 for Agreeableness and .82 for Neuroticism. It is clear that our results are consistent. This similarity reinforces the robustness and validity of the BFI-Fr and demonstrates its ability to assess personality traits consistently and reliably in a variety of contexts.

The second part of our questionnaire, focusing on Corporate Social Irresponsibility (CSiR), includes two distinct subscales: a 12-item scale to measure perception of CSiR and a 26-item scale to assess participants' emotional and behavioral reactions to fictitious CSiR scenarios. Cronbach's Alpha coefficients for the CSiR perception scale were noticeably high: Harm (.833), Moral violation (.891), Knowledge of consequence (.868) and Discretion (.808). These results indicate very good internal consistency for this scale, confirming its reliability for measuring participants' perceptions of CSiR.

In addition, we also found out that emotional and behavioral reactions were well captured by our items. The coefficients obtained are Anger (.876), Guilt (.850), Pride (.907), Sympathy (.734), Compensating behavior (.811) and Punishing behavior (.854). With the exception of the Sympathy dimension, which has a slightly lower coefficient (.734), but which is nevertheless acceptable, the other dimensions show very satisfactory internal consistency. The high values for emotions such as Anger and Pride suggest that these reactions are well measured by the corresponding items in our questionnaire.

These results show that the tools we used are robust and reliable for exploring the hypotheses of our research. The Cronbach's Alpha coefficients obtained for the BFI-Fr and the CSiR scales demonstrate good internal consistency, which is crucial for the validity of any type of research. Our results, in line with previous studies, confirm that the BFI-Fr and CSiR scales are effective tools for assessing personality traits and emotional and behavioral reactions in the context of corporate social responsibility.

3.6. Descriptive statistics: Spearman Analysis

The Spearman correlation is a non-parametric measure, which means that we are not assuming any particular distribution for our data. It evaluates the relation between the ranks of the data. It remains unchanged under transformation and is resistant to the presence of aberrant values. Spearman's correlation is ideal for interpreting continuous and ordinal data, which we have (Eden et al., 2023). However, we remained vigilant to the fact that the Spearman method can be less powerful for small samples such as ours. This means that conclusions based on such samples may be less reliable. In addition, this method does not measure causality between variables, only their association. Therefore, although it can identify relationships between variables, it cannot determine causal relationships (Yu & Hutson, 2024).

Table 3
Descriptive Statistics and Correlations Among Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10
1. Extraversion	3.45	.76										
2. Agreeableness	4.06	.47	.093									
3. Conscientiousness	3..84	.61	.166*	.222**								
4. Neuroticism	2.91	.78	-.104	-.284**	-.178*							
5. Openness	3.50	.61	.168*	.113	.196*	.068						
6. Anger	4.01	1.48	-.143	-.041	-.009	.042	-.054					
7. Guilt	3.72	1.38	-.131	-.002	-.027	.035	-.038	.810**				
8. Pride	2.96	1.35	.151	.127	.087	-.149	-.047	-.676**	-.560**			
9. Sympathy	4.48	1.11	-.173	-.029	-.173	.049	-.032	.615**	.518**	-.507**		
10. Punishing behavior	3.63	1.40	-.287**	-.107	-.063	.072	-.025	.675**	.630**	-.551**	.518**	
11. Compensating behavior	4.86	1.06	.029	.072	-.022	-.002	.082	.053	.028	-.002	.131	.083

Note: M = mean, SD = standard deviation, *p < .05. **p < .01.

Through this correlation analysis, we found no significant correlation showing a connection between a personality trait and a moral emotion.

Extraversion shows an estimated negative correlation of -.287 with punitive behavior, which is significant with a p-value of .003. This means that people who are extraverted tend to adopt less punitive behavior. With regard to the other personality traits, which are openness to experience, neuroticism, conscientiousness and agreeableness, we found no significant correlation that could show a relation with a punishing or compensation behavior.

Using Spearman's correlation, we can see that punitive behavior is significantly correlated with all the moral emotions. Indeed, we can see that there is a strong positive correlation with anger, estimated at .675 with a p-value of less than .001. Similarly for sympathy and guilt, we see a significant positive correlation estimated at .675 and .630 respectively, each with a p-value < .001. However, the moral emotion of pride has a negative correlation estimated at -.551, also with a p-value of less than .001. While compensation behavior shows no significant correlation.
In conclusion for the correlation analysis, the data reveal significant correlations between personality traits, moral emotions, and reaction behavior. There is a negative correlation between anger, guilt, and compassion with punishing behavior. There is a positive correlation between pride and punishing behavior. There is also a negative correlation between the extraversion personality trait and punishing behavior.

Chapter 4. Analysis and outcomes

This section contains our analysis of the data collected through the questionnaire. To carry out this analysis, we used various tools. Firstly, we exported the data from Qualtrics to Excel in order to prepare it for analysis (exclusion of incomplete responses and calculation of latent variables). To analyze the data, we performed four successive levels of statistical analysis using R and SPSS software (as well as the AMOS plugin for SPSS), with a confidence level of .05. This confidence level implies a 5% risk, noted as α or alpha, of wrongly concluding that there is a difference when there is not (Frost, 2012).

Thus, as mentioned above, our analysis is organized into three parts. In the first part, we will carry out tests to assess the quality of the questionnaire. Firstly, we will perform a manipulation check to assess the effectiveness of our vignettes (High and Low CSiR). Second, we will run a path analysis in order to test our hypothesis. This results in a test of robustness of our model against the data collected, using a one-factor versus multi-factor method followed by a complete path analysis to identify all the direct and indirect effects between personality traits and reactions to CSiR. Third and fourth, we will analyze more closely the direct effects between Big Five personality traits and emotional as well as behavioral reactions through a series of regressions and t-tests, again using SPSS software.

To uphold the transparency and rigor of our research, we will provide all detailed data related to our analyses in the appendices of this document. These sections will include comprehensive tables, offering a complete overview of our methodology and results. This allows for an in-depth review, enabling those interested to delve deeper into our work.

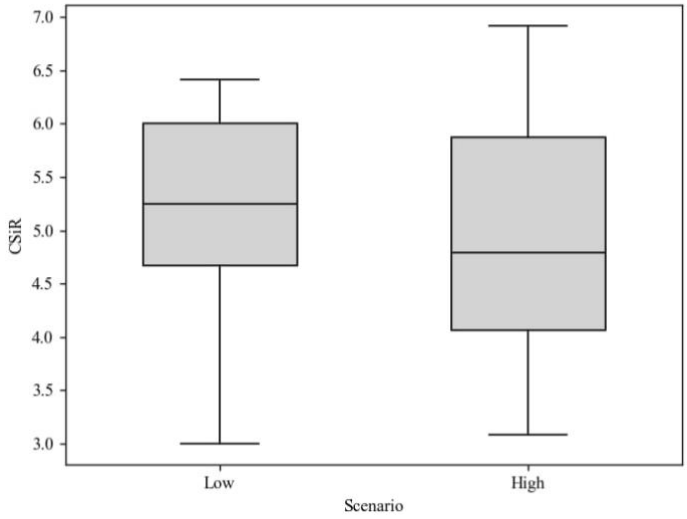
4.1. Manipulation check

We carried out manipulation tests to determine whether our manipulation had the desired effect on the participants. Specifically, we tested the effectiveness of the manipulation on vignettes randomly presenting a high and a low level of CSiR. We conducted a series of t-tests in order to compare the means of perception of the level of CSiR by the participants according to the vignette to which they were subjected. These tests were made with the help of R Studio software.

The results of the t-tests are as follows:

For overall CSiR, the t-test indicates that there is no statistically significant difference between the two groups (t = -.509, p = .612, df = 89.825). The 95% confidence interval is -.553 to .327. The means of the high and low groups were 4.978 and 5.091 respectively.

Figure 2: Boxplot showing the means of both groups



We repeated the test for all the CSiR components, which are harm, moral violation, knowledge of consequences, and discretion, in order to determine whether these unsatisfactory results were repeated for each of the four.

For the 'Harm' variable, the t-test shows, again, no statistically significant difference between the groups (t = -.552, p =.582, df = 90.163). The 95% confidence interval is -0.654 to .369. The means for the high and low groups were 4.790 and 4.932 respectively.

For 'MoralViolation', the results do not indicate any statistically significant difference between the groups (t = -.972, p = .334, df = 87.981). The 95% confidence interval is -.862 to .296. The means of the high and low groups were 4.464 and 4.747 respectively.

For the 'KnowledgeOfConsequences' variable, the results do not differ from the three previous ones (t = -.011, p =.991, df = 87.591). The 95% confidence interval is -.444 to .439. The means of the high and low groups were very similar, at 5.609 and 5.611 respectively, indicating no significant difference (p > .05).

Finally, for the 'Discretion' variable, the test shows no significant difference, as for the previous four (t = -.093, p =.927, df = 95.607). The 95% confidence interval is -.524 to .477. The means of the high and low groups are 5.051 and 5.074 respectively.

The above results suggest that the manipulation of the vignettes did not produce the desired effect on participants' perceptions of the level of CSiR. In concrete terms, a manipulation failure means that the changes made to the vignettes, which were supposed to represent different levels of CSiR (high and low), did not lead to perceptible and statistically significant differences in participants' responses. This may indicate that the participants did not perceive the variations in the vignettes as sufficiently distinct to influence their judgment, or that the variables measured were not sensitive to the manipulations carried out.

However, the analysis also shows that all participants perceived an act of CSiR on the part of the fictitious company presented in the vignettes, regardless of the scenario to which they were exposed (M_{high} = 4.978, M_{low} = 5.091). This indicates that all participants recognized that the company had committed a socially irresponsible act, which may suggest a generalized understanding of what constitutes socially irresponsible behavior, irrespective of the level of detail provided in the scenarios.

Consequently, we decided to continue the analysis by excluding the independent variable (level of CSiR). A failure of manipulation is not necessarily prohibitive for the continuation of the analysis, but it does necessitate a re-evaluation of the hypotheses and methods used. To overcome this failure, we decided to use the CSiR variable as a constant, thus simplifying the analysis and eliminating the complications introduced by its variability between the high and low scenarios. We will therefore explain how personality traits determine emotional or behavioral responses in a CSiR context.

4.2. Path analysis

We had to re-evaluate the initial ambitions of this research because of the failure in the manipulation of the level of CSiR. Therefore, we opted to focus on the direct and indirect links between personality characteristics (Big Five) and emotional and behavioral reactions to CSiR. The objective of this approach is to identify potential trends related to our research hypotheses and to encourage a relevant discussion that may open up prospects for future research on this subject.

4.2.1. Robustness check

We calculated the model fit, which allows us to assess the overall adequacy of the model in relation to the observed data. The fit indicates how well the theoretical model fits the empirical data" (Sakaria et al., 2023). This is important for validating or adjusting the model in order to faithfully represent the relationships between the variables under study.

Table 4

CFA – One-factor Versus Multi-factor Model

Metric	Proposed Model	One-Factor Model
Mchisq[a]	.00	69.97
df[b]	0	44
cfi[c]	1.000	.925
rmsea[d]	.000	.075
srmr[e]	.000	.081
chisq/df[f]	NaN	1.59
chisq.diff[g]	NaN	69.97

Note: [a]Chi-square, [b]Degrees of Freedom, [c]Root-Mean-Square Error of Approximation, [d]Standardized Root Mean square Residual, [f]Chi-square divided by Degrees of Freedom, [g]Chi-square Difference.

For validation of our model, we carried out a confirmatory factor analysis (CFA) comparing a multifactor model (proposed model) and a single-factor model (single-factor model). We conducted a Confirmatory Factor Analysis (CFA) using the ConMET package for R (De Schutter, 2021). The multi-factor model demonstrated a perfect fit to the data: χ^2 (0) = .00, p < .001, Comparative Fit Index (CFI) = 1.00, Tucker-Lewis Index (TLI) = 1.00, Root Mean Square Error of Approximation (RMSEA) = .00, 90% CI [.00, .00], and Standardized Root Mean Square Residual (SRMR) = .00.

The one-factor model demonstrated the following fit indices: χ^2 (44) = 69.97, Comparative Fit Index (CFI) = .925, Root Mean Square Error of Approximation (RMSEA) = .075, 90% CI [.042, .108], and Standardized Root Mean Square Residual (SRMR) = .081. Although the one-factor model fits reasonably well, the multi-factor model demonstrates a superior fit, as evidenced by the perfect fit indices (χ^2 (0) = .00, CFI = 1.00, RMSEA = .00, SRMR = .00).

Altogether, the proposed model proved to be a perfect fit for all indices, despite the possibility of overfitting due to the absence of degrees of freedom. The one-factor model, although a decent

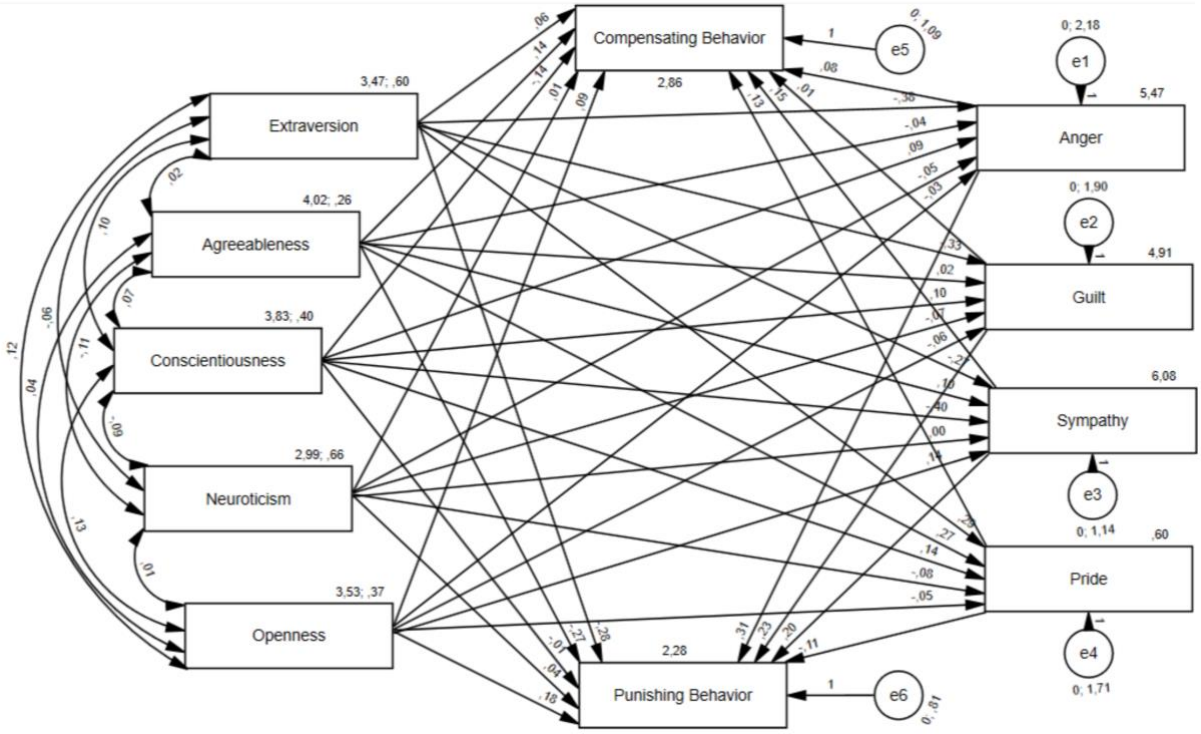
fit, was clearly inferior to the proposed model, confirming the validity of our multifactor structure.

4.2.2. Path analysis via AMOS

We used the graphical interface of the SPSS Analysis of Moment Structures (or AMOS) plugin to carry out a path analysis and to calculate covariances between variables. This software has been developed for Windows computers. AMOS is a sophisticated graphical tool for modeling and estimating relationships between observed and latent variables in structural models. Its intuitive interface makes it particularly suitable for novice users, while offering advanced capabilities for rigorous data analysis. As described by Sakaria et al. (2018): “Through AMOS software, mathematics researchers can test the validity and reliability of a construct measurement model built by using the CFA procedure. After completing the CFA report, the mathematics researcher can model all these constructs into a structural model for analysis. Therefore, this resource is the best and most user-friendly method for analyzing and testing a theory.” (Sakaria et al., p. 17, 2018).

As a result, we were able to specify our model by drawing a path diagram illustrating the relationships between our variables. This approach allows us not only to model direct relationships, but also to understand the indirect effects and interconnections that may exist within a set of variables. The diagram clearly lacks clarity, but the AMOS graphical interface does not allow much flexibility. The important thing to note is that we looked for links between the five traits of the Big Five theory and the various reactions. There are also paths from emotional to behavioral reactions.

Figure 3: Diagram showing the different paths between personality traits, moral emotions, and reaction behaviors.



Notes:
→ : A simple arrow represents a causal relationship between two variables.
↔ : A double arrow represents a covariance between two variables. It indicates whether the variables are related but does not presume the direction of influence.

The path coefficients, which are estimated by AMOS, indicate the strength and direction of the hypothesized relationships, enabling us to assess the validity of our theoretical hypotheses.

4.2.2.1.Personality traits and moral emotion

With hypothesis 1a, we expected a positive relationship between the personality trait of openness to experience and a moral emotion of sympathy towards the victims of CSiR. Our result did not yield a significant link between openness to experience and sympathy (*ß* = .135, *SE* = .193, *p* = .485).

Next, we linked conscientiousness to feelings of guilt when faced with CSiR with the hypothesis 2a. Our outcome did not show a significant relationship between conscientiousness and guilt (*ß* = .096, *SE* = .242, *p* = .693). However, conscientiousness shows a significant negative influence on sympathy (*ß* = -.397, *SE* = .188, *p* =.035).

Concerning the personality trait of extraversion, we hypothesized that there would be a connection with an emotional response of anger (Hypothesis 3a). We obtained results close to the level of significance (however, considered as non-significant) for this association (*ß* = -.382, *SE* = .199, *p* = .054).

Hypothesis 4a predicted that someone with a high level of agreeableness would exhibit greater sympathy towards the victims of CSiR. Our findings revealed no significant connection between agreeableness and feelings of sympathy (*ß* = .102, *SE* = .221, *p* = .645).

The last hypothesis 5a that we posed, associating a personality trait with a moral emotion, was that a person with a high neuroticism score would tend to feel angry when confronted with CSiR. The results show us no significant influence (*ß* = -.049, *SE* = .193, *p* = .798).

4.2.2.2. Personality traits and reaction behaviors

For Hypothesis 1b, we anticipated a positive association between the trait of openness to experience and the compensating behavior towards CSiR victims. Contrary to our expectations, the data did not show a significant relationship between openness and compensating behavior (*ß* = .085, *SE* = .189, *p* = .653).

Concerning the Hypothesis 2b, we suggested that conscientiousness would be related to reactional punishment behavior. This hypothesis was not supported by our findings, which indicated no significant association (*ß* = -.010, *SE* = .162, *p* = .953).

Hypothesis 3b assumed that someone with a higher level of extraversion would correlate with a behavioral reaction of punishment in response to CSiR. The results did support this prediction, as a significant link was found between extraversion and punishing behavior (*ß* = -.278, *SE* = .129, *p* = .031).

According to Hypothesis 4b, individuals with high agreeableness were expected to display compensating behavior towards the victims of CSiR. However, our analysis did not find a significant relationship between agreeableness and compensating behavior (*ß* = .145, *SE* = .217, *p* = .504).

Finally, Hypothesis 5b suggested that people with high levels of neuroticism would experience punitive behavior when confronted with CSiR. The results did not provide evidence for a significant influence of neuroticism on punitive behavior (*ß* = .036, *SE* = .118, *p* = .761).

4.2.2.3. Moral emotions and reaction behaviors

We found out that anger has a significant and positive effect on punishing behavior (*ß* = .310, *SE* = .061, *p* <.001), and a non-significant influence on compensating behavior (*ß* = .082, *SE* = .071, *p* = .246).

For guilt, our results indicated a positive and significant influence of guilt on punishing behavior (*ß* = .230, *SE* = 0.65, *p* <.001), but no significant effect on compensating behavior (*ß* = .014, *SE* = .076, *p* = .858).

What is more, we did not find any significant influence of the feeling of pride on compensating behavior (*ß* = .133, *SE* = .080, *p* = .098), and no significant influence on punishing behavior either (*ß* = -.112, *SE* = .069, *p* = .105).

For sympathy, the results did not show a significant influence of sympathy positively on compensating behavior (*ß* = .147, *SE* = .098, *p* = .135). However, we found a significant positive influence on punishing behavior (*ß* = .198, *SE* = .085, *p* = .019).

Our path analysis also reveals evidence about the mediating role of emotions between personality traits and behavioral responses such as compensating behavior and punishing behavior. Emotions such as anger, guilt, pride, and sympathy appear to moderate these effects.

4.2.2.4.Mediating effect of emotions

To identify the mediating effects (positive or negative) of emotions between personality (Big Five traits) and behavioral responses to CSiR (punitive and compensatory behavior), we calculated the indirect effects for each personality trait through each emotion on each behavior. We performed a mediation analysis using the AMOS extension for SPSS (Sakaria, 2018). Using a bias-corrected bootstrap method for 20,000 samples, we found evidence of mediation at a significance level of 0.05. This evidence is confirmed if the bias-corrected 95% bootstrap confidence interval for the indirect effect does not include zero.

The results show that sympathy has a significant and negative mediating effect between conscientiousness and punitive behavior in response to CSiR (*indirect* = -.299, *SE* = .158, 95% *CI* [-.638; -.031]). In other words, our results support that sympathy acts as a mediator between conscientiousness, personality traits and punitive behavioral responses to CSiR and the higher the score of an individual for this trait the less likely he/she is to punish the organization responsible of CSiR. We can link this relationship to Hypothesis 2b, which states that a high degree of conscientiousness among employees leads to a greater likelihood of advocating ethical policies or stricter controls as a form of corporate punishment. In this case, sympathy exerts a mediating effect that moderates this propensity to punish the wrongdoer.

Table 5

Indirect Effects of Big Five Traits on Behavioral Reactions to CSiR

	BC Bootstrap 95% CI[a]			
Indirect Effects[a]	Estimate	SE[b]	LLCI[c]	ULCI[d]
Extraversion > Anger > Compensating	-.034	.048	-.162	.034
Extraversion > Guilt > Compensating	-.027	.045	-.185	.024
Extraversion > Pride > Compensating	.004	.035	-.057	.094
Extraversion > Sympathy > Compensating	-.040	.050	-.201	.023
Extraversion > Anger > Punishing	-.250	.130	-.501	.005
Extraversion > Guilt > Punishing	-.218	.132	-.483	.030
Extraversion > Pride > Punishing	-.170	.113	-.365	.052
Extraversion > Sympathy > Punishing	-.202	.109	-.413	.023
Agreeableness > Anger > Compensating	-.004	.043	-.163	.048
Agreeableness > Guilt > Compensating	.001	.037	-.075	.098
Agreeableness > Pride > Compensating	.003	.039	-.064	.113
Agreeableness > Sympathy > Compensating	.015	.049	-.041	.167
Agreeableness > Anger > Punishing	-.031	.211	-.500	.339
Agreeableness > Guilt > Punishing	.010	.186	-.369	.381
Agreeableness > Pride > Punishing	-.161	.160	-.509	.135
Agreeableness > Sympathy > Punishing	.078	.169	-.279	.380
Conscientiousness > Anger > Compensating	.008	.040	-.041	.133
Conscientiousness > Guilt > Compensating	.008	.038	-.032	.151
Conscientiousness > Pride > Compensating	.001	.026	-043	.080
Conscientiousness > Sympathy > Compensating	-.059	.071	-.289	.034
Conscientiousness > Anger > Punishing	.058	.180	-.306	.368
Conscientiousness > Guilt > Punishing	.063	.169	-.245	.411
Conscientiousness > Pride > Punishing	-.070	.140	-.357	.224
Conscientiousness > Sympathy > Punishing	**-.299**	**.158**	**-.638**	**-.031**
Neuroticism > Anger > Compensating	-.004	.028	-.096	.032
Neuroticism > Guilt > Compensating	-.006	.025	-.089	.022
Neuroticism > Pride > Compensating	-.001	.021	-.057	.036
Neuroticism > Sympathy > Compensating	.000	.029	-.052	.074
Neuroticism > Anger > Punishing	-.033	.130	-.291	.216
Neuroticism > Guilt > Punishing	-.046	.124	-.279	.223
Neuroticism > Pride > Punishing	.043	.108	-.181	.237
Neuroticism > Sympathy > Punishing	.001	.108	-.206	.225
	-.002	.039	-.097	.062
Openness > Anger > Compensating				
Openness > Guilt > Compensating	-.006	.036	-.130	.037
Openness > Pride > Compensating	.000	.026	-.060	.055
Openness > Sympathy > Compensating	.013	.039	-.026	.155
Openness > Anger > Punishing	-.018	.182	-.315	.416
Openness > Guilt > Punishing	-.048	.172	-.347	.324
Openness > Pride > Punishing	-.009	.145	-.289	.279
Openness > Sympathy > Punishing	.066	.138	-.155	.388

Note: [a]Estimates with confidence intervals that do not include zero are statistically significant and bolded as well as the corresponding indirect effects.
[b]Standard error.
[c]Lower limit.
[d]Upper limit of the bias-corrected bootstrap 95% confidence interval.

4.3. Linear regression

In response to the limited number of significant results we received, we decided to deepen our analysis to gain a better understanding of the interactions between the variables in our model, in order to better discuss the validity of our hypotheses.

The lack of significance of the path analysis prompted us to explore these relationships in more depth to better understand their meaning. To this end, we carried out more tests on the direct relationships between traits and reactions to CSiR. We computed regressions and conducted independent sample t-tests using SPSS software (always within a 95% confidence interval) to assess the direct influence of each trait on each type of reaction, as well as the direction of the latter. To test our hypotheses, we used linear regressions with SPSS software. Following the results of the manipulation check, we had to redesign the model since we had to use the CSiR variable as a constant variable.

Hypothesis 1a argued that a person with a personality open to experience would tend to feel sympathy. However, the regression shows us that we have no significant result showing this tendency **(***ß* **=** -.052, *SE* = .178, *p* =.771). Then, for reaction behavior, we linked the personality trait open to experience to a compensating behavior. This hypothesis 1b did not show any significant results either **(***ß* **=** .085, *SE* = .173, *p* =.624).

For the conscientiousness personality trait, we decided that this trait might tend to feel guilty when faced with CSiR (hypothesis 2a). Our results show that this hypothesis should be rejected because the results are not significant. **(***ß* **=** -.079, *SE* = .207, *p* =.702). For hypothesis 2b, we subsequently concluded that this trait could give a punishing behavior in response to CSiR. However, once again, the results were not significant **(***ß* **=** -.185, *SE* = .218, *p* =.398).

With regard to the extraversion personality trait, our hypothesis 3a postulated a potential tendency to experience anger when confronted with CSiR. However, our results indicate that this hypothesis is not supported because the results are not statistically significant **(***ß* **=** -.340, *SE* = .179, *p* =.059). Then, with hypothesis 3b, we linked the extraversion with a punishing behavior. The regression results show that they are significantly negatively related. This would mean that a person with a high score in the extraversion trait would tend not to engage in punitive behavior **(***ß* **=** -.542, *SE* = .172, *p* =.002).

We had formulated a hypothesis (4a) according to which individuals endowed with the personality trait of agreeableness could experience a moral emotion of sympathy when facing CSiR situations. However, our linear regression analyses revealed non-significant results, which prevented us from confirming the validity of this hypothesis (*ß* = -.003, *SE* = .212, *p* =.988). Similarly, we cannot confirm hypothesis 4b linking agreeableness and a compensation behavior (*ß* = .161, *SE* = .204, *p* =.431).

Finally, for the personality trait of neuroticism, we associated it with feelings of anger and punishing behavior when faced with CSiR. Our results show nothing significant with respectively **(***ß* = .053, *SE* = .171, *p* =.759) and **(***ß* = .096, *SE* = .171, *p* =.574).

4.4. T-tests

To complete the analysis of the associations between personality traits and emotional and behavioral responses, we decided to conduct t-tests to consolidate our understanding of the direct effects between the different personality traits and all the CSiR reactions we were interested in in this paper.

To carry out the t-tests, we had to adapt our personality trait variables into a categorical variable that would enable us to create groups for the test. We divided our population into two groups for each trait: those with a low score and those with a high score for that trait. To differentiate between the two groups, we calculated the respective medians for each trait and distributed them between the two groups according to whether their score for the trait was below the median (low group) or equal to or above the median (high group).

According to the t-test analysis for extraversion, only the link with punitive behavior shows statistical significance ($t = 2.67$, $p = .009$). This suggests that extraverted individuals have a significantly different tendency to adopt a punitive attitude. The other interactions (anger, guilt, pride, sympathy, compensatory behavior) were not statistically significant, with p-values above .05.

Table 6
T-Tests – Extraversion/ CSiR Reactions

	T-Test	Sig.*
Extraversion > Anger	.856	.394
Extraversion > Guilt	.406	.686
Extraversion > Pride	-.667	.506
Extraversion > Sympathy	1.716	.089
Extraversion > Compensating Behavior	-.083	.934
Extraversion > Punishing Behavior	**2.665**	**.009**

Note: *2-Sided p-value

The results of the t-tests for Agreeableness reveal that none of the associations we tested (anger, guilt, pride, sympathy, compensatory behavior, punitive behavior) is statistically significant. All p-values are greater than .05. This indicates that there is no significant difference between the groups with regard to these reactions as a function of agreeableness.

Table 7
T-Tests – Agreeableness/ CSiR Reactions

	T-Test	Sig.*
Agreeableness > Anger	.817	.416
Agreeableness > Guilt	.652	.516
Agreeableness > Pride	.828	.410
Agreeableness > Sympathy	.758	.450
Agreeableness > Compensating Behavior	.655	.514
Agreeableness > Punishing Behavior	.310	.193

Note: *2-Sided p-value

Analysis of the t-tests for conscientiousness reveals, once again, that none of the direct associations (anger, guilt, pride, sympathy, compensatory behavior, punitive behavior) is statistically significant. All p-values are greater than .05, suggesting that there are no significant differences between groups based on this personality trait.

Table 8
T-Tests – Conscientiousness/ CSiR Reactions

	T-Test	Sig.*
Conscientiousness > Anger	.400	.690
Conscientiousness > Guilt	-.086	.931
Conscientiousness > Pride	-1.476	.143
Conscientiousness > Sympathy	1.030	.305
Conscientiousness > Compensating Behavior	.884	.379
Conscientiousness > Punishing Behavior	1.203	.232

Note: *2-Sided p-value

Neuroticism t-test results indicate that none of the associations are significant (p values are all greater than .05).

Table 9
T-Tests – Neuroticism/ CSiR Reactions

	T-Test	Sig.*
Neuroticism > Anger	.388	.699
Neuroticism > Guilt	.388	.699
Neuroticism > Pride	.319	.750
Neuroticism > Sympathy	-.550	.584
Neuroticism > Compensating Behavior	.548	.585
Neuroticism > Punishing Behavior	-.669	.505

Note: *2-Sided p-value

All the associations evaluated (anger, guilt, pride, sympathy, compensatory behavior, punitive behavior) are not statistically significant, with p-values greater than 0.05, according to the t-tests for openness. This suggests that there are no significant differences between groups for these reactions as a function of openness.

Table 10
T-Tests – Openness/ CSiR Reactions

	T-Test	Sig.*
Openness > Anger	.147	.883
Openness > Guilt	.480	.632
Openness > Pride	.185	.854
Openness > Sympathy	.949	.345
Openness > Compensating Behavior	-.745	.458
Openness > Punishing Behavior	.373	.710

Note: *2-Sided p-value

In conclusion, this analysis of direct associations between personality traits and emotional and behavioral responses, despite the limitations of our sample and the challenges of predictive models, offers valuable insights into the internal dynamics of personality traits. Of all the direct associations between personality traits and reactions to CSiR that we examined via t tests, only the association between extraversion and punitive behavior was statistically significant, indicating a link between the two variables. This statistical significance suggests that individuals with higher levels of extraversion tend to engage in punitive behavior significantly differently from those with lower levels of extraversion.

Chapter 5. Results and discussion

In this discussion, we will analyze and interpret the results obtained from the different analysis methods used. As a reminder, the objective of our research is to link a personality trait to a moral emotion and to a behavior in response to a CSiR action. We will therefore compare the hypotheses we made when developing our theoretical framework with the results of our analyses.

5.1. Hypothesis testing

Our hypotheses made specific predictions about the impact of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. However, the results obtained did not confirm these hypotheses, with the exception of hypothesis 3b. This hypothesis highlights the relation between the extraversion personality trait and punitive reaction behavior. Indeed, the analysis of this direct effect showed contradictory results: the t-test indicates a positive effect (t = 2.665, p = .009), while path analysis suggests a negative effect ($ß$ = -.278, SE = .129, p = .031) and the linear regression also shows a negative effect (**$ß$ =** -.542, SE = .172, p =.002). This difference can be explained by the fact that, while t-tests are very useful for comparing two different groups and offer a relevant perspective on the relationships between the pertinent variables, they also tend to simplify the picture by reducing continuous traits to dichotomous categories, which can overlook individual variability and part of the complexity of interactions. Also, extraverts tend to have intense emotional responses and an aversion to negative social implications (DeYoung et al., 2007). They could therefore manifest punitive behavior in unpredictable ways depending on the specific context of CSiR.

In conclusion, none of the hypotheses we posed when writing our theoretical framework can be confirmed. However, concerning hypothesis 3b linking the extraversion personality trait and punitive behavior, our analyses indicate that there is an effect, but do not confirm *stricto sensu* our initial hypothesis, as the path analysis and linear regression show a negative effect between the two variables, which is the opposite of our hypothesis. Only the t-test confirms our hypothesis.

5.2. Relations beyond our hypotheses

We have identified relationships between personality traits and reactions to CSiR that were not predicted in our research hypotheses.

We observed a significant direct negative relationship between conscientiousness and sympathy (*ß* = -.397, *SE* = .188, *p* =.035). This finding suggests that individuals who score higher on conscientiousness tend to score lower on sympathy. This suggests that conscientious individuals may feel less sympathy towards CSiR, which was not anticipated in our initial hypotheses. This unexpected result could be explained by the fact that conscientious employees, by focusing on rules and obligations (DeYoung et al., 2007), may perceive victims of CSiR in a more critical light, or feel less personally responsible for perceived misconduct. This could also be because they are less emphatic about the importance of order to them (John & Srivastava, 1999). Conscientious individuals are perceived as being responsible, organized and having a strong sense of duty. However, this same rigor and attention to detail can sometimes limit their ability to feel sympathy, especially if their focus on rules and norms overrides their inclination to put themselves in other people's shoes.

In addition, we identified an indirect effect of sympathy on the connection between conscientiousness and punitive behavior during path analysis (*indirect* = -.299, *SE* = .158, 95% *CI* [-.638; -.031]). This suggests that sympathy moderates the impact of conscientiousness on punitive behavior, meaning that the moral emotion of sympathy influences the way conscientiousness affects punitive behavior.

As for the implications of this finding in the context of CSiR, we might consider that highly conscientious people might tend to prioritize the application of rigorous rules and procedures more, to the detriment of emotional understanding of colleagues or stakeholders affected by irresponsible corporate actions. This posture could negatively influence their engagement in remedial actions or moral support after a CSiR event. Higher sympathy, a feeling connected to compassion and empathy, however, lowers the tendency toward punishing. This implies that moral feelings such as sympathy can have a significant effect on how conscientiousness manifests itself in conduct, possibly balancing strictness or rigidity with empathy and understanding. The interaction of these characteristics emphasizes the nuanced dynamics of personality in the development of conduct.

Chapter 6. Conclusion

6.1. Main conclusion

The purpose of this study was to investigate how personality traits interact with emotional and behavioral reactions to corporate social irresponsibility (CSiR). The main inquiry was to understand how personality traits, as defined by the Big Five model, influence individuals' reactions to CSiR. The objectives included identifying specific emotional responses (anger, guilt, pride, and sympathy) as well as behavioral outcomes (punitive and compensatory behaviors) associated with different personality traits and determining the direct and indirect relationships between these factors.

We contributed to the understanding of personality-induced responses to CSiR. Indeed, we identified a statistically significant direct association between extraversion and punitive behavior. In addition, conscientiousness was found to have a direct negative effect on sympathy. Sympathy emerged as a significant mediator between conscientiousness and punitive behavior, indicating a complex interplay between personality traits and emotional responses in determining behavioral outcomes. On the side, the analysis also revealed that anger and guilt were positively associated with punitive behavior, while pride showed a negative correlation. Interestingly, sympathy was also positively correlated with punitive behavior, suggesting a protective or corrective motivation underlying sympathy responses.

The findings of this study, while needing to be understood within the constraints of the research, have theoretical and practical implications. These findings have theoretical and practical implications, albeit needing to be considered in the context of the study's limitations. From a theoretical perspective, this study extends the Big Five personality framework by linking it to moral emotions and behavioral responses in the context of CSiR. It provides preliminary evidence in favor of the idea that personality attributes influence moral decisions and behaviors. From an organizational perspective, appreciation of these dynamics can help anticipate and manage individuals' reactions to irresponsible actions. Appropriate communication and intervention could improve the management of ethical behavior and organizational resilience. To support these findings, further studies with larger and more varied samples are needed.

6.2. Limitations and recommendations for future research

Although this study provides valuable insights into the relationship between personality traits and reactions to corporate social irresponsibility (CSiR), several limitations must be recognized to contextualize the results and suggest directions for future research.

Our first limitation is that the results may not apply to all contexts or groups. Indeed, our sample is only based on people living in Belgium, which means that there are no major cultural differences within our sample group. We recommend including larger and more varied samples in future studies to improve generalizability. Implementing stratified sampling methods can help ensure proportional representation of various demographic groups, and cross-cultural studies are needed to compare the impact of different cultural contexts on reactions to CSiR (Poortinga & Fontaine, 2022).

Second, the study relies on self-reported statements, which may be subject to social desirability bias and inaccurate self-assessment. Participants may have responded in ways that were socially acceptable, rather than reflecting their true feelings. This limitation may lead to an overestimation or underestimation of the true relationship between personality traits and reactions to CSiR, potentially skewing the results of the study. Incorporating objective measures or third-party assessments could provide a more accurate description of participants' personality traits and reactions. Bias could also be reduced through indirect questioning (Koller et al., 2023).

To continue, we believe that the choice of the Big Five model is optimal, as in the course of our research we found that it had been the subject of a great deal of empirical research, confirming its robustness and reliability across different cultures and populations. We should also bear in mind that this model enabled us to easily associate a moral emotion and a reaction behavior with each personality trait. The model is easy to use and interpret.

However, the analysis is limited to the five main personality traits and focuses on particular moral emotions, which could lead to the neglect of other influencing factors and emotional responses. Although it offers a comprehensive framework for understanding personality, the Big Five model does not take into account all facets of human personality. Other models, such as the HEXACO model, which includes honesty-humility, or the characteristics of the Dark

Triad (narcissism, Machiavellianism, psychopathy), could also have a significant impact on reactions to CSiR (Feher & Vernon, 2021).

To pursue, while carrying out our analysis, we decided to restrict our research to these 4 moral emotions, as we chose to use a test developed by Hericher & Bridoux (2022). The tests they developed correspond perfectly to what we wanted to study. What is more, the advantage of using their tests is that they have already been validated and have already produced significant results. Using pre-existing tests gave us confidence in their reliability, as they have all been thoroughly tested. Nevertheless, it should be pointed out that by focusing primarily on anger, guilt, sympathy and pride, the study risks overlooking other relevant emotions such as fear, sadness or moral uplift, which can also influence reactions. By limiting the analysis to specific emotions, understanding of the factors influencing employee reactions to CSiR may be restricted, leading to incomplete or biased interpretations. Incorporating other emotions into the model could improve this understanding. Integrating other emotions could logically uncover additional information and offer a more nuanced perspective on the interactions at play.

Finally, manipulation verification revealed that the vignettes employed to distinguish between high and low CSiR levels did not achieve the expected effect. We noticed no significant difference between high and low CSiR scenarios in participants' reaction levels, suggesting that manipulation verification failed. This may be due to insufficient distinction between scenarios (although we applied the same distinctions as in the original study by Hericher & Bridoux (2022), which showed convincing results), or to other uncontrolled factors influencing participants' perceptions. Nevertheless, the manipulation check revealed, by examining the group averages for the low and high scenarios, that respondents in both cases had perceived CSiR behavior. Thanks to this observation, we were able to assume that the CSiR variable remained constant, which allowed us to continue our analysis by adapting the statistical tests to be applied.

Aware of these limitations, our aim is to preserve academic rigor and lay the foundations for future research, in order to exploit and fill the gaps identified.

For future research, we suggest that it would be interesting to extend the number of emotions studied by including a more complete selection, such as for example disgust, contempt, shame, etc. By taking into account a greater variety of moral emotions, researchers could obtain a more

nuanced view of emotional responses to CSiR. Furthermore, it would be beneficial to explore the sub-dimensions of each personality trait in the Big Five model. According to DeYoung et al. (2007), each personality trait can be decomposed into more specific subcategories that could reveal more precise influences and more subtle interactions with moral emotions. For example, conscientiousness includes aspects such as orderliness and diligence (DeYoung et al., 2007), which could have different impacts on reactions to CSiR experiences. By integrating these sub-dimensions, future research could provide more detailed and in-depth insights, enriching the overall understanding of the interactions between personality and moral emotions.

6.3. Last words

In conclusion, we can state that this research offers a first perspective on the influence of personality traits on individuals' emotional and behavioral reactions to corporate social irresponsibility. The results emphasize the importance of integrating the personal dimension into the management of ethical issues within organizations. We hope that this study will pave the way for future research that will explore this theme in new depth, including other aspects of personality, thus enriching our understanding of moral psychology and corporate ethics. This research should also be seen as part of an effort to promote more informed and responsible approaches to corporate social responsibility.

BIBLIOGRAPHY

Declaration concerning the AI tools

When writing this master's thesis, the authors used ChatGPT, a generative artificial intelligence tool developed by OpenAI. This tool was used for various writing tasks, such as generating ideas, formulating sentences and writing very specific sections. The authors then carefully revised and edited the content to ensure that it was accurate, relevant and in line with the objectives of the paper. It is important to note that AI was not used to produce substantive content, but only to improve form and quality of writing. The authors assume full responsibility for the content of the present paper, including any information or interpretation resulting from the use of ChatGPT in the writing process.

References

AAPOR. (2016). *Best practices for survey research.* American Association for Public Opinion Research. https://www.aapor.org

Abbasi, M. A., Amran, A., Khan, R., & Sahar, N. E. (2024). Linking corporate social irresponsibility to workplace deviant behavior: A comparative analysis of generation Z and Generation Y. *Current Psychology*, *43*(2), 1118–1135. https://doi.org/10.1007/s12144-023-04372-z

Agrawal, N., & Duhachek, A. (2010). Emotional Compatibility and the Effectiveness of Antidrinking Messages: A Defensive Processing Perspective on Shame and Guilt. *Journal of Marketing Research*, *47*(2), 263–273.

Aguinis, H., & Bradley, K. J. (2014). Best Practice Recommendations for Designing and Implementing Experimental Vignette Methodology Studies. *Organizational Research Methods*, *17*(4), 351–371. https://doi.org/10.1177/1094428114547952

Bagozzi, R. P., Sekerka, L. E., & Sguera, F. (2018). Understanding the consequences of pride and shame: How self-evaluations guide moral decision making in business. *Journal of Business Research, 84*, 271–284. https://doi.org/10.1016/j.jbusres.2017.11.036

Bernhard, F. (2022). When bankers feel guilty–Employees' vicarious guilt and the support of moral business practices. *European Management Journal*, *40*(3), 419–428. https://doi.org/10.1016/j.emj.2021.08.001

Boekhorst, J. A., Hewett, R., Shantz, A., & Good, J. R. L. (2021). *The double-edged sword of manager caring behavior: Implications for employee wellbeing*. *26*(6), 507–521. https://doi.org/10.1037/ocp0000313

Bonett, D. G., & Wright, T. A. (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, *36*(1), 3–15. https://doi.org/10.1002/job.1960

Calvet Christian, R., & Alm, J. (2014). Empathy, sympathy, and tax compliance. *Journal of Economic Psychology*, *40*, 62–82. https://doi.org/10.1016/j.joep.2012.10.001

Chan, E. Y., & Septianto, F. (2024). Self-construals and health communications: The persuasive roles of guilt and shame. *Journal of Business Research*, *170*, 114357. https://doi.org/10.1016/j.jbusres.2023.114357

Coste, J., Quinquis, L., Audureau, E., & Pouchot, J. (2013). Non response, incomplete and inconsistent responses to self-administered health-related quality of life measures in the general population: Patterns, determinants and impact on the validity of estimates. A population-based study in France using the MOS SF-36. *Health and Quality of Life Outcomes*, *11*(1), 44. https://doi.org/10.1186/1477-7525-11-44

CROPANZANO, R., GOLDMAN, B., & ROBERT FOLGER, R. (2003). *Deontic justice: The role of moral principles in workplace fairness*. Wiley. https://www.jstor.org/stable/4093752

DeYoung, C. G., Quilty, L. C., & Peterson, J. B. (2007). Between facets and domains: 10 aspects of the Big Five. *Journal of Personality and Social Psychology*, *93*(5), 880–896. https://doi.org/10.1037/0022-3514.93.5.880

Dijker, A. J. M. (2010). Perceived vulnerability as a common basis of moral emotions. *British Journal of Social Psychology*, *49*(2), 415–423. https://doi.org/10.1348/014466609X482668

Eden, S. K., Li, C., & Shepherd, B. E. (2023). Spearman-like correlation measure adjusting for covariates in bivariate survival data. *Biometrical Journal*, *65*(8), 2200137. https://doi.org/10.1002/bimj.202200137

Eisenberg, N., Fabes, R. A., Schaller, M., Miller, P., Carlo, G., Poulin, R., Shea, C., & Shell, R. (1991). *Personality and socialization correlates of vicarious emotional responding*. *61*(3), 459–470. https://doi.org/10.1037/0022-3514.61.3.459

Feher, A., & Vernon, P. A. (2021). Looking beyond the Big Five: A selective review of alternatives to the Big Five model of personality. *Personality and Individual Differences*, *169*, 110002. https://doi.org/10.1016/j.paid.2020.110002

Folger, R. (2001). Fairness as Deonance. In *Theoretical and Cultural Perspectives on Organizational Justice*. Stephen W. Gilliland, Dirk D. Steiner, Daniel P. Skarlicki. https://books.google.be/books?hl=fr&lr=&id=zPgnDwAAQBAJ&oi=fnd&pg=PA3&ots=6ECLvTTS1y&sig=JnDVPNrgIRcaiyfPifGAV9pg5Z0&redir_esc=y#v=onepage&q&f=false

Folger, R. (2012). Deonance: Behavioral ethics and moral obligation. In D. De Cremer, & A. E. Tenbrunsel (Eds.). *New York: Routledge.*, 121-139.

Folger, R., & Shukla, J. (2020). A fairness theory update. In E. A. Lind (Ed.) Social psychology and justice: *New York: Routledge.*, 110–133.

Frost, J. (2012). *Alphas, P-Values, and Confidence Intervals*. Oh My! Minitab Blog. https://blog.minitab.com/en/alphas-p-values-confidence-intervals-oh-my

Galesic, M. (2006). Dropouts on the Web: Effects of Interest and Burden Experienced During an Online Survey. *Journal of Official Statistics*, *22*(2), 313–328.

Gilliland, S., Steiner, D., & Skarlicki, D. (2001). *Theoretical and cultural perspectives on organizational justice*. Information Age Pub.

Gond, J.-P., Akremi, A. E., Swaen, V., & Babu, N. (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior*, *38*(2), 225–246.

Grappi, S., Romani, S., & Bagozzi, R. P. (2013). Consumer response to corporate irresponsible behavior: Moral emotions and virtues. *Journal of Business Research*, *66*(10), 1814–1821. https://doi.org/10.1016/j.jbusres.2013.02.002

Greenbaum, R., Bonner, J., Gray, T., & Mawritz, M. (2020). Moral emotions: A review and research agenda for management scholarship. *Journal of Organizational Behavior*, *41*(2), 95–114. https://doi.org/10.1002/job.2367

Greenwood, M. (2007). *Stakeholder Engagement: Beyond the Myth of Corporate Responsibility*. *74*(4), 315–327. https://doi.org/10.1007/s10551-007-9509-y

Haidt, J., & Joseph, C. (2004). Intuitive Ethics: How Innately Prepared Intuitions Generate Culturally Variable Virtues. *Daedalus*, *133*(4), 55–66.

Hericher, C., & Bridoux, F. (2023). Employees' Emotional and Behavioral Reactions to Corporate Social Irresponsibility. *Journal of Management*, *49*(5), 1533–1569. https://doi.org/10.1177/01492063221100178

Hutcherson, C. A., & Gross, J. J. (2011). The moral emotions: A social–functionalist account of anger, disgust, and contempt. *Journal of Personality and Social Psychology*, *100*(4), 719–737. https://doi.org/10.1037/a0022408

John, O. P., & Srivastava, S. (1999). *The Big-Five trait taxonomy: History, measurement, and theoretical perspectives.* (In L. A. Pervin&O. P. John (Eds.), Vol. 2).

Johnson, P. (2015). Evaluating qualitative research: Past, present and future. *Qualitative Research in Organizations and Management: An International Journal*, *10*(4), 320–324. https://doi.org/10.1108/QROM-07-2015-1303

Koller, K., Pankowska, P. K., & Brick, C. (2023). Identifying bias in self-reported pro-environmental behavior. *Current Research in Ecological and Social Psychology*, *4*, 100087. https://doi.org/10.1016/j.cresp.2022.100087

Lange, D., & Washburn, N. T. (2012). Understanding Attributions of Corporate Social Irresponsibility. *The Academy of Management Review*, *37*(2), 300–326.

Lin, Y.-T., Liu, N.-C., & Lin, J.-W. (2022). Firms' adoption of CSR initiatives and employees' organizational commitment: Organizational CSR climate and employees' CSR-induced attributions as mediators. *Journal of Business Research*, *140*, 626–637. https://doi.org/10.1016/j.jbusres.2021.11.028

Locke, E. A. (2007). The Case for Inductive Theory Building. *Journal of Management*, *33*(6), 867–890. https://doi.org/10.1177/0149206307307636

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, *79*(4), 602–616. https://doi.org/10.1037/0022-3514.79.4.602

McAdams, D. P., & Pals, J. L. (2006). A new Big Five: Fundamental principles for an integrative science of personality. *American Psychologist*, *61*(3), 204–217. https://doi.org/10.1037/0003-066X.61.3.204

McWilliams, A., & Siegel, D. (2001). *Corporate social responsibility: A theory of the firm perspective*. *26*(1), 117–127.

Nguyen, P. L. L., Syed, M., & DeYoung, C. G. (2023). Four types of change and self-other agreement on change in personality traits during college years: A multi-informant

longitudinal study. *Journal of Personality*, *91*(2), 441–463. https://doi.org/10.1111/jopy.12740

Plaisant, O., Courtois, R., Réveillère, C., Mendelsohn, G. A., & John, O. P. (2010). Validation par analyse factorielle du Big Five Inventory français (BFI-Fr). Analyse convergente avec le NEO-PI-R. *Annales Médico-psychologiques, revue psychiatrique*, *168*(2), 97–106. https://doi.org/10.1016/j.amp.2009.09.003

Poortinga, Y. H., & Fontaine, J. R. J. (2022). Principles and Practices of Methodology and Methods in Cross-Cultural Psychology. *Journal of Cross-Cultural Psychology*, *53*(7–8), 847–859. https://doi.org/10.1177/00220221221093811

Sakaria, D., Maat, S. M., & Mohd Matore, M. E. E. (2023). Examining the Optimal Choice of SEM Statistical Software Packages for Sustainable Mathematics Education: A Systematic Review. *Sustainability*, *15*(4), 3209. https://doi.org/10.3390/su15043209

Schonlau, M., Fricker, R. D., & Elliott, M. N. (2002). *Conducting Research Surveys via E-mail and the Web*. RAND Corporation. https://www.jstor.org/stable/10.7249/mr1480rc

Simpson, J., Carter, S., Anthony, S. H., & Overton, P. G. (2006). Is Disgust a Homogeneous Emotion? *Motivation and Emotion*, *30*(1), 31–41. https://doi.org/10.1007/s11031-006-9005-1

Smillie, L. D., Katic, M., & Laham, S. M. (2021). Personality and moral judgment: Curious consequentialists and polite deontologists. *Journal of Personality*, *89*(3), 549–564. https://doi.org/10.1111/jopy.12598

Smith, R. H., Webster, J. M., Parrott, W. G., & Eyre, H. L. (2002). *The role of public exposure in moral and nonmoral shame and guilt*. *83*(1), 138–159. https://doi.org/10.1037/0022-3514.83.1.138

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral Emotions and Moral Behavior. *Annual Review of Psychology*, *58*(1). https://doi.org/10.1146/annurev.psych.56.091103.070145

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Vess, M., Schlegel, R. J., Hicks, J. A., & Arndt, J. (2014). Guilty, But Not Ashamed: "True" Self-Conceptions Influence Affective Responses to Personal Shortcomings. *Journal of Personality*, *82*(3), 213–224. https://doi.org/10.1111/jopy.12046

Walter, M., & Andersen, C. (2013). Conceptualizing Quantitative Methodologies. In *Indigenous Statistics: A Quantitative Research Methodology* (pp. 41–57). https://library.oapen.org/handle/20.500.12657/77180

Woiceshyn, J., & Daellenbach, U. (2018). Evaluating inductive vs deductive research in management studies: Implications for authors, editors, and reviewers | Emerald Insight. *Qualitative Research in Organizations and Management: An International Journal*, *13*(2), 183–195.

Xie, C., Bagozzi, R. P., & Grønhaug, K. (2015). *The role of moral emotions and individual differences in consumer responses to corporate green and non-green actions*. *43*(3), 333–356. https://doi.org/10.1007/s11747-014-0394-5

Yoon, Y., Gürhan-Canli, Z., & Schwarz, N. (2006). The Effect of Corporate Social Responsibility (CSR) Activities on Companies With Bad Reputations. *Journal of Consumer Psychology*, *16*(4), 377–390. https://doi.org/10.1207/s15327663jcp1604_9

Yu, H., & Hutson, A. D. (2024). A robust Spearman correlation coefficient permutation test. *Communications in Statistics - Theory and Methods*, *53*(6), 2141–2153. https://doi.org/10.1080/03610926.2022.2121144

APPENDICES

Appendix 1: Questionnaire

Note: The version shown here is the questionnaire with the High CSiR vignette. Appendix 2 contains the two vignettes (High and Low) as well as a comparison with the original vignettes (Hericher & Bridoux, 2023).

Chers participant.e.s,

Nous vous remercions vivement de consacrer un peu de votre temps à remplir ce questionnaire qui fait partie intégrante de notre mémoire de recherche. Votre contribution est essentielle pour approfondir notre compréhension des comportements individuels et organisationnels vis-à-vis de l'irresponsabilité sociale des entreprises.

Ce questionnaire, d'une durée d'environ 10 minutes, se divise en deux parties distinctes. La première partie est un test de personnalité visant à mieux cerner les traits individuels susceptibles d'influencer les perceptions et les réactions face à des situations sociales complexes. La seconde partie aborde spécifiquement des questions liées à l'irresponsabilité sociale des entreprises et à leurs réactions à ces enjeux.

Vos réponses resteront confidentielles et seront utilisées uniquement à des fins de recherche académique. Ce questionnaires est soumis au Règlement Général sur la Protection des Données (RGPD). La collecte de votre adresse e-mail à la fin du questionnaire est facultative et réservée uniquement à ceux qui souhaitent participer à un concours associé à cette étude. Nous vous prions de répondre avec soin et honnêteté à toutes les questions posées. Votre contribution nous permettra d'enrichir les connaissances dans ce domaine et de proposer des pistes pour des pratiques plus responsables et éthiques dans le monde des affaires.

Marie & Gaëtan

Contact: marie.vanackere@student.uclouvain.be ou gaetan.hayen@student.uclouvain.be

Je me vois comme quelqu'un qui...

	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord
est créatif.ve, plein.e d'idées originales	○	○	○	○	○
est facilement distrait.e	○	○	○	○	○
a tendance à être silencieux.se	○	○	○	○	○
est quelqu'un de tempéré.e, pas facilement troublé.e	○	○	○	○	○
a une forte personnalité, s'exprime avec assurance	○	○	○	○	○
a de bonnes connaissances en art, musique ou en littérature	○	○	○	○	○
est bavard.e	○	○	○	○	○
a tendance à être désorganisé.e	○	○	○	○	○
préfère un travail simple et routinier	○	○	○	○	○
aime réfléchir et jouer avec des idées	○	○	○	○	○

	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord
a tendance à être paresseux.se	○	○	○	○	○
fait généralement confiance aux autres	○	○	○	○	○
a une grande imagination	○	○	○	○	○
peut être angoissé.e	○	○	○	○	○
est plein.e d'énergie	○	○	○	○	○
peut être parfois négligent.e	○	○	○	○	○
communique beaucoup d'enthousiasme	○	○	○	○	○
apprécie les activités artistiques et esthétiques	○	○	○	○	○
est fiable dans son travail	○	○	○	○	○
est facilement anxieux.se	○	○	○	○	○

	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord
aime coopérer avec les autres	○	○	○	○	○
est ingénieux.se, une grosse tête	○	○	○	○	○
est parfois impoli.e avec les autres	○	○	○	○	○
est réservé.e	○	○	○	○	○
est déprimé.e, cafardeux.se	○	○	○	○	○
est indulgent.e de nature	○	○	○	○	○
se tourmente beaucoup	○	○	○	○	○
est sociable, extraverti.e	○	○	○	○	○
peut être lunatique d'humeur changeante	○	○	○	○	○
cherche des histoires aux autres	○	○	○	○	○

	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord
est quelquefois timide, inhibé.e	○	○	○	○	○
est "relaxe", détendu.e, gère bien les stress	○	○	○	○	○
travaille consciencieusement	○	○	○	○	○
est inventif.ve	○	○	○	○	○
est efficace dans son travail	○	○	○	○	○
persévère jusqu'à ce que sa tâche soit finie	○	○	○	○	○
est parfois dédaigneux.se, méprisant.e	○	○	○	○	○
commence facilement à se disputer avec les autres	○	○	○	○	○
est serviable et n'est pas égoïste avec les autres	○	○	○	○	○
est peu intéressé.e par tout ce qui est artistique	○	○	○	○	○

	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord
est prévenant.e et gentil.le avec presque tout le monde	○	○	○	○	○
s'intéresse à de nombreux sujets	○	○	○	○	○
fait des projets et les poursuit	○	○	○	○	○
a tendance à critiquer les autres	○	○	○	○	○
reste calme dans les situations angoissantes	○	○	○	○	○
	Pas du tout d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	Tout à fait d'accord

→

La seconde partie de cette enquête est une mise en situation. Voici quelques informations générales sur l'entreprise pour laquelle vous travaillez…

Vous travaillez depuis cinq ans pour EnergyTech, une grande entreprise spécialisée dans les énergies renouvelables. Vous êtes satisfait de votre travail et entretenez de bonnes relations avec vos collègues.

EnergyTech est l'une des sociétés leaders dans le développement de technologies vertes. Avec ses installations de production actuelles, EnergyTech produit chaque jour 1 000 mégawattheures (MWh) d'électricité à partir de sources renouvelables telles que l'énergie solaire et éolienne.

Comme EnergyTech a bénéficié de subventions gouvernementales pour ses recherches sur les énergies renouvelables, elle a convenu avec les autorités de vendre une partie de son électricité à des régions plus pauvres, même si le prix par MWh payé par ces régions est inférieur à celui payé par les régions plus riches. Alors que les régions plus riches sont en bonne voie pour atteindre leurs objectifs en matière d'énergies propres, les régions plus pauvres accusent un retard significatif.

La non-disponibilité d'électricité dans les régions plus pauvres a au moins deux conséquences négatives : (1) les habitants de ces régions auront des difficultés à accéder à l'électricité nécessaire à leurs besoins quotidiens, et (2) cela pourrait freiner le développement économique et social de ces régions. Le principe d'allocation qu'EnergyTech utilise est le suivant : sur les 1 000 MWh qu'elle produit chaque jour, EnergyTech a convenu de vendre 3/4 d'entre eux (750 MWh) aux régions plus riches et 1/4 d'entre eux (250 MWh) aux régions plus pauvres.

Voici ce qui s'est passé...

Hier, une panne majeure est survenue dans l'une des centrales de production d'EnergyTech, entraînant l'arrêt complet de la production. En conséquence, la production quotidienne d'électricité d'EnergyTech est passée à 500 MWh par jour.

Jusqu'à ce que la panne soit réparée, EnergyTech a décidé de vendre toute l'électricité produite (500 MWh) aux régions plus riches et aucune (0) aux régions plus pauvres. Cette répartition de l'électricité protégera les bénéfices d'EnergyTech. L'entreprise sait que cette répartition ralentira considérablement l'accès à l'électricité dans les régions plus pauvres, ayant un impact négatif important sur leur développement économique et social. Cette répartition échouera également à remplir l'obligation morale qu'EnergyTech a de contribuer au développement durable et à la réduction des inégalités.

Lorsque je pense aux personnes affectées par le comportement d'EnergyTech, j'éprouve de/du...

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
la pitié	○	○	○	○	○	○	○
la compassion	○	○	○	○	○	○	○
pardon	○	○	○	○	○	○	○
l'inquiétude	○	○	○	○	○	○	○

→

Quand je pense au comportement d'EnergyTech, je me sens...

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
plein de regret	○	○	○	○	○	○	○
coupable	○	○	○	○	○	○	○
furieux.se	○	○	○	○	○	○	○
très ennuyé.e	○	○	○	○	○	○	○
satisfait.e	○	○	○	○	○	○	○
confiant.e	○	○	○	○	○	○	○
comblé.e	○	○	○	○	○	○	○
plein de remords	○	○	○	○	○	○	○

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
irrité.e	○	○	○	○	○	○	○
mal	○	○	○	○	○	○	○
en colère	○	○	○	○	○	○	○
fier.ère	○	○	○	○	○	○	○

→

Suite au comportement d'EnergyTech, ...

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
Je me suis efforcé.e d'être très amical envers les clients/consommateurs.	○	○	○	○	○	○	○
J'ai redoublé d'efforts pour montrer que je me souciais vraiment des clients/consommateurs.	○	○	○	○	○	○	○
J'ai fait des heures supplémentaires pour aider les clients/consommateurs.	○	○	○	○	○	○	○
J'ai contribué à répondre aux besoins des clients/consommateurs.	○	○	○	○	○	○	○
J'ai exposé sur les médias sociaux ce que EnergyTech avait fait.	○	○	○	○	○	○	○

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
J'ai proposé des solutions pour que les clients/consommateurs se sentent mieux.	○	○	○	○	○	○	○
J'ai parlé négativement d'EnergyTech à mon entourage.	○	○	○	○	○	○	○
Je me suis plaint.e à mes amis et à ma famille du comportement d'EnergyTech.	○	○	○	○	○	○	○
J'ai averti mes amis et mes proches de ne pas travailler pour EnergyTech ou de ne pas acheter auprès d'elle.	○	○	○	○	○	○	○
J'ai dit des choses négatives sur EnergyTech à d'autres personnes.	○	○	○	○	○	○	○

Veuillez évaluer cette action spécifique d'EnergyTech :

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
EnergyTech a causé du tort à autrui.	○	○	○	○	○	○	○
EnergyTech a agi de la sorte en connaissant les effets potentiels de ses actions sur les autres.	○	○	○	○	○	○	○
Les actions d'EnergyTech étaient contraires à l'éthique.	○	○	○	○	○	○	○
EnergyTech voulait se comporter de cette manière, d'autres comportements étaient possibles.	○	○	○	○	○	○	○
EnergyTech a infligé des dommages à d'autres personnes.	○	○	○	○	○	○	○
EnergyTech a agi de la sorte en connaissant les conséquences possibles pour les autres.	○	○	○	○	○	○	○
Le comportement d'EnergyTech était immoral.	○	○	○	○	○	○	○
EnergyTech était parfaitement consciente que son comportement pouvait avoir des conséquences pour les autres.	○	○	○	○	○	○	○

	Pas du tout d'accord	Pas d'accord	Plutôt pas d'accord	Indifférent	Plutôt d'accord	D'accord	Tout à fait d'accord
EnergyTech a fait du mal à autrui.	○	○	○	○	○	○	○
EnergyTech a choisi d'agir de cette manière, elle avait la possibilité d'agir d'une autre manière.	○	○	○	○	○	○	○
EnergyTech avait le contrôle de ses actions, elle aurait pu agir différemment.	○	○	○	○	○	○	○
Ce qu'EnergyTech a fait est moralement répréhensible.	○	○	○	○	○	○	○

Etes-vous ... ?

- ◯ Une femme
- ◯ Un homme
- ◯ Autre

Quel âge avez-vous?

Nombre d'années

Quel est votre profession ?

Combien d'années d'expérience professionnelle avez-vous?

Nombre d'années

Indiquez votre adresse e-mail si vous souhaitez participer au concours ! Nous faisons gagner une carte cadeau FNAC de 10€ 🥳

Appendix 2: High and Low CSiR vignettes

2.1 Our Vignettes

La seconde partie de cette enquête est une mise en situation. Voici quelques informations générales sur l'entreprise pour laquelle vous travaillez...

Vous travaillez depuis cinq ans pour EnergyTech, une grande entreprise spécialisée dans les énergies renouvelables. Vous êtes satisfait de votre travail et entretenez de bonnes relations avec vos collègues.

EnergyTech est l'une des sociétés leaders dans le développement de technologies vertes. Avec ses installations de production actuelles, EnergyTech produit chaque jour 1 000 mégawattheures (MWh) d'électricité à partir de sources renouvelables telles que l'énergie solaire et éolienne.

Comme EnergyTech a bénéficié de subventions gouvernementales pour ses recherches sur les énergies renouvelables, elle a convenu avec les autorités de vendre une partie de son électricité à des régions plus pauvres, même si le prix par MWh payé par ces régions est inférieur à celui payé par les régions plus riches. Alors que les régions plus riches sont en bonne voie pour atteindre leurs objectifs en matière d'énergies propres, les régions plus pauvres accusent un retard significatif.

La non-disponibilité d'électricité dans les régions plus pauvres a au moins deux conséquences négatives : (1) les habitants de ces régions auront des difficultés à accéder à l'électricité nécessaire à leurs besoins quotidiens, et (2) cela pourrait freiner le développement économique et social de ces régions. Le principe d'allocation qu'EnergyTech utilise est le suivant : sur les 1 000 MWh qu'elle produit chaque jour, EnergyTech a convenu de vendre 3/4 d'entre eux (750 MWh) aux régions plus riches et 1/4 d'entre eux (250 MWh) aux régions plus pauvres.

Voici ce qui s'est passé...

Hier, une panne majeure est survenue dans l'une des centrales de production d'EnergyTech, entraînant l'arrêt complet de la production. En conséquence, la production quotidienne d'électricité d'EnergyTech est passée à 500 MWh par jour.

[Manipulation: low CSiR]	*[Manipulation: high CSiR]*
Jusqu'à ce que la panne soit réparée, EnergyTech continuera à vendre 3/4 de son électricité produite (375 MWh) aux régions riches et 1/4 (125 MWh) aux régions pauvres. Cette répartition de la production d'électricité est conforme à l'accord contraignant conclu entre EnergyTech et les autorités. Cela ne ralentira pas l'accès à l'électricité dans les régions plus pauvres et sur leur développement économique et social .Cette allocation répondra également à l'obligation morale de EnergyTech de rendre au public ce qu'il a reçu, étant donné que la recherche a été en partie financée par des fonds publics.	Jusqu'à ce que la panne soit réparée, EnergyTech a décidé de vendre toute l'électricité produite (500 MWh) aux régions plus riches et aucune (0) aux régions plus pauvres. Cette répartition de l'électricité protégera les bénéfices d'EnergyTech. L'entreprise sait que cette répartition ralentira considérablement l'accès à l'électricité dans les régions plus pauvres, ayant un impact négatif important sur leur développement économique et social. Cette répartition échouera également à remplir l'obligation morale qu'EnergyTech a de contribuer au développement durable et à la réduction des inégalités.

2.2 Original Vignettes (Hericher & Bridoux, 2023)

Some general information about the company you work for...

For the last five years, you have been working for BigPharma, a big multinational pharmaceutical company. You like your job and have good relationships with your direct colleagues.

BigPharma is one of the pharmaceutical companies that succeeded in quickly developing a vaccine against Covid-19.

With its current production facilities, BigPharma produces each day 2,500,000 doses of its Covid-19 vaccine.

As the research of BigPharma was partially funded by public money, BigPharma has agreed with the UK authorities to sell some of its vaccines to poorer countries (e.g., Uganda) even if

the price per dose paid by these countries is much lower than the price paid by richer countries (e.g., Sweden).

While richer countries are well on the way of vaccinating their population by the end of the summer, poorer countries are still lagging far behind.

Not vaccinating people in poorer countries fast enough has at least two negative consequences for public health:

(1) people in poorer countries will continue to suffer from Covid-19 and

(2) the probability that the Covid-19 virus will mutate in these countries is higher, which increases the risk for all people regardless of where they live.

The allocation principle BigPharma uses is the following. Out of the 2,500,00 doses it produces per day, BigPharma has agreed to sell 3/5 of them (1,500,000) to richer countries and 2/5 of them (1,000,000) to poorer countries.

This is what happened...

Yesterday, a machine broke down in one of the production facilities of BigPharma and this facility had to stop production completely. As a result, BigPharma's daily production of doses has dropped to 1,500,000 per day.

[Manipulation: low CSiR]	*[Manipulation: high CSiR]*
Until the machine is repaired, BigPharma will keep selling 3/5 of the doses (900,000) to richer countries and 2/5 (600,000) to poorer countries. This allocation of the doses is in line with the binding agreement between BigPharma and the UK authorities. This allocation of the doses will not slow down the vaccination process in poor countries, limiting very much the negative impact of the shortage. This allocation will also fulfil the moral obligation BigPharma has to give back to the public given that the research was partly publicly funded.	Until the machine is repaired, BigPharma has decided to sell all the doses (1,500,000) to richer countries and none (0) to poorer countries. This allocation of the doses will protect BigPharma's profit. BigPharma knows that this allocation of the doses will slow down significantly the vaccination process in poor countries, having a large negative impact on public health. This allocation will also fail to fulfil the moral obligation BigPharma has to give back to the public given that the research was partly publicly funded.

Appendix 3: Confirmatory Factor Analysis

```
###

 Measurement Model: ProposedModel

###

 lavaan 0.6-8 ended normally after 75 iterations

  Estimator                                         ML

  Optimization method                           NLMINB

  Number of model parameters                        77

                                                Used       Total

  Number of observations                         104         202

Model Test User Model:

  Test statistic                              0.000

  Degrees of freedom                              0

Model Test Baseline Model:

  Test statistic                            399.006

  Degrees of freedom                             55

  P-value                                     0.000

User Model versus Baseline Model:

  Comparative Fit Index (CFI)                 1.000

  Tucker-Lewis Index (TLI)                    1.000

Loglikelihood and Information Criteria:

  Loglikelihood user model (H0)           -1358.562

  Loglikelihood unrestricted model (H1)   -1358.562
```

```
  Akaike (AIC)                           2871.125

  Bayesian (BIC)                         3074.743

  Sample-size adjusted Bayesian (BIC)    2831.500

Root Mean Square Error of Approximation:

  RMSEA                                  0.000

  90 Percent confidence interval - lower 0.000

  90 Percent confidence interval - upper 0.000

  P-value RMSEA <= 0.05                  NA

Standardized Root Mean Square Residual:

  SRMR                                   0.000

Parameter Estimates:

  Standard errors                        Standard

  Information                            Expected

  Information saturated (h1) model       Structured

Latent Variables:

                        Estimate  Std.Err  z-value  P(>|z|)   Std.lv

  Extraversion_single =~

    Extraversion                1.000                        0.766

  Agreeableness_single =~

    Agreeableness               1.000                        0.512

  Conscientiousness_single =~

    Conscientisnss              1.000                        0.631

  Neuroticism_single =~

    Neuroticism                 1.000                        0.811
```

```
Openness_single =~

  Openness                  1.000                    0.597

Anger_single =~

  Anger                     1.000                    1.485

Guilt_single =~

  Guilt                     1.000                    1.392

Pride_single =~

  Pride                     1.000                    1.333

Sympathy_single =~

  Sympathy                  1.000                    1.091

Punishing.Behavior_single =~

  Punishing.Bhvr            1.000                    1.400

Compensating.Behavior_single =~

  Compnstng.Bhvr            1.000                    1.059

Std.all

  1.000

  1.000

  1.000

  1.000

  1.000

  1.000

  1.000

  1.000

  1.000
```

```
    1.000

    1.000

Covariances:

                   Estimate  Std.Err  z-value  P(>|z|)   Std.lv

 Extraversion_single ~~

   Agreblnss_sngl             0.015    0.038    0.392    0.695    0.038

   Cnscntsnss_sng             0.104    0.049    2.136    0.033    0.214

   Neurotcsm_sngl            -0.057    0.061   -0.930    0.353   -0.092

   Openness_singl             0.106    0.046    2.297    0.022    0.231

   Anger_single              -0.216    0.114   -1.899    0.058   -0.190

   Guilt_single              -0.189    0.106   -1.780    0.075   -0.177

   Pride_single               0.191    0.102    1.880    0.060    0.188

   Sympathy_singl            -0.182    0.084   -2.167    0.030   -0.217

   Pnshng.Bhvr_sn            -0.318    0.110   -2.900    0.004   -0.297

   Cmpnstng.Bhvr_             0.017    0.080    0.215    0.830    0.021

 Agreeableness_single ~~

   Cnscntsnss_sng             0.066    0.032    2.032    0.042    0.203

   Neurotcsm_sngl            -0.106    0.042   -2.523    0.012   -0.255

   Openness_singl             0.041    0.030    1.365    0.172    0.135

   Anger_single              -0.007    0.075   -0.093    0.926   -0.009

   Guilt_single               0.012    0.070    0.171    0.864    0.017

   Pride_single               0.094    0.068    1.396    0.163    0.138

   Sympathy_singl            -0.003    0.055   -0.063    0.950   -0.006

   Pnshng.Bhvr_sn            -0.089    0.071   -1.253    0.210   -0.124
```

```
   Cmpnstng.Bhvr_              0.041    0.053    0.778    0.436    0.077

Conscientiousness_single ~~

   Neurotcsm_sngl             -0.080    0.051   -1.581    0.114   -0.157

   Openness_singl              0.129    0.039    3.295    0.001    0.341

   Anger_single               -0.004    0.092   -0.048    0.962   -0.005

   Guilt_single               -0.001    0.086   -0.011    0.991   -0.001

   Pride_single                0.082    0.083    0.988    0.323    0.097

   Sympathy_singl             -0.152    0.069   -2.201    0.028   -0.221

   Pnshng.Bhvr_sn             -0.071    0.087   -0.822    0.411   -0.081

   Cmpnstng.Bhvr_             -0.023    0.066   -0.350    0.726   -0.034

Neuroticism_single ~~

   Openness_singl              0.015    0.048    0.319    0.750    0.031

   Anger_single               -0.010    0.118   -0.081    0.936   -0.008

   Guilt_single               -0.031    0.111   -0.282    0.778   -0.028

   Pride_single               -0.117    0.107   -1.095    0.273   -0.108

   Sympathy_singl              0.040    0.087    0.466    0.641    0.046

   Pnshng.Bhvr_sn              0.063    0.112    0.568    0.570    0.056

   Cmpnstng.Bhvr_             -0.009    0.084   -0.101    0.919   -0.010

Openness_single ~~

   Anger_single               -0.046    0.087   -0.530    0.596   -0.052

   Guilt_single               -0.058    0.082   -0.714    0.475   -0.070

   Pride_single                0.060    0.078    0.763    0.445    0.075

   Sympathy_singl             -0.040    0.064   -0.631    0.528   -0.062

   Pnshng.Bhvr_sn             -0.004    0.082   -0.048    0.961   -0.005
```

```
  Cmpnstng.Bhvr_              0.021    0.062    0.345    0.730    0.034

Anger_single ~~

  Guilt_single              1.705    0.263    6.489    0.000    0.825

  Pride_single             -1.309    0.233   -5.625    0.000   -0.661

  Sympathy_singl            1.085    0.191    5.677    0.000    0.670

  Pnshng.Bhvr_sn            1.477    0.250    5.906    0.000    0.710

  Cmpnstng.Bhvr_            0.173    0.155    1.118    0.263    0.110

Guilt_single ~~

  Pride_single             -1.034    0.208   -4.964    0.000   -0.557

  Sympathy_singl            0.880    0.172    5.115    0.000    0.580

  Pnshng.Bhvr_sn            1.283    0.229    5.607    0.000    0.658

  Cmpnstng.Bhvr_            0.128    0.145    0.886    0.376    0.087

Pride_single ~~

  Sympathy_singl           -0.707    0.158   -4.459    0.000   -0.486

  Pnshng.Bhvr_sn           -1.059    0.210   -5.033    0.000   -0.567

  Cmpnstng.Bhvr_            0.005    0.138    0.037    0.970    0.004

Sympathy_single ~~

  Pnshng.Bhvr_sn            0.927    0.175    5.292    0.000    0.607

  Cmpnstng.Bhvr_            0.190    0.115    1.657    0.098    0.165

Punishing.Behavior_single ~~

  Cmpnstng.Bhvr_            0.145    0.146    0.992    0.321    0.098

Std.all

  0.038

  0.214
```

-0.092

0.231

-0.190

-0.177

0.188

-0.217

-0.297

0.021

0.203

-0.255

0.135

-0.009

0.017

0.138

-0.006

-0.124

0.077

-0.157

0.341

-0.005

-0.001

0.097

-0.221

-0.081

-0.034

0.031

-0.008

-0.028

-0.108

0.046

0.056

-0.010

-0.052

-0.070

0.075

-0.062

-0.005

0.034

0.825

-0.661

0.670

0.710

0.110

-0.557

0.580

0.658

0.087

-0.486

```
-0.567

0.004

0.607

0.165

0.098

Intercepts:

                Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all

.Extraversion     3.466    0.075   46.143    0.000    3.466    4.525

.Agreeableness    4.016    0.050   79.999    0.000    4.016    7.845

.Conscientisnss   3.801    0.062   61.387    0.000    3.801    6.020

.Neuroticism      2.983    0.080   37.494    0.000    2.983    3.677

.Openness         3.522    0.059   60.188    0.000    3.522    5.902

.Anger            4.041    0.146   27.755    0.000    4.041    2.722

.Guilt            3.767    0.137   27.595    0.000    3.767    2.706

.Pride            2.877    0.131   22.016    0.000    2.877    2.159

.Sympathy         4.476    0.107   41.856    0.000    4.476    4.104

.Punishing.Bhvr   3.640    0.137   26.516    0.000    3.640    2.600

.Compnstng.Bhvr   4.850    0.104   46.708    0.000    4.850    4.580

Extravrsn_sngl    0.000                      0.000    0.000

Agreblnss_sngl    0.000                      0.000    0.000

Cnscntsnss_sng    0.000                      0.000    0.000

Neurotcsm_sngl    0.000                      0.000    0.000

Openness_singl    0.000                      0.000    0.000

Anger_single      0.000                      0.000    0.000
```

```
   Guilt_single      0.000                          0.000    0.000

   Pride_single      0.000                          0.000    0.000

   Sympathy_singl    0.000                          0.000    0.000

   Pnshng.Bhvr_sn    0.000                          0.000    0.000

   Cmpnstng.Bhvr_    0.000                          0.000    0.000

Variances:

                Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all

   .Extraversion      0.000                          0.000    0.000

   .Agreeableness     0.000                          0.000    0.000

   .Conscientisnss    0.000                          0.000    0.000

   .Neuroticism       0.000                          0.000    0.000

   .Openness          0.000                          0.000    0.000

   .Anger             0.000                          0.000    0.000

   .Guilt             0.000                          0.000    0.000

   .Pride             0.000                          0.000    0.000

   .Sympathy          0.000                          0.000    0.000

   .Punishing.Bhvr    0.000                          0.000    0.000

   .Compnstng.Bhvr    0.000                          0.000    0.000

   Extravrsn_sngl     0.587    0.081    7.211    0.000    1.000    1.000

   Agreblnss_sngl     0.262    0.036    7.211    0.000    1.000    1.000

   Cnscntsnss_sng     0.399    0.055    7.211    0.000    1.000    1.000

   Neurotcsm_sngl     0.658    0.091    7.211    0.000    1.000    1.000

   Openness_singl     0.356    0.049    7.211    0.000    1.000    1.000

   Anger_single       2.204    0.306    7.211    0.000    1.000    1.000
```

```
   Guilt_single      1.938    0.269    7.211    0.000    1.000    1.000

   Pride_single      1.776    0.246    7.211    0.000    1.000    1.000

   Sympathy_singl    1.189    0.165    7.211    0.000    1.000    1.000

   Pnshng.Bhvr_sn    1.960    0.272    7.211    0.000    1.000    1.000

   Cmpnstng.Bhvr_    1.121    0.156    7.211    0.000    1.000    1.000

R-Square:

                Estimate

   Extraversion      1.000

   Agreeableness     1.000

   Conscientisnss    1.000

   Neuroticism       1.000

   Openness          1.000

   Anger             1.000

   Guilt             1.000

   Pride             1.000

   Sympathy          1.000

   Punishing.Bhvr    1.000

   Compnstng.Bhvr    1.000
```

Appendix 4: Path analysis

Analysis Summary

The model is recursive.
Sample size = 101

Variable Summary

Your model contains the following variables

- Observed, endogenous variables: Anger, CompensatingBehavior, PunishingBehavior, Guilt, Pride, Sympathy
- Observed, exogenous variables: Extraversion, Conscientiousness, Neuroticism, Openness, Agreeableness

  Unobserved, exogenous variables e1, e2, e3, e4, e5, e6

Variable counts

Number of variables in your model:	17
Number of observed variables:	11
Number of unobserved variables:	6
Number of exogenous variables:	11
Number of endogenous variables:	6

Parameter Summary

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	6	0	0	6	0	12
Labeled	0	0	0	0	0	0
Unlabeled	38	10	11	5	6	70
Total	44	10	11	11	6	82

Models

Computation of degrees of freedom

Number of distinct sample moments:	77
Number of distinct parameters to be estimated:	70
Degrees of freedom (77 - 70):	7

Results

Minimum was achieved
Chi-square = 230,889
Degrees of freedom = 7
Probability level = ,000

Estimates (Maximum Likelihood Estimates)

Regression Weights:

			Estimate	S.E.	C.R.	PLabel
Pride	<---	Conscientiousness	,145	,230	,630	,529
Anger	<---	Extraversion	-,382	,199	-1,923	,054
Guilt	<---	Extraversion	-,335	,186	-1,803	,071
Pride	<---	Extraversion	,294	,176	1,668	,095
Anger	<---	Agreeableness	-,045	,304	-,147	,883
Guilt	<---	Agreeableness	,015	,284	,055	,956
Pride	<---	Agreeableness	,271	,269	1,006	,314
Guilt	<---	Conscientiousness	,096	,242	,395	,693
Anger	<---	Conscientiousness	,085	,259	,328	,743
Guilt	<---	Neuroticism	-,070	,180	-,386	,699
Anger	<---	Neuroticism	-,049	,193	-,256	,798
Sympathy	<---	Extraversion	-,274	,144	-1,895	,058
Sympathy	<---	Agreeableness	,102	,221	,461	,645
Sympathy	**<---**	**Conscientiousness**	**-,397**	**,188**	**-2,106**	**,035**
Sympathy	<---	Neuroticism	,002	,140	,012	,990
Sympathy	<---	Openness	,135	,193	,698	,485
Guilt	<---	Openness	-,062	,249	-,251	,802
Anger	<---	Openness	-,029	,266	-,108	,914
Pride	<---	Openness	-,050	,236	-,211	,833
Pride	<---	Neuroticism	-,079	,171	-,462	,644
CompensatingBehavior	<---	Conscientiousness	-,138	,189	-,731	,465
CompensatingBehavior	<---	Openness	,085	,189	,449	,653
CompensatingBehavior	<---	Extraversion	,065	,150	,432	,666
PunishingBehavior	**<---**	**Extraversion**	**-,278**	**,129**	**-2,152**	**,031**
CompensatingBehavior	<---	Agreeableness	,145	,217	,668	,504
PunishingBehavior	<---	Agreeableness	-,270	,187	-1,441	,149

			Estimate	S.E.	C.R.	PLabel
PunishingBehavior	<---	Conscientiousness	-,010	,162	-,059	,953
CompensatingBehavior	<---	Neuroticism	,008	,137	,059	,953
PunishingBehavior	<---	Neuroticism	,036	,118	,304	,761
PunishingBehavior	<---	Openness	,184	,163	1,126	,260
CompensatingBehavior	<---	Anger	,082	,071	1,161	,246
PunishingBehavior	<---	Pride	-,112	,069	-1,621	,105
PunishingBehavior	**<---**	**Sympathy**	**,198**	**,085**	**2,337**	**,019**
PunishingBehavior	**<---**	**Guilt**	**,230**	**,065**	**3,507**	*******
PunishingBehavior	**<---**	**Anger**	**,310**	**,061**	**5,073**	*******
CompensatingBehavior	<---	Guilt	,014	,076	,178	,858
CompensatingBehavior	<---	Pride	,133	,080	1,655	,098
CompensatingBehavior	<---	Sympathy	,147	,098	1,495	,135

Standardized Regression Weights:

			Estimate
Pride	<---	Conscientiousness	,068
Anger	<---	Extraversion	-,197
Guilt	<---	Extraversion	-,185
Pride	<---	Extraversion	,169
Anger	<---	Agreeableness	-,015
Guilt	<---	Agreeableness	,006
Pride	<---	Agreeableness	,104
Guilt	<---	Conscientiousness	,043
Anger	<---	Conscientiousness	,036
Guilt	<---	Neuroticism	-,040
Anger	<---	Neuroticism	-,027
Sympathy	<---	Extraversion	-,190
Sympathy	<---	Agreeableness	,047
Sympathy	<---	Conscientiousness	-,223
Sympathy	<---	Neuroticism	,001
Sympathy	<---	Openness	,074
Guilt	<---	Openness	-,027
Anger	<---	Openness	-,012
Pride	<---	Openness	-,023
Pride	<---	Neuroticism	-,048
CompensatingBehavior	<---	Conscientiousness	-,080
CompensatingBehavior	<---	Openness	,048
CompensatingBehavior	<---	Extraversion	,047
PunishingBehavior	<---	Extraversion	-,183
CompensatingBehavior	<---	Agreeableness	,069
PunishingBehavior	<---	Agreeableness	-,118
PunishingBehavior	<---	Conscientiousness	-,005
CompensatingBehavior	<---	Neuroticism	,006
PunishingBehavior	<---	Neuroticism	,025
PunishingBehavior	<---	Openness	,095
CompensatingBehavior	<---	Anger	,114
PunishingBehavior	<---	Pride	-,128

			Estimate
PunishingBehavior	<---	Sympathy	,187
PunishingBehavior	<---	Guilt	,273
PunishingBehavior	<---	Anger	,396
CompensatingBehavior	<---	Guilt	,018
CompensatingBehavior	<---	Pride	,165
CompensatingBehavior	<---	Sympathy	,151

Means:

	Estimate	S.E.	C.R.	PLabel
Conscientiousness	3,827	,063	60,789	***
Agreeableness	4,016	,051	78,026	***
Extraversion	3,472	,078	44,706	***
Neuroticism	2,990	,082	36,534	***
Openness	3,530	,061	57,981	***

Intercepts:

	Estimate	S.E.	C.R.	PLabel
Pride	,597	1,572	,380	,704
Guilt	4,914	1,658	2,965	,003
Anger	5,467	1,776	3,079	,002
Sympathy	6,082	1,290	4,715	***
PunishingBehavior	2,281	1,288	1,772	,076
CompensatingBehavior	2,861	1,495	1,914	,056

Covariances:

			Estimate	S.E.	C.R.	PLabel
Extraversion	<-->	Openness	,118	,049	2,416	,016
Openness	<-->	Neuroticism	,013	,050	,255	,798
Conscientiousness	<-->	Neuroticism	-,091	,052	-1,741	,082
Conscientiousness	<-->	Agreeableness	,069	,033	2,088	,037
Extraversion	<-->	Agreeableness	,018	,040	,438	,661
Conscientiousness	<-->	Extraversion	,101	,050	2,025	,043
Extraversion	<-->	Neuroticism	-,058	,064	-,916	,360
Neuroticism	<-->	Agreeableness	-,113	,044	-2,599	,009
Conscientiousness	<-->	Openness	,133	,041	3,270	,001
Openness	<-->	Agreeableness	,042	,032	1,329	,184

Correlations:

			Estimate
Extraversion	<-->	Openness	,249
Openness	<-->	Neuroticism	,026
Conscientiousness	<-->	Neuroticism	-,178
Conscientiousness	<-->	Agreeableness	,213
Extraversion	<-->	Agreeableness	,044

			Estimate
Conscientiousness	<-->	Extraversion	,207
Extraversion	<-->	Neuroticism	-,092
Neuroticism	<-->	Agreeableness	-,270
Conscientiousness	<-->	Openness	,346
Openness	<-->	Agreeableness	,134

Variances:

	Estimate	S.E.	C.R.	PLabel
Conscientiousness	,396	,056	7,071	***
Extraversion	,603	,085	7,071	***
Openness	,371	,052	7,071	***
Neuroticism	,664	,094	7,036	***
Agreeableness	,265	,037	7,071	***
e1	2,181	,308	7,071	***
e4	1,710	,242	7,071	***
e3	1,139	,162	7,036	***
e2	1,901	,269	7,071	***
e6	,806	,115	7,036	***
e5	1,086	,154	7,036	***

Squared Multiple Correlations:

	Estimate
Sympathy	,089
Guilt	,036
Anger	,038
Pride	,058
PunishingBehavior	,421
CompensatingBehavior	,074

For Bootstrap results see Table 5.

Appendix 5: Descriptive statistics on Big Five personality traits

		Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
N	Valid	101	101	101	100	101
	Missing	0	0	0	1	0
Mean		3.47	4.02	3.83	2.99	3.53
Median*		3.50	4.00	3.89	3.00	3.50
SD		.780	.517	.633	.819	.612
Variance		.609	.268	.400	.671	.374

Note: *Medians were used to convert continuous variables related to personality traits into dichotomous variables for t-tests.

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