

# **Personality and Whistleblowing**

Theory, Methodology, and Some Empirical Evidence



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## **2 Statement of Authorship**

This dissertation consists of an introduction, four manuscripts that are currently prepared for submission in peer-reviewed journals (see below), and a general discussion. I have written and primarily conceived all parts of this dissertation. Moreover, I have independently developed the methodological designs, wrote the pre-registrations, as well as analyzed, visualized and interpreted the data of both empirical studies reported in this dissertation. Manuscript 1 has received two rounds of feedback from my designated co-authors, Isabel Thielmann and Mario Gollwitzer. Manuscript 2 has received one round of feedback from my designated co-author, Mario Gollwitzer. Anja Göritz has steered the data collection process for the empirical study reported in Manuscript 4.

### **Manuscript 1**

Fischer, M., Thielmann, I., & Gollwitzer, M. (2022). *The role of personality in whistleblowing: An integrative framework*. Manuscript in preparation.

### **Manuscript 2**

Fischer, M., & Gollwitzer, M. (2022). *Whistleblowing paradigms*. Manuscript in preparation.

### **Manuscript 3**

Fischer, M., & Gollwitzer, M. (2022). *Personality effects on two types of whistleblowing decisions*. Manuscript in preparation.

### **Manuscript 4**

Fischer, M., Göritz, A. S., & Gollwitzer, M. (2022). *Whistleblowing and the HEXACO model of personality: Evidence from an autobiographical recall study*. Manuscript in preparation.

### 3 Introduction

In January 2019, the *Financial Times* published an article accusing the financial services company *Wirecard* of illegal accounting practices. In this article, an internal document was quoted that outlined malpractices such as falsification of accounts at some of Wirecard's subsidiaries in Asia (McCrum & Palma, 2019). Wirecard first denied the accusations raised by the Financial Times. A few months later though, after the Financial Times had published more documents substantiating their accusations, Wirecard agreed upon external investigations (McCrum, 2019), which ultimately forced Wirecard to admit that 1.9€ billion cash were missing on the company's accounts. In fact, Wirecard had manipulated its balance sheets for years. As a result of this revelation, Wirecard's stock price crashed by 72%, their CEO was arrested and charged for fraud, and the company eventually declared insolvency in June 2020 (McCrum et al., 2020; McCrum & Storbeck, 2020; Storbeck & McCrum, 2022).

The Wirecard scandal is one instance of unethical behavior in organizations, but it is by far not the only. A recent survey among members of organizations in more than 50 countries, for example, revealed that 46% of the surveyed organizations had experienced some kind of fraud or other economic crime in the last two years (PwC, 2022). Seemingly, there is something inherent to groups or organizations that make individuals in these contexts prone to unethical behavior. In fact, empirical research has shown that unethical behavior (e.g., lying for personal benefits) is indeed more prevalent in groups as compared to individual settings (e.g., Kocher et al., 2018). As an attempt to explain this finding, research from organizational settings has shown that unethical behavior may be "contagious" in the sense that employees seeing colleagues or peers engaging in wrongful activities become more inclined to resort to unethical practices themselves (e.g., Gino et al., 2009). Furthermore, (un-)ethicality in organizations seems to "trickle down" from leaders to employees, in the sense

that employees working under supervisors with an ethics-oriented leadership style show less unethical behavior, or—viewed from the other angle—that unethical behavior tends to increase when working under supervisors with lower levels of ethical leadership (Mayer et al., 2009; for a review, see Treviño et al., 2014). Together, these findings suggest that people observing unethical behavior in the context of their organization (e.g., in colleagues or leaders) interpret these wrongdoings as evidence for the existence of a local norm suggesting that unethical behavior is viewed as acceptable under specific circumstances, for example unethical behavior that benefits the organization (i.e., “unethical pro-organizational behavior”; see Umphress et al., 2010).

However, not all members of an organization comply with practices they consider dubious or unethical. Besides compliance, frequently observed responses to unethical behavior in organizations are (1) refusing to go along, (2) disengaging or leaving the organization, and (3) voicing concerns to colleagues or supervisors (e.g., Anvari et al., 2019; Jetten & Hornsey, 2014; Packer, 2008). Yet, these responses do not always succeed in stopping the wrongdoing or correcting the damage caused. In these cases, a more radical, yet often more effective measure to combat unethical behavior in organizational contexts is to inform someone *outside* of one’s organization (e.g., the media or the authorities). Wirecard’s accounting fraud, for example, would not have been detected, stopped, and prosecuted if one of its (former) employees, Pav Gill, together with his mother, had not disclosed the incriminating documents to the Financial Times (McCrum et al., 2021).

Organization members (e.g., former or current employees) who disclose information about a legal or moral norm violation (e.g., accounting fraud) committed within their organization (e.g., in a financial service company) to someone who is capable of correcting the situation (e.g., the media) are known as *whistleblowers* (see Jubb, 1999; Near & Miceli,

1985).<sup>1</sup> It is widely acknowledged that whistleblowing serves the greater good (i.e., societal interests) as it enables the detection, prosecution, and possibly correction of organizational wrongdoing. A law in the US—the so-called False Claims Act (see Carson et al., 2008)—even allows to estimate the amount of money that whistleblowers helped to recover from false claims against the US government. More specifically, citizens with insider information about fraud against the government (e.g., employees of public sector organizations) may file a case against fraudulent organizations. If such a case is successful in the sense that it recovers money for the government (either through a judgment or a settlement), the whistleblower is compensated with a share of up to 30% of the money that was successfully recovered. Although the False Claims Act only applies to the public but not to the private sector, 14,595 cases were documented since 1987 and the amount of recovered money from these cases sums up to almost \$37 billion (U.S. Department of Justice, 2022). Above and beyond this tangible economic value, whistleblowing may also create more long-term economic value, for example by deterring future organizational wrongdoing in the first place (Carson et al., 2008; Wilde, 2017).

In contrast to the value of whistleblowing on a societal level, blowing the whistle often entails substantial negative consequences on an individual level, most importantly retaliation by the management or co-workers against the whistleblower. In the Wirecard case, for example, Pav Gill reported that “they [Wirecard] tried to destroy me, manfully, professionally, emotionally” (McCrum et al., 2021). More specifically, he suspected that “he was being followed” and that Wirecard tried to prevent him from getting a new job by placing bad references on his professional performance (McCrum et al., 2021). Such retaliatory actions against whistleblowers have also been documented in the scientific

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<sup>1</sup> A more comprehensive discussion of a whistleblowing definition can be found in Manuscript 1 of this dissertation.



literature. For example, a study by Rehg et al. (2008) reported that (1) poor performance appraisals, (2) tighter monitoring of work, (3) verbal harassment or intimidation, and (4) ostracism by co-workers were experienced by more than 10% of the surveyed whistleblowers. Moreover, a report about the experiences of 1,000 whistleblowers who called a confidential advice hotline showed that approx. 8% were dismissed after they had blown the whistle (Vandekerckhove et al., 2013). Similarly, in a survey among Norwegian employees, 8% of the approx. 250 surveyed whistleblowers reported that they had experienced retaliation from the management in response to their actions (Bjørkelo et al., 2011). In sum, despite the societal value of whistleblowing, blowing the whistle often yields negative consequences for the whistleblower on an individual level.

### **3.1 Why Understanding Whistleblowing Matters**

Understanding when and why (some) people blow the whistle on an observed organizational wrongdoing (while many others remain silent) is essential because it may help to encourage more individuals who have observed wrongdoing to speak up, for example through organizational practices or laws that effectively protect whistleblowers. Thus, in order to implement practical remedies that enable whistleblowers and organizations to handle organizational wrongdoing appropriately and effectively, a more nuanced understanding of the (psychological) underpinnings of whistleblowing is urgently needed.

Furthermore, research on the psychological mechanisms underlying whistleblowing is not only relevant from an applied perspective, but also from a theoretical perspective. More specifically, whistleblowing is arguably the result of a psychologically complex decision-making process, during which (at least) three different, potentially conflicting psychological forces play out. First, based on the notion that whistleblowing often yields negative consequences for the whistleblower, it seems that whistleblowing contradicts the “rational choice” axiom, that is the presumption that individuals are motivated to maximize their

individual benefits. Second, although many whistleblowers are motivated by moral or prosocial motives (e.g., Dozier & Miceli, 1985), whistleblowing often results in negative consequences for the involved organization, for instance, economic drawbacks, legal consequences, or damages to its public reputation. Third, despite the negative consequences of whistleblowing on both an individual as well as on an organizational level, whistleblowing often serves the greater good (i.e., societal interests). Thus, the decision for or against whistleblowing requires a trade-off between individual, organizational, and societal interests, and studying how people navigate this decision can be informative for future theorizing in moral psychology. Most previous empirical research in moral psychology has focused on the intra- or interpersonal dynamics moral behavior (e.g., how two individuals behave towards one another), but far less on intragroup (or, “intra-organizational”) aspects (Ellemers et al., 2019)—or, even on settings incorporating personal, organizational, and societal aspects of morality within the same situation—and whistleblowing is a unique setting in that regard.

### **3.2 Explaining Whistleblowing Behavior**

On the broadest level, behavior—such as whistleblowing—may be best explained as a function of characteristics of the involved person and characteristics of the specific situation (Funder, 2006; Lewin, 1963/2012). For many years, psychological research has considered person-related and situation-related factors to be competitive forces, that is, it has focused on the question whether characteristics of the person *or* characteristics of the situation exert stronger effects on behavior. Today, this “person vs. situation debate” is largely over, and it is widely acknowledged that behavior results from an interplay of person-related factors and situational factors (e.g., Furr & Funder, 2021).<sup>2</sup>

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<sup>2</sup> More specifically, person-related factors and situational factors not only shape behavior independent of one another, but also in form of person-situation interactions, that is, the strength of a personality effect depends on situational characteristics and vice versa (Furr & Funder, 2021). Moreover, personality and situation may transact, that is, personality might influence the evocation, manipulation, or construal of situations across time and the evocation, manipulation, or construal of situations, in turn, may change personality (Rauthmann & Sherman, 2020).

Whistleblowing research, however, has so far focused more on the role of situational variables as compared to person-related factors (i.e., characteristics of the whistleblower) in the prediction of whistleblowing behavior. For instance, an influential meta-analysis on the predictors and consequences of whistleblowing summarized the effects of various situational variables—such as the severity of the wrongdoing or organizational climate for whistleblowing—but much less variables pertaining to characteristics of the whistleblower (Mesmer-Magnus & Viswesvaran, 2005). Specifically, the only person-related variables in this meta-analysis were demographic data (e.g., age and gender) or characteristics that arguably entail both person-related as well as situation-related components (e.g., job satisfaction). By contrast, a crucial set of person-related variables is entirely missing in this meta-analysis: The whistleblower's personality. To further illustrate the emphasis on situational as compared to person-related factors in previous whistleblowing research, consider the following notion:

Basically, whistle-blowers are employees who are in the wrong place at the wrong time—that is, they have the opportunity to observe wrongdoing, often because of the nature of their jobs. Although it is premature to draw conclusions, there is some evidence that if the wrongdoing is sufficiently serious and if potential whistle-blowers believe they can successfully cause the termination of the wrongdoing, they will act. (Near & Miceli, 1996, p. 515)

In the present research program, I challenge the notion that whistleblowers are simply “in the wrong place at the wrong time.” By contrast, I will argue—both from a theoretical and from an empirical perspective—that certain personality characteristics render a whistleblowing decision more or less likely. This notion—which forms the basic premise of this dissertation—is based on three main arguments. First, although Near and Miceli's argument (1996) that most employees will blow the whistle if the wrongdoing is sufficiently

severe may be correct, I argue that personality traits might influence the entire whistleblowing decision-making process, including moral judgments of an organizational practice. In other words, I will advocate the idea that whether or not a wrongdoing is judged as “sufficiently serious” is already shaped by personality. Second, it is to-be-expected that personality effects on whistleblowing are comparably small (see Gignac & Szodorai, 2016), which suggests that previous research in this domain might have had insufficient statistical power. Thus, non-significant personality effects in these studies (e.g., Bocchiaro et al., 2012) should not be interpreted as evidence for the *absence* of personality effects. On a side note, this also implies that valid and efficient whistleblowing paradigms are a fundamental prerequisite for robust research on the personality-whistleblowing link. Lastly, previous studies on personality in the context of whistleblowing have investigated a heterogenous selection of personality variables of which many are theoretically and empirically related to one another. This makes it difficult to integrate and summarize research findings in the sense that it complicates understanding whether certain personality effects are functionally equivalent and reflect a common psychological mechanism. Therefore, I advocate the idea of using a coherent personality taxonomy rather than a combination of multiple “stand-alone” traits. I elaborate on this argument in the following section.

### **3.3 Personality**

Personality traits are defined as “relatively enduring patterns of thoughts, feelings, and behaviors that reflect the tendency to respond in certain ways under certain circumstances” (Roberts, 2009; p. 140). This relatively broad definition suggests that there is a countless number of psychological constructs that can be conceptualized as personality traits. Therefore, one major historical challenge in the evolution of personality research was to find an organizing structure of the personality space. Ideally, such a structure would need to

capture the universe of personality traits comprehensively, but with a limited number of broad, overarching personality “domains” or “dimensions” only.

### **3.3.1 Basic Personality Taxonomies**

Such a descriptive model of personality traits—also known as a personality taxonomy—was eventually achieved through the means of the *lexical hypothesis* (for a review, see John, 2021). The lexical hypothesis posits that all relevant personality characteristics are mirrored in the natural language, and that, in order to obtain a finite list of relevant personality traits, one can screen the dictionary for words that are suitable to describe a person. Although such a list was formally “finite,” it comprised several thousand words and was thus still too large for most research settings. Therefore, researchers employed statistical techniques (i.e., factor analyses) to reduce these thousands of personality traits to a smaller number of overarching factors (henceforth: personality dimensions).

In essence, the lexical approach to personality has produced two main competing taxonomies, one advocating five personality dimensions and one proposing six personality dimensions. On the one hand, the so-called Big Five model, which is rooted in lexical research in mainly English-speaking samples (e.g., Goldberg, 1990), holds that five personality dimensions are sufficient to describe the personality space comprehensively: (1) Extraversion, (2) Agreeableness, (3) Conscientiousness, (4) Neuroticism, and (5) Openness to Experience (for a review, see John, 2021). On the other hand, the so-called HEXACO model of personality, which was derived from later lexical studies in other languages (e.g., Ashton et al., 2004), proposes six personality dimensions: (1) Honesty-Humility, (2) Emotionality, (3) eXtraversion, (4) Agreeableness, (5) Conscientiousness, and (6) Openness to Experience (for a review, see Ashton & Lee, 2007).<sup>3</sup>

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<sup>3</sup> Definitions of these personality dimensions can be found in John (2021) and in Ashton & Lee (2007). I also present some of these definitions in Manuscript 1 of this dissertation.

Three of the HEXACO dimensions—Extraversion, Conscientiousness, and Openness to Experience—closely resemble the corresponding Big Five dimensions, both conceptually (Ashton et al., 2014) as well as empirically (i.e., meta-analytic correlations ranging from .89 to .91; Thielmann et al., 2021). By contrast, the other three HEXACO dimensions—Honesty-Humility, Emotionality, and Agreeableness—are less comparable to the remaining Big Five dimensions (Ashton et al., 2014; Thielmann et al., 2021). The most prominent difference with regard to these HEXACO dimensions in comparison to the Big Five is how they incorporate prosocial tendencies. In the Big Five, prosocial tendencies are mostly captured by the Agreeableness dimension (John, 2021). In the HEXACO model, however, prosociality-related traits are distributed across the Honesty-Humility, Agreeableness, and—to a smaller extent—the Emotionality dimensions (Ashton et al., 2014). Precisely, Honesty-Humility is conceptualized as unconditional concern for others, defined by traits such as being honest, fair-minded, and sincere, whereas HEXACO Agreeableness is viewed as conditional concern for others, defined by traits such as being mild, lenient, and patient (Ashton et al., 2014; Ashton & Lee, 2007; also see Thielmann et al., 2020). Lastly, HEXACO Emotionality reflects altruistic tendencies towards close others, and is defined by trait adjectives such as vulnerable, emotional, and fearful (Ashton & Lee, 2007). By implication, the HEXACO model allows a more fine-grained differentiation of prosocial tendencies than the Big Five (see Thielmann et al., 2020), thereby qualifying as a prime candidate to study personality effects on whistleblowing.

### **3.4 The Present Research Program**

With the present research program, I aim at contributing to a more holistic understanding of how personality shapes the whistleblowing process. By emphasizing the holistic nature of my research endeavor, I refer to three different aspects. First, I study how personality affects whistleblowing from multiple perspectives. In Manuscript 1, I take a

theoretical perspective on the personality-whistleblowing link by deriving theoretical predictions regarding situational characteristics typical whistleblowing situations entail, and regarding personality traits that should be relevant under the presence of these characteristics. In Manuscript 2, I discuss the whistleblowing-personality link from a methodological perspective by reviewing and evaluating commonly used whistleblowing paradigms with regard to their psychometric properties. In Manuscripts 3 and 4, I take these theoretical and methodological insights into action by presenting two empirical studies on the effects of broad personality dimensions on whistleblowing.

Second, another aspect of the holistic nature of this research lies in the fact that I conceptualize whistleblowing not as a single “one-off” behavior, but rather as a decision-making process encompassing multiple stages (Dozier & Miceli, 1985). This differentiation is theoretically relevant because I propose that not all personality traits are equally relevant at all stages of the whistleblowing process, and that some traits might even exert opposite effects at different stages of the whistleblowing decision-making process. To illustrate this, and building on the idea that the “greater good” is at odds with organizational interests in many whistleblowing situations, we can assume that certain prosocial personality traits relate to an increased willingness to correct the wrongdoing (e.g., through whistleblowing; in order to serve the greater good), but at the same time, with an increased willingness to voice concerns regarding the wrongdoing internally (e.g., to an ombudsperson; “internal whistleblowing”) as compared to external entities (e.g., to the authorities; “external whistleblowing”), in order to minimize negative consequences for the organization. In sum, the idea that whistleblowing results from a decision-making process guided my theoretical work (Manuscript 1) and my empirical research (Manuscript 3 and Manuscript 4).

Third, I study the personality effects on whistleblowing holistically in the sense that I do not only focus on one or two selected personality traits, but rather on comprehensive

personality taxonomies. More specifically, in the theoretical review reported in Manuscript 1, I derive hypotheses about both the effects of the Big Five as well as of the HEXACO dimensions on whistleblowing. In the empirical manuscripts, I specifically focus on the HEXACO model of personality because—as outlined above—it allows a more nuanced differentiation of prosocial tendencies, which is arguably relevant for whistleblowing contexts. More precisely, in Manuscript 3, I report the results of a two-wave scenario study ( $N = 724$ ) focusing on the role of HEXACO Honesty-Humility and HEXACO Agreeableness on two types of whistleblowing decision: The decision to blow the whistle (vs. remaining silent), and the decision to blow the whistle to internal entities (e.g., to an ombudsperson) vs. to external entities (e.g., to the media, or to the authorities). In Manuscript 4, I describe the findings of an autobiographical recall study in which I asked participants ( $N = 622$ ) to recall real-life instances of an observed organizational wrongdoing and how they reacted to it. Correlating these autobiographic whistleblowing instances with the HEXACO dimensions provides an ecologically valid investigation of the role of broad personality traits for whistleblowing.



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#### **4 Manuscript 1: The role of personality in whistleblowing: An integrative framework**

## **The Role of Personality in Whistleblowing: An Integrative Framework**

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### **Abstract**

People differ substantially in the way they respond to perceived immoral or illegal activities within their organization. One possible response in such situations is whistleblowing, but empirical research has shown that a substantial share of individuals who observe questionable organizational practices refrain from blowing the whistle. While previous studies have identified single personality traits that predict whistleblowing, we currently lack a framework that integrates these findings. The present contribution (1) organizes the whistleblowing decision along four phases, (2) identifies situational characteristics that are relevant for each of these phases, and (3) building on these situational characteristics, derives hypotheses regarding the effects of broad personality dimensions (i.e., Big Five/FFM as well as HEXACO dimensions) and narrow personality traits (e.g., Justice Sensitivity) on whistleblowing. We hope that our framework contributes to a more holistic understanding of how personality shapes the whistleblowing decision-making process and stimulates more research on the nexus of personality and whistleblowing.

[152 words]

*Keywords:* whistleblowing, personality, big five, five-factor model, HEXACO.

### **The Role of Personality in Whistleblowing: An Integrative Framework**

How do people respond when they observe illegal or immoral practices within their organization? Oftentimes, organization members have insufficient power to stop the wrongful practice on their own efforts; thus, their behavioral options essentially reduce to remaining silent versus informing someone who might be able to intervene, that is, to *blow the whistle* (Near & Miceli, 1985). As such, whistleblowing constitutes an important mechanism to help detect and combat organizational misconduct, for example, financial fraud (Wilde, 2017), corruption (Köbis et al., 2016), or scientific wrongdoing (Gross, 2016; Stroebe et al., 2012).

The global economic value of whistleblowing is difficult to estimate, but it is well-documented that whistleblowers contributed to the recovery of \$1.6 billion from fraud against the US government in 2020 alone (U.S. Department of Justice, 2021). Above and beyond the economic value, whistleblowing may also create more indirect societal value, for example, by raising public awareness of potentially harmful organizational practices. Edward Snowden's disclosures about global surveillance practices operated by US intelligence agencies, for instance, stimulated a public debate about privacy issues on the internet. Arguably resulting from Snowden's revelations, governments have implemented new data protection regulations (Traynor, 2013) and tech companies have adopted encryption technologies (Sanger & Chen, 2014).

Unlike the NSA surveillance programs that were disclosed by Edward Snowden, many other instances of organizational misconduct remain undetected because no one blows the whistle: According to a survey among employees of a military base, only 26% of those who observed organizational wrongdoing, such as mismanagement, safety problems, or discrimination, reported it (Near et al., 2004). Similarly, a large-scale survey among

employees in the Australian public sector revealed that only 39% of those who witnessed wrongdoing within their organization disclosed it (Brown et al., 2008).<sup>4</sup>

This discrepancy between the economic and societal value of whistleblowing on the one hand and the low-to-moderate reporting rates of organizational misconduct on the other hand has motivated researchers across disciplines to identify factors that may foster versus inhibit whistleblowing. One line of research has largely focused on situational predictors of whistleblowing, and—to name a few examples—revealed that whistleblowing rates increase with an increasing severity of the wrongful action (Miceli & Near, 1985; Cassematis & Wortley, 2013), with increasing financial incentives for whistleblowing (Butler et al., 2020), and in organizational climates that approve whistleblowing (Cassematis & Wortley, 2013; also see Mesmer-Magnus & Viswesvaran, 2005).

Situational factors are important, but not the only antecedent of whistleblowing: Person-related variables (e.g., personality traits) are another determinant of behavior in general (e.g., Furr & Funder, 2021) and therefore arguably also of whistleblowing. Accordingly, research has also identified personality traits that predict whistleblowing. Table 4.1 summarizes a selection of empirical studies that have investigated the association of whistleblowing and personality traits. Taken together, these studies demonstrate that some personality traits do indeed account for a substantial amount of variance in whistleblowing. For instance, HEXACO Honesty-Humility, a trait capturing characteristics such as being fair-minded and sincere (Ashton & Lee, 2007), predicted whistleblowing positively with a large effect size in an economic game paradigm (Bartuli et al., 2016). Moreover, Extraversion as operationalized within the Five Factor Model (FFM) of personality—a trait encompassing characteristics such as being sociable and talkative (McCrae & Costa, 1987)—showed a

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<sup>4</sup> An overview and discussion of “reporting rates” (i.e., the share of individuals who reported vs. concealed observed organizational misconduct) can be found in Olsen (2014).

positive medium-sized correlation with autobiographical recalls of whistleblowing instances (Bjørkelo et al., 2010). And, in addition, the so-called Proactive Personality (see Bateman & Crant, 1993) showed a positive medium-sized association with whistleblowing (Miceli et al., 2012).

**Table 4.1**

*Effect Sizes in Selected Empirical Studies on the Personality-Whistleblowing Association*

Study	Whistleblowing paradigm	Personality trait	Pearson's $r$	Classification of effect size
Bartuli et al. (2016)	economic game	HEXACO: HH	.30	large
Bjørkelo et al. (2010)	autobiographical recall study	Big Five/FFM: EX	.26	medium
		Big Five/FFM: AG	-.05	very small
		Big Five/FFM: CO	.03	tiny
		Big Five/FFM: NE	-.09	very small
		Big Five/FFM: OP	.09	very small
Bocchiaro et al. (2012)	immersive behavioral study	HEXACO: HH	.02	tiny
		HEXACO: EM	-.25	medium
		HEXACO: EX	.09	very small
		HEXACO: AG	.07	very small
		HEXACO: CO	.11	small
		HEXACO: OP	.23	medium
Chiu (2003)	scenario study	Locus of Control	-.12	small
Miceli et al. (2012)	autobiographical recall study	Proactive Personality	.25	medium

*Note.* HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; NE = Neuroticism. Whenever effect sizes were not provided in the metric of Pearson's  $r$ , we calculated  $r$  from either means and standard deviations (i.e., for Bartuli et al., 2016; Bocchiaro et al., 2012; Miceli et al., 2012) or estimated  $r$  from Kendall's Tau (i.e., for Bjørkelo et al., 2010) by using the Table provided in Gilpin (1993). Based on recent recommendations regarding the classification of effect sizes (Funder & Ozer, 2019; Gignac & Szodorai, 2016), we interpret values of  $|r| < .05$  as tiny,  $.05 \leq |r| < .10$  as very small,  $.10 \leq |r| < .20$  as small,  $.20 \leq |r| < .30$  as medium, and  $|r| \geq .30$  as large. The negative effect of Locus of Control on whistleblowing intentions reported by Chiu (2003) indicates that a more internal Locus of Control was associated with increased whistleblowing intentions.

Besides this evidence supporting the relevance of personality in accounting for whistleblowing, other studies failed to show effects of personality traits on whistleblowing. For example, a lab-based study investigating the associations of the six HEXACO dimensions with whistleblowing behavior (operationalized as informing the local ethics committee about the ostensibly wrongful actions of a researcher) found that none of these traits were significant predictors of whistleblowing (Bocchiaro et al., 2012), although the magnitude of some of these associations corresponded to medium effect sizes (see Table 4.1). But also when solely focusing on the effect sizes rather than statistical significance, it is somewhat surprising to see that traits capturing individual differences in altruism (e.g., HEXACO Honesty-Humility, HEXACO Agreeableness, or FFM Agreeableness) sometimes exert strong positive effects on whistleblowing (Bartuli et al., 2016)—as one would probably expect given that whistleblowing represents a prosocial behavior (Dozier & Miceli, 1985)—but in other cases, tiny (Bocchiaro et al., 2012) and sometimes even negative effects on whistleblowing (Bjørkelo et al., 2010). Such inconsistencies, together with the fact that there are only few empirical studies that have investigated personality effects on whistleblowing, illustrate that the whistleblowing literature is still far from reaching a consensus regarding the general relevance of personality for whistleblowing (i.e., how much of the variance in whistleblowing can be explained by personality traits), and, more specifically, there is still a lack of robust evidence about which personality traits reliably predict whistleblowing—in and of itself as well as in interaction with situational features.

We argue that the incoherent empirical picture regarding the role of personality for whistleblowing stems from an underdevelopment of theoretical considerations rather than from a “true” absence of personality effects in this domain. Arguably, this lack of theory has led to considerable heterogeneity in the selection of personality constructs that have been considered to account for individual variation in whistleblowing. As a consequence, the

current state of evidence aggravates identifying a coherent personality profile of whistleblowers. Moreover, non-significant personality effects on whistleblowing in some studies might have resulted from methodological limitations, most importantly, limited sample sizes in (lab-based) whistleblowing research. In addition, previous research has used a range of different paradigms to operationalize whistleblowing (see Table 4.1), and—from a theoretical perspective—not all personality effects are to be expected in every whistleblowing paradigm, as we will discuss towards the end of our manuscript.

To overcome these issues and provide the basis for more theory-driven research on the personality-whistleblowing link, we propose a theoretical framework of individual differences in whistleblowing. This framework can serve several purposes, such as providing testable hypotheses about which personality traits should account for whistleblowing, evaluate existing empirical evidence in a systematic way, comparing whistleblowing with other behaviors in the realm of prosocial and ethical behavior, and identifying gaps in the literature on individual differences in whistleblowing. To develop this framework, in what follows we (1) delineate four phases of a whistleblowing decision, (2) describe situational characteristics of each of these four phases, and (3) identify both broad personality dimensions and narrow personality traits that should be “afforded” (i.e., activated) to become expressed by these situational characteristics.

### **Defining Whistleblowing**

To date, there is no consensus about how to define whistleblowing in the scientific literature: Scholars from different fields have proposed a variety of whistleblowing definitions (e.g., Anvari et al., 2019; Bjørkelo, 2016; Jubb, 1999; Near & Miceli, 1985; Waytz et al., 2013). One frequently cited definition that we are also relying on here reads:

Whistleblowing is a deliberate non-obligatory act of disclosure, which gets onto public record and is made by a person who has or had privileged access to data or

information of an organisation, about non-trivial illegality or other wrongdoing whether actual, suspected or anticipated which implicates and is under the control of that organisation, to an external entity having potential to rectify the wrongdoing. (Jubb, 1999, p. 83)

This definition has four core features: First, whistleblowing is an *act of disclosure* which is publicly promoted (e.g., in the media). The disclosure has to be “deliberate” and “non-obligatory” to be considered as whistleblowing, which means that role-prescribed reports (e.g., an organization member’s disclosure of safety problems to their direct supervisor) cannot be considered as whistleblowing.<sup>5</sup> Second, the disclosure is made by a *person with privileged access to relevant data or information* related to the organization. By implication, whistleblowers have some kind of “insider status” of the respective organization, for example, because they are employees or other members of that organization. Third, the subject of the disclosure needs to refer to an *illegal activity* or related wrongdoing. Thus, the disclosure can be made about violations of legal or moral norms that occurred under the control of the respective organization. Fourth, the wrongdoing has to be disclosed to an *external party*, that is, an entity (e.g., a person or institution) outside of the organization, which has the *capacity to correct the wrongdoing*. This feature excludes internal reports (e.g., directed at the direct supervisor, management, or HR department) as well as disclosures not intended to evoke counteraction (e.g., informal conversations with friends or family) from being classified as whistleblowing.

Whistleblowing is conceptually similar to other constructs in the prosocial domain, most prominently to moral courage. By definition, “moral courage [...] manifests itself in actions that are intended to stop or redress others’ violations of moral principles, such as

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<sup>5</sup> For the sake of clarity and consistency, we will use the term *organization member* to refer to persons facing a whistleblowing situation, the term *wrongdoing* to label the (legal or moral) norm violation that the organization member (potentially) aims to stop or rectify, and the term *organization* when referring to the organization in which the wrongdoing occurred.

fairness or care, even if one is not personally or directly affected by these violations and risks negative consequences from intervening” (Sasse et al., 2022, p. 146). This definition suggests that whistleblowing can be regarded as a special case of moral courage (see also Anvari, 2018) because both constructs intend to stop or rectify a wrongdoing or legal/moral violation. However, unlike moral courage, whistleblowing is, by definition, embedded in an organizational context. This is not necessarily the case for moral courage; moral courage is often a response to interpersonal transgressions.

### **Decision-Making in Whistleblowing Situations**

Now that we have defined whistleblowing, we turn to the question of how individuals who face such a situation decide whether to speak up and blow the whistle or rather remain silent. Building on previous theorizing in the domain of helping behavior (Latané & Darley, 1970), Dozier and Miceli (1985) developed a model describing the decision-making process in whistleblowing situations as a sequence of six phases: (1) an organization member first needs to become aware of an organizational wrongdoing, (2) they need to consider this wrongdoing deserving of action, (3) they have to assume personal responsibility for correcting the wrongdoing, (4) they have to know at least one action that could correct the wrongdoing, (5) they have to choose one specific action they consider most appropriate, and (6) they have to consider whether the benefits outweigh the costs of that action.

According to the original formulation of this model, each of the six phases represents a necessary precondition for whistleblowing to occur. Later, this model was re-organized and extended (Miceli et al., 2008; Miceli & Near, 2005). Crucially, the whistleblowing phases were no longer viewed as strictly sequential—in other words, it was no longer required that one phase had to be “successfully completed” before the next phase could be entered. This implicates that an organization member (i.e., a potential whistleblower) may engage in



several of these processes simultaneously, that processes may trigger each other in any possible order, or that these processes may be repeated multiple times (i.e., in “loops”).

To illustrate this, imagine a person who vaguely suspects that the organization they belong to might be involved in immoral or illegal practices. However, evidence for this suspicion is not unequivocal: The organization member would need to investigate it further to gain final proof that the organization indeed engages in immoral or illegal practices. In this case, the organization member might *first* evaluate the costs and benefits of whistleblowing and *then* search for more evidence of organizational misconduct if the cost-benefit ratio of that action is perceived to be favorable. As a second example, picture an organization member who, after “completing” Steps 1 through 3 of the Dozier and Miceli (1985) model, cannot think of a way to correct the wrongdoing (Step 4) and, as a result, denies their personal responsibility for doing so (Step 3) as a means to reduce cognitive dissonance (Gosling et al., 2006) or to morally disengage from the wrongdoing (Bandura, 1999). Such a back loop in the decision process is not allowed in strictly consecutive models.

In addition, we propose that some of the six phases of the original model by Dozier and Miceli (1985) cannot be meaningfully distinguished and should thus be merged. Specifically, we argue that the observation of a wrongdoing and the judgment whether the action is deserving of action (i.e., Steps 1 and 2 in Dozier and Miceli’s model) essentially represent a common psychological process. This is because moral judgments have been shown to be made quickly, intuitively, and sometimes even automatically (Haidt, 2001; Malle, 2021). Thus, separating moral judgements from the observation of wrongdoing is neither methodologically feasible nor conceptually meaningful. We will therefore refer to the combination of these two phases as the “Detection and Interpretation” phase in our framework. Likewise, Steps 4 and 5 of Dozier and Miceli’s model—knowing at least one action that might correct the wrongdoing and choosing one that is seen as most appropriate—

may be condensed into one “Considering and Choosing Response Options” phase. The rationale for merging these two phases was pragmatic: If the organization member believes that only whistleblowing but no other, potentially “milder” means will correct the wrongdoing (e.g., as in Snowden’s case), they can no longer select the most appropriate one. Thus, condensing these two phases appears to be more parsimonious yet sufficient for many whistleblowing situations.

Consequently, we will structure the whistleblowing decision-making process along four (potentially simultaneous) phases: (A) “Detection and Interpretation”, (B) “Assuming Personal Responsibility”, (C) “Considering and Choosing Response Options”, and (D) “Cost-Benefit Analysis”. These four whistleblowing phases and how they relate to the original Dozier and Miceli’s (1985) model are summarized in Table 4.2.

**Table 4.2***Structure of the Whistleblowing Decision-Making Process*

Phase	Name	Respective Decision Phase in Dozier and Miceli (1985; pp. 832 - 833)
A	Detection and Interpretation	<ul style="list-style-type: none"> <li>- Is the organization member aware of wrongdoing?</li> <li>- Does the organization member consider wrongdoing deserving of action?</li> </ul>
B	Assuming Personal Responsibility	<ul style="list-style-type: none"> <li>- Does the organization member consider self responsible for action?</li> </ul>
C	Considering and Choosing Response Options	<ul style="list-style-type: none"> <li>- Is at least one response option available?</li> <li>- Does the organization member believe the response option under consideration (e.g., whistleblowing) is more appropriate than another response option?</li> </ul>
D	Cost-Benefit Analysis	<ul style="list-style-type: none"> <li>- Does the organization member believe the benefits of engaging in the response option under consideration outweigh the costs?</li> </ul>

*Note.* We use the term “response option” to denote possible responses to the observed wrongdoing (e.g., whistleblowing) while Dozier and Miceli (1985) choose the term “political behavior alternative.” We therefore exchanged this wording in the questions describing the phases of their whistleblowing decision-making process.

### **How Personality Shapes Whistleblowing Decisions**

By definition, personality traits are “relatively enduring patterns of thoughts, feelings, and behaviors that reflect the tendency to respond in certain ways under certain circumstances” (Roberts, 2009; p. 140). Personality traits are influential predictors of a broad variety of behavioral and life outcomes (Ozer & Benet-Martínez, 2006; Soto, 2019; Zettler et al., 2020), but their role also depends on situational characteristics. As Funder (1991) noted, “every global trait is situation specific, in the sense that it is relevant to behavior in some (perhaps many), but not all, life situations” (p. 36). As such, certain personality traits can be more or less relevant for behavior in a situation, depending on the specific characteristics of that situation. Put differently, the situational characteristics of a situation activate or “afford” the expression of certain personality traits (De Vries et al., 2016; Reis, 2008). These characteristics are usually referred to as *situational affordances*. In the present work, we apply this idea to the context of whistleblowing by delineating which situational affordances

each whistleblowing decision phase entails, and which personality traits are, in turn, likely to be activated and expressed in each decision phase.

For the latter step, we begin by discussing broad personality dimensions—specifically the Big Five (Goldberg, 1990) respectively the FFM (McCrae & Costa, 1987), and the HEXACO model (Ashton & Lee, 2007). However, given that the Big Five and the FFM converge to a great extent, both conceptually and empirically (John, 2021), we will subsume both taxonomies under the term Big Five/FFM in the present manuscript.

According to the Big Five/FFM model, which was dominantly derived from the lexical approach (for a review, see John, 2021), five broad personality dimensions are sufficient to describe the personality space (e.g., Digman, 1990). These dimensions are typically labeled as Extraversion (defined by traits such as extroverted and talkative), Agreeableness (e.g., sympathetic and kind), Conscientiousness (e.g., organized and precise), Neuroticism (e.g., moody and temperamental), and Openness (e.g., intellectual and unconventional; see John, 2021). In fact, many, if not most researchers for many years agreed that this five-dimensional taxonomy appropriately and sufficiently captures individual differences in personality (John, 2021).

However, more recent research based on further lexical studies in various languages has suggested a six-dimensional structure of the personality space (Ashton, Lee, & Goldberg, 2004; Ashton, Lee, Perugini, et al., 2004). This finding inspired the proposal of an alternative taxonomy of basic personality traits, that is, the so-called HEXACO model of personality (Ashton et al., 2014; Ashton & Lee, 2007). The name HEXACO represents an acronym of its dimension labels: Honesty-Humility, Emotionality, eXtraversion, Agreeableness, Conscientiousness, and Openness to Experience. The HEXACO model incorporates three dimensions that closely resemble their Big Five/FFM counterparts (i.e., Extraversion, Conscientiousness, and Openness to Experience) and three dimensions that are conceptually

less closely related to the Big Five/FFM model (Ashton et al., 2014; Thielmann et al., 2021). More specifically, Honesty-Humility (defined by characteristics such as sincere and honest), Emotionality (e.g., fearful and sentimental), and Agreeableness (e.g., patient and tolerant; Ashton, Lee, Perugini, et al., 2004; Ashton & Lee, 2008) are all conceptualized as altruism-related traits (Ashton et al., 2014). By contrast, in the Big Five/FFM model, altruistic tendencies are mostly subsumed under the Agreeableness dimension (John, 2021). Hence, the HEXACO model provides a more fine-grained differentiation of dispositional differences in altruism, which may be of advantage for the whistleblowing context, given that whistleblowing is often viewed as a prosocial behavior (Dozier & Miceli, 1985). Yet, both taxonomies of basic personality traits are used extensively in psychological research, and we therefore derive hypotheses for both models in the present manuscript.

Broad personality traits such as the Big Five/FFM or the HEXACO dimensions are tremendously useful because they allow a comprehensive yet parsimonious assessment of the personality space. However, their conceptual breadth sometimes results in limited predictive power: In the prediction of certain outcomes, narrower or more “facet-level” personality traits often outperform broad personality dimensions (e.g., Paunonen et al., 2003). We will therefore also consider narrow personality traits that are likely to be afforded by the whistleblowing situation in our current framework. Importantly, the narrow personality traits we consider in this review merely serve as exemplars of a broader class of relevant narrow traits and should not be considered comprehensive. That is, any one narrow trait that is conceptually similar to the ones considered here—in the sense that they are activated by the same situational affordances—should also be predictive of whistleblowing.

Table 4.3 provides a summary of the core predictions drawn from our framework regarding (1) the relevant situational affordances in the decision phases of the whistleblowing situation, (2) broad personality dimensions that should be afforded in the decision phases, and

(3) narrower personality traits that should be afforded in the decision phases. In what follows, we will detail the rationale for these predictions.

**Table 4.3**

*Summary of our Main Predictions*

<b>Phase</b>	<b>Detection and Interpretation</b>	<b>Assuming Personal Responsibility</b>	<b>Considering and Choosing Response Options</b>	<b>Cost-Benefit Analysis</b>
<b>Situational affordance</b>	Moral ambiguity	Potential for diffusion of responsibility	Conflict between loyalty and integrity	Trade-off between benefits for others and costs for the self
<b>Broad traits</b>	Big Five/FFM Agreeableness (+) HEXACO Honesty-Humility (+) HEXACO Agreeableness (-)	Big Five/FFM Conscientiousness (+) HEXACO Conscientiousness (+)	Big Five/FFM Agreeableness (-) HEXACO Honesty-Humility (-) HEXACO Agreeableness (-)	Big Five/FFM Agreeableness (+) HEXACO Honesty-Humility (+) Big Five/FFM Neuroticism (-) HEXACO Emotionality (-)
<b>Narrow traits</b>	Justice Sensitivity (+)	Moral Disengagement (-)	Right-Wing Authoritarianism (-)	Social Value Orientation (+) Guilt Proneness (+)

*Note.* FFM = Five-Factor Model. Plus (+) and minus (-) signs indicate predictions regarding positive and negative associations of that trait with whistleblowing, respectively.

### **Phase A: Detection and Interpretation**

As described above, a necessary precondition for whistleblowing is that the organization member perceives and interprets an organizational activity as illegal or morally wrong. Legal judgments may at least to some extent be normative and objectifiable; but moral “wrongness” judgments are often highly subjective (for a review, see Malle, 2021). In other words, individuals differ substantially in their perception of what is “right” or “wrong”, and one reason why some individuals may refrain from whistleblowing is because they do not perceive the organizational activity as “wrong.” To illustrate this with a real-life example,

again consider Snowden's disclosures about the NSA surveillance programs. Public opinion polls conducted with representative samples in the US showed that—even after Snowden's disclosures—40% of respondents indicated that it is acceptable for the government to monitor communications of American citizens (Pew Research Center, 2015). It can thus be speculated that other NSA employees might have perceived the mass surveillance programs as morally acceptable to some extent, thus holding them back from blowing the whistle.

By implication, this phase of the whistleblowing process requires dealing with moral ambiguity—in other words, a dispositional sensitivity to moral issues or injustice is afforded in this phase. Importantly, moral transgressions can be viewed from different perspectives. Drawing on the social justice literature, one can differentiate the perspectives of the victim, observer, beneficiary, and perpetrator of a moral transgression (e.g., Mikula, 1993).<sup>6</sup> In a prototypical whistleblowing situation, the organization member is, by definition, an observer of the wrongdoing. However, the organization member may also experience the wrongdoing from the perspective of a victim, a beneficiary, or the perpetrator themselves. For example, an organization member with a migration background who reports discriminatory practices within their organization can also be considered a victim of the wrongdoing if it affected them personally. An organization member who reports tax fraud can be considered a beneficiary of the wrongdoing if they economically benefitted from it, for example, through profit sharing. And an organization member can be considered a perpetrator if they are directly involved in or responsible for the wrongdoing, for example, a software developer who works on a tool that secretly collects confidential data from the smartphones or computers of their users. Notably, results from an autobiographic recall study showed that

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<sup>6</sup> Of note, we use the term “victim” broadly to refer to a person who is taken advantage of, and the term “perpetrator” to denote someone who takes advantage of others. We do not wish to imply the criminological meaning of “victim” and “perpetrator.”

whistleblowing is more prevalent when the organization member was personally victimized by the observed wrongdoing (Cassematis & Wortley, 2013).

### ***Broad Personality Dimensions***

Which broad personality dimensions from the Big Five/FFM and HEXACO models should be afforded by morally ambiguous situations? Considering the Big Five/FFM, Agreeableness is a prime candidate in this regard. Big Five/FFM Agreeableness contrasts “a *prosocial and communal orientation* toward others with antagonism and hostility” (John, 2021, p. 42). Thus, Big Five/FFM Agreeableness should particularly predict behavioral responses in situations in which a moral transgression harms other people (i.e., when the potential whistleblower experiences the wrongdoing from the perspective of an observer, beneficiary, or perpetrator).<sup>7</sup>

In terms of the HEXACO model, Honesty-Humility and Agreeableness are most relevant. Honesty-Humility is conceptualized as “the tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation” (Ashton & Lee, 2007, p. 156). HEXACO Agreeableness denotes “[...] the tendency to be forgiving and tolerant of others, in the sense of cooperating with others even when one might be suffering exploitation by them” (Ashton & Lee, 2007, p. 156). By definition, both HEXACO dimensions should be relevant for this decision phase, but in different situational contexts: Honesty-Humility should be specifically afforded in situations incorporating moral transgressions against other people (i.e., when the whistleblower is in the position of an observer, a beneficiary, or a perpetrator of the wrongdoing), whereas HEXACO Agreeableness should be specifically afforded in situations

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<sup>7</sup> However, personality arguably also shapes which organization someone joins or which professional role someone holds within an organization (Schneider, 1987). Specifically, we can assume that altruism-related traits (e.g., Big Five/FFM Agreeableness) decrease the likelihood of belonging to an organization that engages in morally dubious activities or holding a position that involves morally dubious conduct in the first place. We acknowledge that this mechanism may attenuate the effects of the proposed personality traits on the observation of organizational wrongdoing at this decision stage.



entailing moral transgressions against the (potential) whistleblower themselves (i.e., when the whistleblower is a victim of the wrongdoing).<sup>8</sup>

### ***Narrow Personality Traits***

In the presence of moral ambiguity, a highly relevant narrow trait is Justice Sensitivity. Justice Sensitivity manifests itself on the one hand in the frequency of perceiving unfairness in daily life, and on the other hand in reacting with strong affective (e.g., anger), cognitive (e.g., rumination), and behavioral (e.g., punishment) to perceived unfairness (Schmitt et al., 1995, 2005). It consists of four facets, which mirror the previously introduced perspectives on moral transgressions. Put differently, Justice Sensitivity comprises dispositional sensitivity to moral transgressions from the perspective of a victim (Victim Sensitivity), an observer (Observer Sensitivity), a beneficiary (Beneficiary Sensitivity), and a perpetrator (Perpetrator Sensitivity; for a review, see Baumert & Schmitt, 2016). This conceptualization suggests that Victim Sensitivity should be most predictive of whistleblowing when the organization member is personally negatively affected by the wrongdoing (e.g., through discrimination). Observer Sensitivity should predict whistleblowing positively when the organization member is neither actively involved in the wrongdoing nor personally affected by its consequences. Likewise, Beneficiary Sensitivity should be positively associated with whistleblowing when the organization member personally benefits from the wrongdoing (e.g., through profit sharing), and Perpetrator Sensitivity should lead to more whistleblowing when the organization member is actively involved in the wrongful practice.

### **Phase B: Assuming Personal Responsibility**

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<sup>8</sup> In line with this reasoning, we recently found that HEXACO Honesty-Humility—but not HEXACO Agreeableness—was positively associated with judging an organizational wrongdoing which was described from the perspective of an observer (i.e., being a doctor in a hospital and observing cost savings at the expense of its patients) as morally unacceptable (see Manuscript 3 of this dissertation).

In most whistleblowing situations, more than one organization member is aware of the organizational wrongdoing. However, not all who observe the respective organizational practice and interpret it as legally or morally wrong act to correct it. This phenomenon closely resembles the “bystander effect” in emergency situations—the phenomenon that every single observer of an emergency is less likely to help with an increasing number of bystanders (Latané & Darley, 1970; for a meta-analysis, see Fischer et al., 2011). Psychologically, this effect can be explained by diffusion of personal responsibility across multiple observers: The more people observe an emergency, the less each individual bystander is accountable and blameworthy if they do not help. Even though whistleblowing situations are structurally different from emergency situations (for example, because emergencies involve more time pressure than whistleblowing situations; see Dozier & Miceli, 1985), diffusion of responsibility should also be relevant in whistleblowing contexts. Specially, the more organization member become aware of an organizational wrongdoing, the less responsible each individual might feel to act against it.<sup>9</sup>

### ***Broad Personality Dimensions***

Situations with potential for diffusion of responsibility should activate Conscientiousness. As previously noted, the conceptualization of this trait is largely equivalent in the Big Five/FFM and the HEXACO model and our prediction therefore applies for both traits. One definition of Conscientiousness conceptualizes it as a tendency for “*socially prescribed impulse control that facilitates task- and goal-directed behavior*” (John, 2021, p. 42). This conceptualization suggests that Conscientiousness should be afforded in situations that allow demonstrating one’s sense of duty (De Vries et al., 2016), and this finding has also been meta-analytically confirmed (Zettler et al., 2020).

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<sup>9</sup> Note, however, that Miceli et al. (1991) found that more bystanders in a whistleblowing situation unexpectedly *increased* whistleblowing.

### ***Narrow Personality Traits***

A representative narrow trait that is likely to be afforded by situations with potential for diffusion of responsibility is Moral Disengagement (Bandura, 1999; Bandura et al., 1996). Moral Disengagement represents a set of cognitive strategies that allow to situationally disengage from one's moral standards, thereby allowing to engage in unethical behavior without feeling distress or cognitive dissonance (Bandura, 1999; Moore, 2015). Specifically, these strategies are (1) moral justification, (2) palliative comparison, (3) euphemistic labeling, (4) ignoring or minimizing the consequences, (5) dehumanization, (6) attribution of blame, (7) displacement of responsibility, and (8) diffusion of responsibility (Bandura, 1999, p. 194). Conceptually, the diffusion of responsibility strategy should be particularly afforded at this stage of the whistleblowing process, as we have discussed earlier. However, since the eight disengagement strategies are highly correlated with each other and often load on one factor (e.g., Bandura et al., 1996; Detert et al., 2008), general tendencies in Moral Disengagement should negatively predict whistleblowing as well.<sup>10</sup>

### **Phase C: Considering and Choosing Response Options**

Another relevant phase of a whistleblowing decision is that the organization member has to trade-off different possible responses to the observed wrongdoing. Besides whistleblowing, an organization member may, for example, confront the responsible person, voice one's concerns internally (e.g., reporting to an ombudsperson), not act at all, or leave the organization (see Anvari et al., 2019; Packer, 2008). Empirically, it is well-established that whistleblowers usually first raise their concerns internally (e.g., by confronting the perpetrator, informing one's supervisor, or filing a report) before doing so externally

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<sup>10</sup> Arguably, the positive effect of the Proactive Personality on whistleblowing (Miceli et al., 2012) and the association of internal locus of control with whistleblowing intentions (Chiu, 2003) could also be integrated at this stage of the whistleblowing decision-making process as both traits refer to the tendency to effect environmental change rather than being passive (Bateman & Crant, 1993) respectively the belief that one can influence certain outcomes.

(Vandekerckhove & Phillips, 2019). That is, external whistleblowing is often considered a “last resort” when internal reporting failed to rectify the situation.

A psychological explanation for the (initial) preference for internal reporting over (external) whistleblowing is the moral dilemma inherent in the whistleblowing situation: Whistleblowing involves a trade-off between the desire to consider the welfare of people outside of the organization (who might be harmed by the organizational wrongdoing) and the desire to be loyal to one’s own organization (Dungan et al., 2015, 2019; Jubb, 1999; Misch et al., 2018; Waytz et al., 2013). Stated differently, there is a conflict between integrity and loyalty. As a consequence of this conflict, organization members need to evaluate how justifiable whistleblowing (as opposed to alternative options) is. For organizational practices that are perceived as morally dubious but not blatantly wrong, an organization member might consider whistleblowing as too extreme to justify being disloyal. By contrast, organizational practices that are perceived as highly immoral or even illegal are arguably more likely to evoke whistleblowing (Mesmer-Magnus & Viswesvaran, 2005), specifically if earlier internal reporting did not redress the situation.

### ***Broad Personality Dimensions***

A conflict between loyalty and integrity essentially represents a clash of two forms of prosocial behavior at different levels, that is, behaving prosocial towards one’s group/organization (i.e., loyalty) or behaving prosocial towards a higher, and often more abstract entity (e.g., society) whose members suffered from the organization’s wrongdoing (i.e., integrity). This reasoning suggests that broad personality traits pertaining to differences in altruism or prosociality should be afforded at this stage of the decision process. Specifically, this points to the relevance of Big Five/FFM Agreeableness as well as of HEXACO Honesty-Humility and HEXACO Agreeableness for this decision phase. These traits should generally increase the preference for responses that avoid or minimize negative

consequences for one's group/organization (e.g., voicing one's concerns internally) over those with rather considerable reprisals for one's group or organization (i.e., whistleblowing) – at least as long as these responses are believed to be similarly effective with regard to their capacity of stopping the organizational wrongdoing.<sup>11</sup>

### ***Narrow Personality Traits***

A prime candidate for a narrow trait that is afforded by a conflict between loyalty and integrity is Right-Wing Authoritarianism (RWA; Altemeyer, 1981). RWA is a three-dimensional construct reflecting (1) adherence to social norms, traditions, and conventions (i.e., conventionalism), (2) a tendency to strictly obey authorities (i.e., authoritarian submission), and (3) to behave aggressively or legitimize aggression towards others who deviate from established norms or conventions (authoritarian aggression; Altemeyer, 1981). An evolutionarily conceptualization of RWA has argued that its function is to enable cooperation in (large-scale) groups (such as organizations), especially by enforcing norm compliance and condemning norm deviance (Kessler & Cohrs, 2008). This idea maps onto whistleblowing situations because research has shown that blowing the whistle becomes less likely when loyalty norms (as compared to fairness norms) are made salient through an experimental manipulation (Waytz et al., 2013) or when organization members strongly endorse loyalty concerns (Dungan et al., 2019). This speaks to the idea that the salience of loyalty may obstruct whistleblowing, and that whistleblowing should therefore be less likely performed by highly authoritative individuals who are predispositioned to value compliance to norms and conventions.

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<sup>11</sup> There are arguments for the relevance of both HEXACO Honesty-Humility and HEXACO Agreeableness at this stage of the whistleblowing decision-making process. On the one hand, trait adjectives such as “loyal” or “faithful” have been shown to load on HEXACO Honesty-Humility (Ashton & Lee, 2007), thereby suggesting that this trait should be afforded at this stage. On the other hand, HEXACO Agreeableness comprises traits such as being mild and peaceful, and moreover, it is conceptualized to involve high levels of flexibility, that is a tendency to “accommodate others’ suggestions, even when these may be unreasonable” (Ashton et al., 2014, p. 142). This definitory feature suggests that also HEXACO Agreeableness might be relevant here. Thus, whether both HEXACO Honesty-Humility *and* HEXACO Agreeableness are afforded to a similar extent or whether one trait is more relevant at this stage are subject to future empirical research.

### **Phase D: Cost-Benefit Analysis**

Many scholars have argued that whistleblowing constitutes a prosocial act because whistleblowers sacrifice their self-interest for the greater good (Dozier & Miceli, 1985; Gundlach et al., 2003; Miceli et al., 2008). Whistleblowing usually benefits others than the whistleblower themselves (e.g., the society) by stopping a potentially harmful organizational practice, emphasizing its prosocial nature (see Pfattheicher et al., 2022, for common definitions of prosocial behavior). At the same time, whistleblowers often experience substantial backlash and retaliation from their (current or former) colleagues or supervisors, such as being fired, the obstruction of career opportunities, or ostracism (Rehg et al., 2008; Rothschild & Miethe, 1999). Thus, whistleblowing is beneficial on the one hand, but undoubtedly costly on the other. In addition to the tangible costs associated with whistleblowing, applying the “arousal:cost-reward” model from the helping literature (Piliavin et al., 1981) suggests that there are also costs for non-reporting organizational wrongdoing, for example negative self-evaluations such as self-blame or feelings of guilt—after all, looking away perpetuates the wrongdoing. However, the overall costs of whistleblowing are typically higher than the overall costs of non-reporting organizational wrongdoing. Anecdotal evidence for this argument also comes from Snowden’s case: He lost his job, had to flee to a foreign country in order to escape prosecution, and was separated from his spouse, family, and friends for a long time. Therefore, whistleblowing situations entail a trade-off between benefits for others and costs for the self, corresponding to a conflict of interest between the whistleblower and those being negatively affected by the wrongdoing (e.g., members of society; see Kelley et al., 2003).

Of note, considering the consequences for Edward Snowden also illustrates that the costs (and benefits) of whistleblowing should be broadly conceptualized, specifically as the entirety of all negative (or positive) consequences for the whistleblower. Under this

assumption, whistleblowing costs not only encompass objectifiable (i.e., financial or legal) consequences (e.g., a loss of income), but also more subjective, emotionally-charged consequences (e.g., distress, or feeling isolated; Rothschild & Miethe, 1999).

### ***Broad Personality Dimensions***

A trade-off between benefits for others and costs for the self should again activate prosocial traits, and more specifically traits related to unconditional concern for others. Therefore, Big Five/FFM Agreeableness and HEXACO Honesty-Humility are likely to be afforded at this stage of the decision process (Thielmann et al., 2020). Moreover, building on the notion that whistleblowing costs are not only legal or financial, but also emotionally-charged consequences, broad traits capturing individual differences in the experience of negative emotions (i.e., fear, anxiety) should become additionally activated. This suggests that Big Five/FFM Neuroticism and HEXACO Emotionality are also relevant at this decision stage (also see De Vries et al., 2016). Big Five/FFM Neuroticism “contrasts *negative emotionality* with emotional stability, contentment, and frustration tolerance” (John, 2021, p. 42). Similarly, HEXACO Emotionality comprises tendencies to experience negative emotions (i.e., fear, anxiety, and sentimentality) as well as a need for emotional support from others (Ashton et al., 2014).

### ***Narrow Personality Traits***

A narrow trait that is crucial for situations with a trade-off between benefits for others and costs for the self is Social Value Orientation (SVO). SVO represents “the weights people assign to their own and others’ outcomes in situations of interdependence” (Balliet et al., 2009, p. 533). Given that we have argued that this stage of the whistleblowing decision-making process contains a conflict of interest between the organization member and those who are negatively affected by the organizational wrongdoing, a prosocial value orientation should increase the likelihood of whistleblowing. Yet, SVO is a construct that focuses

essentially on preferences for distributions of *monetary* outcomes between the self versus others, and it is less concerned with distributions of other, non-monetary resources.

Therefore, an additional narrow trait should be considered that better accounts for the emotional costs associated with whistleblowing. Specifically, Guilt Proneness, defined as “a predisposition to experience negative feelings about personal wrongdoing, even when the wrongdoing is private” (Cohen et al., 2012, p. 355), should become activated here. More precisely, highly guilt-prone individuals should anticipate higher emotional costs for personal wrongdoings (i.e., self-blame), and one salient personal wrongdoing in this context would arguably be non-reporting an organizational practice which harms other people. Following this theorizing, Guilt Proneness should be activated here and produce a positive effect on whistleblowing.<sup>12</sup>

### **Discussion and Outlook**

Organization members who blow the whistle when their organization resorts to unethical or illegal practices are crucial to detect and stop such wrongdoing, and to consequently hold the responsible individuals accountable. Whereas a large and growing body of research focuses on the situational circumstances that foster or inhibit whistleblowing, a second category of whistleblowing antecedents has so far received less systematic attention: The whistleblower’s personality. To overcome this gap, we developed an integrative framework for the role of (broad and narrow) personality traits that should predict and explain whistleblowing. Our framework was guided by an affordance-perspective, that is, the idea that certain characteristics of a whistleblowing situation activate certain personality traits. Thereby, our framework not only allows the prediction of main effects of personality on whistleblowing, but it also enables to explain why and when (i.e.,

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<sup>12</sup> We acknowledge, however, that individuals might also interpret whistleblowing as a form of personal wrongdoing because it might be seen as disloyal towards one’s organization. If this is the case, then the effect of Guilt Proneness on whistleblowing should be attenuated.



under which situational affordances) these effects are to-be-expected. Therefore, our framework provides a more comprehensive and more fine-grained perspective on the personality-whistleblowing link than previous research.

### **Directions for Future Research**

We see four directions for future research that might be worth pursuing. First, we hope that our framework inspires more research on the proposed main effects on whistleblowing. The existing empirical evidence is—as we have delineated in the introduction of our review—limited by a heterogenous selection of personality traits, different whistleblowing paradigms, and relatively small sample sizes. Thus, generally speaking, we call for more research on the personality-whistleblowing association. For instance, we are not aware of any study that has looked at the joint impact of the (five or six) broad personality dimensions on whistleblowing within an economic game, which represents a viable alternative to self-report paradigms. Ideally, future research should operationalize whistleblowing as a *decision process* encompassing multiple phases (see Table 4.2). This is warranted given that our review has proposed that personality may partially exert opposite effects on different stages of the decision-making process. For example, our theorizing suggested that altruism-related traits such as Big Five/FFM Agreeableness, HEXACO Honesty-Humility or HEXACO Agreeableness may exert both positive *as well as* negative effects on whistleblowing, at different stages of the decision-making process (see Table 4.3).

Second, we propose that testing whether whistleblowing decisions are sufficiently predicted by the proposed broad personality dimensions, or alternatively, whether the proposed narrower traits (i.e., Justice Sensitivity, Moral Disengagement, Right-Wing Authoritarianism, Social Value Orientation, and Guilt Proneness) predict whistleblowing over and above the broad Big Five/FFM or HEXACO dimensions. This approach seems adequate because previous research has shown that some of the narrow traits we consider

relevant for whistleblowing are substantially correlated with the proposed broad personality dimensions. For example, regarding the “Assuming Personal Responsibility” phase, meta-analytic evidence suggests that Conscientiousness and Moral Disengagement are substantially correlated ( $\rho = -.38$ ; Ogunfowora et al., 2022). Thus, whether or not Moral Disengagement (as well as the other narrow traits) explain variance in whistleblowing over and above the broad personality dimensions we proposed is subject to future empirical research.

Third, another promising avenue for empirical tests of hypotheses resulting from our framework refer to the context specificity of the proposed effects. Our framework builds on the assumption that four situational characteristics are inherent to most whistleblowing situations. However, in some real-life whistleblowing situations, not all of these characteristics may be present. For example, when an organization has a “code-of-conduct” that verbalizes which practices it considers morally unacceptable, the affordance of dealing with moral ambiguity is less present in that specific context. Consequently, the traits we proposed to be afforded by this characteristic (i.e., Big Five/FFM Agreeableness, HEXACO Honesty-Humility, HEXACO Agreeableness, and Justice Sensitivity) should be less predictive of whistleblowing. As another example, we have argued that certain traits should be predictive of whistleblowing when the specific situation entails a trade-off between benefits for others and costs for the self. However, when an organization member is convinced that they can stay anonymous during and after the whistleblowing episode, for example because the respective organization has a well-functioning IT system that enables anonymous reports of organizational wrongdoing or because their legally protected from retaliation against them, these traits should exert weaker effects on whistleblowing.

Fourth, our framework entails that some of our theoretical predictions might be method-dependent: Our hypotheses hold for many real-life whistleblowing situations,

however, when researchers operationalize whistleblowing in a (lab-based or vignette) study, not all relevant situational features of whistleblowing situations can be modelled. For example, studying whistleblowing intentions using a scenario study might underestimate the effects of the traits afforded by the trade-off between benefits for others and costs for the self because the costs associated with whistleblowing are non-immersive in that paradigm. Similarly, when studying whistleblowing as responses in an economic game where whistleblowing is usually made costly only through implementing *monetary* costs (e.g., Butler et al., 2020), the traits that are afforded by *emotional* whistleblowing costs (e.g., Big Five/FFM Neuroticism and HEXACO Emotionality) should be attenuated. As such, our review may also inform future methodological advancements in whistleblowing research: An ideal whistleblowing paradigm should not only mirror its definitory features (see Jubb, 1999) in order to ensure its construct validity, but also model all situational characteristics we have proposed to be essential for typical whistleblowing situations in order to ensure ecological validity. However, to our knowledge, no whistleblowing paradigm available—that is, scenario studies (e.g., Chiu, 2003), autobiographical recalls (e.g., Bjørkelo et al., 2010), immersive lab-paradigms (e.g., Bocchiaro et al., 2012), and economic games (e.g., Butler et al., 2020)—is capable of modelling the situational characteristics of whistleblowing situations comprehensively in that regard. Therefore, the most promising test of the proposed hypotheses is a multi-method approach, combining methodologies that jointly capture all relevant characteristics of typical whistleblowing situations.

### **Conclusion**

In conclusion, the present review provides a comprehensive theoretical account of how personality shapes whistleblowing decisions. Our framework not only allows to hypothesize which broad personality dimensions and which narrow personality traits should predict whistleblowing, but also why and under which situational circumstances these effects

are to-be-expected. By this means, our framework contributes to a more holistic understanding of the personality-whistleblowing association and hopefully stimulates more research in this domain.

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## **5 Manuscript 2: Whistleblowing paradigms**



## **Whistleblowing Paradigms**

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### **Abstract**

Operationalizing whistleblowing in a valid paradigm is an important yet challenging endeavor. In the present article, we review four categories of whistleblowing paradigms—scenario studies, autobiographical recalls, immersive behavioral paradigms, and economic games—and discuss how they capture the definitory features of whistleblowing. Moreover, we evaluate the strengths and weaknesses of each paradigm along selected psychometric criteria. Our review suggests that each of these paradigms comes with individual strength and weaknesses regarding the non-fakeability of participants' responses, their efficiency, and whether or not they avoid using deception. We call for future research to conduct multi-method studies combining the four categories of whistleblowing paradigms within the same sample in order to test their convergence empirically.

[114 words]

*Keywords:* whistleblowing, paradigm, methodology, survey, economic game.

## Whistleblowing Paradigms

Whistleblowers have repeatedly contributed to the detection and prosecution of scandals in corporations (e.g., McCrum et al., 2021), politics (e.g., Miller et al., 2019), science (e.g., Bhattacharjee, 2013; also see Stroebe et al., 2012), and the military (e.g., Manning, 2015). These examples anecdotally illustrate the role of whistleblowing as an important mechanism that enables societies to identify and correct wrongdoing—wrongdoings that arguably would not have been revealed without whistleblowers. But despite the societal importance of whistleblowing, conducting empirical research on its antecedents and consequences is a challenging endeavor. While various theoretical articles, books, and chapters on whistleblowing have been published in the last 20 years (e.g., Anvari et al., 2019; Brown et al., 2014; Culiberg & Mihelic, 2017; Gundlach et al., 2003; Miceli et al., 2008; Miceli & Near, 2005), empirical research in this field is comparably scarce. In their review article, Miceli and Near (2005) argued that “the primary causes for the underdevelopment of the empirical literature are methodological, and that workable solutions are needed.” (p. 130).

Indeed, methodological challenges are inherent to the empirical study of whistleblowing. This is because observing whistleblowing “in the wild” (i.e., in organizations) is challenging given that whistleblowing (1) is a relatively rare phenomenon (Olsen, 2014), (2) occurs embedded in an organizational context (Jubb, 1999; Near & Miceli, 1985), and (3) is a highly confidential matter about which the involved individuals and organizations do not necessarily want to reveal details to scientists (Miceli & Near, 2005). These circumstances make it difficult for researchers to collect extensive data on whistleblowing in the field. Therefore, researchers have developed online and lab-based paradigms to operationalize whistleblowing in order to investigate the social and psychological antecedents and consequences of whistleblowing in controlled settings. Broadly speaking, there are four categories of whistleblowing paradigms: (1) scenario studies

(measuring whistleblowing intentions), (2) autobiographical recall studies (assessing retrospective and self-reported whistleblowing behavior), (3) immersive behavioral paradigms, and (4) economic games.<sup>13</sup> Our review will contribute to the search for “workable solutions” that Miceli and Near (2005) called for by discussing how these four categories of whistleblowing paradigms incorporate definitory features of whistleblowing, evaluating strengths and weaknesses of each category of whistleblowing paradigm, and formulating recommendations for future research.<sup>14</sup>

### **Defining Whistleblowing**

A well-established definition conceptualizes whistleblowing as “[...] the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action” (Near & Miceli, 1985, p. 4). This definition consists of three central components: First, whistleblowing is a response to an *observed wrongdoing*, that is defined as an illegal, immoral or illegitimate practice. According to this definition, the wrongdoing may be all kinds of moral or legal norm violations, encompassing both intentional as well as unintentional actions (see Skivenes & Trygstad, 2014). Second, the observed wrongdoing occurs in the context of an organization while the potential whistleblower is a (former or current) member of the same organization. In other words, whistleblowing entails a *common organizational membership* of the person responsible for the wrongdoing (henceforth: the wrongdoer) and the whistleblower.<sup>15</sup> Of note, the wrongdoer in a whistleblowing episode

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<sup>13</sup> Here, we focus on primary research and therefore willfully refrain from considering secondary research approaches (e.g., analyses of archival data, see Dworkin & Baucus, 1998). Also, we do not consider prospective correlational studies (i.e., studies measuring independent variables before it is known who will once become a whistleblower) because we are not aware of any empirical study that has used this approach.

<sup>14</sup> The structure of this manuscript was inspired by a recent review on lab-based aggression paradigms (McCarthy & Elson, 2018) which we found tremendously helpful for our perspective on whistleblowing paradigms.

<sup>15</sup> Of note, some other definitions do not agree with the notion that common organizational membership between the wrongdoer and whistleblower is a definitory feature of whistleblowing. Jubb (1999), for example, emphasized that a whistleblower must have “privileged access to data or information of an organisation” (p. 78) but does not necessarily have to be a (former or current) member of that organization. This definition

may be a person who actively contributes to a wrongdoing (e.g., an accountant falsifying balance sheets) or someone who passively but knowingly tolerates or even instructs others to engage in wrongdoing in their organization (e.g., a manager tolerating financial fraud within their organization). Third, whistleblowing is an act of *information disclosure* about the observed wrongdoing, directed at a recipient that “may be able to effect action” (Near & Miceli, 1985; for elaborations on the role of whistleblowing recipients, see Moberly, 2014). These whistleblowing recipients may be persons or institutions within the same organization (e.g., the management; “internal whistleblowing”) or external to the organization (e.g., the media; “external whistleblowing”; see Dworkin & Baucus, 1998).

Building on this definition, we argue that in order to ensure construct validity, every solid whistleblowing paradigm must mirror these three definitory aspects. Thus, whistleblowing paradigms must (1) incorporate an observable wrongdoing (*the observable wrongdoing criterion*), (2) establish a common organizational membership between wrongdoer and the potential whistleblower, (*the common organizational membership criterion*) and (3) provide an opportunity to disclose information about the wrongdoing to a person or body that may rectify the situation (*the information disclosure criterion*).

Before we turn to our review of different whistleblowing paradigms, we would like to note that the whistleblowing definition by Near and Miceli (1985) is not undisputed. In essence, some scholars have argued for a narrower definition that restricts whistleblowing to voluntary or non-obligatory acts and/or to disclosures that are made to recipients *external* to the organization (e.g., authorities or media) only (Jubb, 1999). Then again, other scholars have proposed that only non-anonymous disclosures should be viewed as whistleblowing (Bjørkelo, 2016; Bjørkelo et al., 2011). While we acknowledge that these specifications are

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consequently also qualifies consultants or service contractors as potential whistleblowers. Anvari et al. (2019) concur with the notion that whistleblowers do not need to be formal members of the offending organization—what really matters is that the whistleblower identifies with the offending group/organization.

appropriate for some research areas, we nonetheless focus on Near and Miceli's definition (1985) in our current work because it is conceptually broader and thus more comprehensive. If researchers employ a more restrictive definition in their empirical studies, their whistleblowing paradigm must correspondingly reflect *additional* definitory criteria; but the observable wrongdoing, common organizational membership and information disclosure criteria must be necessarily reflected in every whistleblowing paradigm.

### ***Whistleblowing Intentions vs. Whistleblowing Behavior***

The whistleblowing definition cited above indicates that whistleblowing constitutes a specific type of *behavior*: An act of information disclosure. Therefore, every solid whistleblowing paradigm should allow an observation of actual behavior. That being said, it is also fair to assume that whistleblowing usually represents a form of planned rather than spontaneously executed behavior. Under this assumption, whistleblowing behavior should be preceded by the *intention* to blow the whistle (Ajzen, 1991; also see Bjørkelo & Bye, 2014). Consequently, a widely-used empirical approach is to study whistleblowing intentions instead of or in addition to whistleblowing behavior (e.g., Chiu, 2003; Ellis & Arieli, 1999; Helzer et al., 2022; Waytz et al., 2013).

We argue that this methodological approach can be valuable under specific circumstances (which we will outline towards the end of our review), but it is important to emphasize upfront that whistleblowing intentions and whistleblowing behavior should be treated as distinct constructs rather than viewing whistleblowing intentions as an operationalization of whistleblowing behavior (Bjørkelo & Bye, 2014). In line with this idea, meta-analytical research has provided evidence that whistleblowing intentions and whistleblowing behavior do not necessarily share the same predictors (Mesmer-Magnus & Viswesvaran, 2005).

### **Four Categories of Whistleblowing Paradigms**

As previously noted, we consider four categories of whistleblowing paradigms in the current review: Scenario studies, autobiographical recall studies, immersive behavioral paradigms, and economic games. Table 5.1 shows one empirical example for each of these whistleblowing paradigms.

**Table 5.1***Overview and Examples of Commonly Used Whistleblowing Paradigms*

<b>Construct</b>	<b>Type of study</b>	<b>Example article</b>	<b>Whistleblowing operationalization in example article</b>
Whistleblowing intentions	Scenario study	Ellis & Arieli, 1999	<ul style="list-style-type: none"> <li>• Scenario: “An officer in your brigade, above you in rank, gave soldiers permission to go on leave and to hitchhike in places and hours that are forbidden.” (p. 954)</li> <li>• Variable: “If you encountered this situation, would you report it?” (p. 954), assessed on a 7-point response scale</li> </ul>
Whistleblowing behavior	Autobiographical recall	Dungan et al., 2019	<ul style="list-style-type: none"> <li>• Variable: Indicating that (1) participants had “personally observed or obtained direct evidence of one or more illegal or wasteful activities involving [their] agency” (single-choice, yes/no) AND (2) “reported the activity to one or more of the following [...]: their immediate supervisor, a higher-level supervisor or agency official, the Agency Inspector General, the Office of Special Counsel, the Government Accountability Office, a law enforcement official, a union representative, the news media, a congressional staff member or member of Congress, or an advocacy group outside the Government.” (multiple-choice) (p. 4)</li> </ul>
Whistleblowing behavior	Immersive behavioral paradigm	Bocchiaro et al., 2012	<ul style="list-style-type: none"> <li>• Paradigm: Participant (allegedly) learns about the traumatic effects of a study and is nonetheless asked to advertise this study as “exciting” to potential future participants</li> <li>• Variable: Reporting an experimenter’s unethical request to an ethics committee by filling out a complaint form and putting it into a mailbox in the laboratory</li> </ul>
Whistleblowing behavior	Economic game	Butler et al., 2020	<ul style="list-style-type: none"> <li>• Paradigm: “Manager” is a role in the economic game that has the possibility to “break the law”. The law-breaking option generates a financial benefit for all organization members (i.e. the manager as well as their employees) but a financial loss to players outside of the organization (“members of the public”)</li> <li>• Variable: “Would you blow the whistle if you found out that your manager broke the law?” (yes/no; strategy elicitation method). The whistleblowing option created a loss to the whistleblower and the manager but had no financial effects on members of the public</li> </ul>

*Note.* A graphical illustration of the economic game paradigm developed by Butler et al. (2020) is shown in Figure 5.1.



In the following section, we will describe these whistleblowing paradigms in greater detail by discussing how they capture the three whistleblowing criteria we delineated before (i.e., the observable wrongdoing, common organizational membership, and information disclosure criteria). Note that we will focus on the methodology of the reviewed paradigms and we will not discuss the results of these studies in greater detail. However, we have compiled the results of some studies in Table 5.2. More specifically, this table shows one study per whistleblowing paradigm that focused on the effects of broad personality dimensions (i.e., the Five-Factor Model or the HEXACO; McCrae & Costa, 1999; Ashton & Lee, 2007) on whistleblowing. We chose this subfield of whistleblowing research because we found at least one published study for each of the four whistleblowing paradigms, thereby enabling an illustration of how a research question can be studied with different whistleblowing paradigms.

**Table 5.2**

*Summary of Main Findings in the Reviewed Studies That Focused on Broad Personality Dimensions*

<b>Category of Whistleblowing Paradigm</b>	<b>Study</b>	<b>Sample</b>	<b>Independent Variable(s)</b>	<b>Dependent Variable(s)</b>	<b>Main Finding</b>
Scenario study	Helzer et al. (2022), Study 2	English speaking individuals living in the U.S.; recruited via Amazon MTurk ( $N = 281$ )	HEXACO Honesty-Humility	Internal whistleblowing intentions, external whistleblowing intentions	Honesty-Humility was positively correlated with internal whistleblowing intentions but non-significantly correlated with external whistleblowing intentions.
Autobiographical recall study	Bjørkelo et al. (2010), Study 1	Employees of a large municipality in Norway ( $N = 503$ )	FFM: Neuroticism, Extraversion, Openness, Agreeableness, Conscientiousness	Retrospective whistleblowing behavior	Whistleblowing was positively related to Extraversion, negatively related to Agreeableness, and non-significantly related to the other FFM dimensions.
Immersive behavioral paradigm	Bocchiaro et al. (2012)	Undergraduate students recruited at a university campus in the Netherlands ( $N = 149$ )	HEXACO: Honesty-Humility, Emotionality, Extraversion, Agreeableness, Conscientiousness, Openness to Experience	Whistleblowing behavior	Whistleblowing was not significantly related to any of the six HEXACO dimensions.
Economic game	Bartuli et al. (2016)	Students from different fields of study ( $N = 222$ )	HEXACO Honesty-Humility	Whistleblowing behavior	Whistleblowing was positively associated with higher levels of Honesty-Humility.

*Note.* FFM = Five-Factor Model of personality (see McCrae & Costa, 1999). HEXACO denotes the HEXACO model of personality (see Ashton & Lee, 2007). These studies also measured other personality traits, however, we focus on the broad FFM/HEXACO dimensions here because they were assessed in all of these four studies.

## **Scenario Studies**

Scenario studies represent an easy-to-implement approach to study responses to social situations.<sup>16</sup> Participants read a short description of a (fictitious or real) situation and are instructed to imagine themselves vividly in this scenario, including feelings and thoughts that might emerge in such a situation. Thereafter, participants are asked to report how they would feel, think, or react in the described situation. Applying this method to the study of whistleblowing is a true “classic” that has been used over and over again (e.g., Chiu, 2003; Ellis & Arieli, 1999; Helzer et al., 2022; Waytz et al., 2013).

### ***What is the Wrongdoing?***

Creating scenarios that describe a wrongdoing in the context of an organization is quick, cheap, and flexible. As such, researchers can easily describe all kinds of wrongdoings such as stealing (Waytz et al., 2013; Study 1), corruption (Chiu, 2003), accounting fraud (Helzer et al., 2022), or data manipulation in scientific research (Anvari, 2018). Some studies have made use of scenarios that were inspired by true real-life whistleblowing cases (see Manuscript 3 of this dissertation), while others have created purely fictitious situations that fit the specific purpose of the respective study (e.g., Helzer et al., 2022).

### ***What is the Common Organizational Membership?***

Generally speaking, there are two options to establish a common organizational membership between the wrongdoer and the whistleblower (i.e. the participant) in scenario studies. First, the common organizational membership can be fully fictitious in the sense that participants are instructed to imagine belonging to a certain organization and that the wrongdoer also belongs to the same organization (see Manuscript 3 of this dissertation). Alternatively, researchers can try to make use of participants’ real organizational membership

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<sup>16</sup> Some scholars use the term „vignette” instead of “scenario.” We will use the terms interchangeably in the current manuscript.

(i.e., by sampling employees of one specific organization) and instructing them to imagine a scenario where a member of the same organization engages in a wrongdoing (see Ellis & Arieli, 1999).

### ***How and to Whom is the Information Disclosed?***

The disclosure of information is operationalized simply by asking participants to rate their intentions to disclose information about the wrongdoing, either on a Likert scale (e.g., “How likely is it that you would report this practice to someone who might be able to effect action?”, ranging from 1 = *not at all* to 6 = *very likely*) or as a dichotomous variable (e.g., “Would you report this practice to someone who might be able to effect action?”, yes/no). Sometimes, researchers also specify the recipient of the disclosure, for example by asking whether the participant would like to disclose information regarding wrongdoing to the authorities (Anvari, 2018). The flexibility of scenario studies also allows contrasting between internal and external whistleblowing intentions (Helzer et al., 2022; also see Manuscript 3 of this dissertation), for instance, by asking participants whether they would disclose information internally (e.g., to the HR department or the management) versus externally (e.g., to the media or legal authorities).

### **Autobiographical Recall Studies**

Another straightforward whistleblowing paradigm is to ask participants to recall a situation in which they have previously observed some kind of immoral or illegal practices under the control of their employer and whether or not they disclosed this practice to someone who they thought might be able to effect action. According to the definition by Near and Miceli (1985), participants who answer both question in the affirmative can be classified as (self-reported) whistleblowers. Empirical studies that used this method were, for example, conducted by Dungan et al. (2019), Near et al. (2004) as well as by Miceli and Near (1988). A close variant of this method is to present participants with an operational description of

whistleblowing and ask them directly whether this definition applies to them (see Bjørkelo et al., 2010, 2011).<sup>17</sup>

### ***What is the Wrongdoing?***

In contrast to all other whistleblowing paradigms presented in this review, autobiographical recall studies do not describe or induce one specific type of wrongdoing but rather rely on wrongdoings that occurred “in the real world”: Participants report a wrongdoing that they have actually observed in the context of their organization. Wrongdoings that have repeatedly emerged in autobiographical recall studies on whistleblowing belong to the categories of harassment, bullying, safety violations, or mismanagement (Bjørkelo et al., 2010; Near et al., 2004).

### ***What is the Common Organizational Membership?***

Autobiographical recall studies on whistleblowing also make use of naturally occurring organizational memberships, for example by asking participants to recall an instance where they obtained evidence of wrongdoing “at work” (Bjørkelo et al., 2010, p. 214), involving “their own organization” (Near et al., 2004, p. 226) or involving “their agency” (Dungan et al., 2019, p. 4). In some studies, participants from various organizations were recruited (Dungan et al., 2019) whereas sampling was restricted to only one organization in other studies (Near et al., 2004).

### ***How and to Whom is the Information Disclosed?***

To assess whether the observed wrongdoing was disclosed to someone who could intervene, participants in autobiographical recall studies are usually asked whether or not they reported the wrongdoing, and if so, to whom. To this end, Near et al. (2004), who sampled employees of a large military base, differentiated between several internal recipients (e.g., the

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<sup>17</sup> Arguably, research focusing exclusively on known whistleblowers, for example through qualitative interviews (e.g., Kölbel & Herold, 2019), can be subsumed under autobiographical recall studies as well. In the present manuscript, we focus more on quantitative autobiographical recall studies which usually contrast whistleblowers with a control group of non-whistleblowers.

“immediate supervisor” or a “higher level supervisor”) and several external recipients, thereby allowing to distinguish internal from external whistleblowing. Similarly, Dungan et al. (2019) provided a list of whistleblowing recipients that allowed a post-hoc differentiation of internal and external whistleblowing (see Table 5.1). By contrast, Bjørkelo et al. (2010) did not list specific persons or bodies as whistleblowing recipients but asked participants explicitly whether they used internal reporting channels, external reporting channels, or a combination of both.

### **Immersive Behavioral Paradigms**

A third category of whistleblowing paradigms—yet a relatively rare one—consists of lab studies in which participants’ actual whistleblowing behavior is observed and analyzed (see, for instance, Bocchiaro et al., 2012; Miceli et al., 1991). In these paradigms, researchers stage a fictitious situation (typically in a lab-based environment) which provides an opportunity to blow the whistle on an observed wrongdoing. Oftentimes, participants are deceived about the real purpose of the study by using an elaborate cover story.<sup>18</sup>

#### ***What is the Wrongdoing?***

Given that immersive behavioral studies on whistleblowing are usually conducted in a researcher’s lab on campus, participants are typically students. Therefore, the wrongdoing often represents a violation of academic, research-related, or campus-related norms. For instance, Miceli et al. (1991) conducted a lab study where they led participants to believe that the preliminary results of an ongoing study did not confirm the researcher’s predictions, thereby allegedly reducing the likelihood that the results were publishable. Next, participants

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<sup>18</sup> Of note, Waytz et al. (2013) reported a study (Study 4) that can be interpreted as an online-variant of an immersive behavioral paradigm. In this study, participants, who were recruited via Amazon MTurk, were confronted with the careless work of another participant (who had ostensibly also participated on MTurk). Participants then had the chance to report the other participant to the experimenter by indicating the extent to which they thought the other participant had violated rules and the extent to which they recommended blocking that participant from future studies. We do not discuss this paradigm in greater detail in the current manuscript (1) because the wrongdoing was arguably too mild for being considered an “immoral practice” (see whistleblowing definition at the beginning of our manuscript) and (2) because the dependent variables arguably tapped more into punishment or peer reporting than into whistleblowing.

were informed about the experimental condition they were ostensibly assigned to as well as the hypotheses for this particular condition. The experimenter then asked the participant to provide responses that fitted the researchers' hypotheses and left the room. Such a request clearly represents a form of scientific misconduct by the experimenter.

Similarly, Bocchiaro et al. (2012) invited participants to the lab where they were told that the experimenter had conducted a pilot study on "sensory deprivation of brain functions." Participants were told that this pilot study had elicited traumatic experiences (e.g., panic, hallucinations, etc.) in previous trials. Nonetheless, the experimenter asked the participant to write a "testimonial" for some of their fellow students, indicating that they found the experiment "exciting" and "incredible" while concealing the allegedly traumatic effects. This request—writing an endorsing statement for a potentially harmful study—clearly violates ethical standards of conducting research (see American Psychological Association, 2017) and, thus, served as the wrongdoing in this study.

### ***What is the Common Organizational Membership?***

In immersive behavioral paradigms, researchers often try to make use of a participant's real organizational membership. For example, both Bocchiaro et al. (2012) and Miceli et al. (1991) utilized the common organizational membership of a university, by informing participants (who were all students of the same university) that the wrongdoer was a researcher at the same university.

### ***How and to Whom is the Information Disclosed?***

In contrast to scenario or autobiographical recall studies, immersive behavioral paradigms provide the opportunity to observe actual whistleblowing behavior rather than relying on self-reports. Miceli et al. (1991)—in their study staging a data fudging request by the experimenter—embedded their dependent measure of information disclosure in a questionnaire that the participants were asked to complete during the course of the study.

First, participants were asked to indicate whether they were asked to do something they considered objectionable during the study using “yes”, “no” or “can’t remember” as response categories. Next, participants who indicated “yes” were asked to describe the objectionable request in an open-response format. After completion of the study, two trained raters coded whether or not participants actually described the data fudging request as the objectionable practice. Participants who responded “yes” to the first question and later clearly described the data fudging incidence as the objectionable request were classified as whistleblowers.

Bocchiaro et al. (2012)—in their study staging a request to write a testimonial of a potentially harmful study—used a slightly different approach. They conducted their study in a laboratory room with a postbox on the wall and participants were informed that they could drop a note in the postbox to inform the local ethics committee about unethical conduct. This action—leaving a note to inform the local ethics committee in the postbox—served as the behavioral measure of whistleblowing.

### **Economic Games**

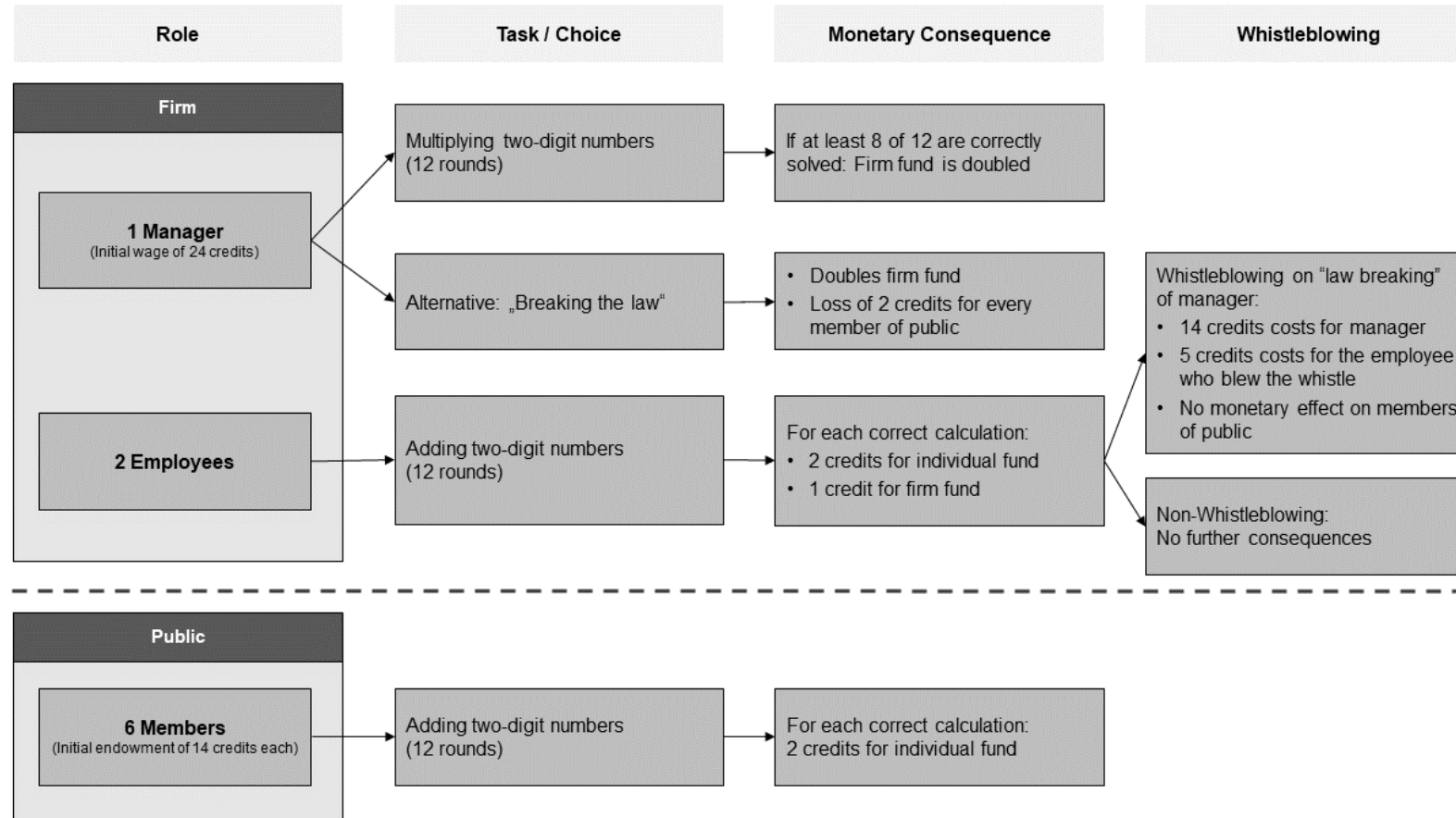
A fourth and final category of whistleblowing paradigms we consider in this review are economic games. These paradigms are “economic” in the sense that participants make decisions about the allocation of economic resources (e.g., money, vouchers, lottery tickets, etc.). They are referred to as “games” because the decisions participants make are artificial in the sense that they would not occur as such in real life. That being said, these decisions and the specific constraints under which they are made structurally mirror real-life situations, such as bargaining situations (for instance, in an “ultimatum game”) or social dilemmas (for instance, in a “public goods game”). Very often, the allocation decisions that participants can make are more or less prosocial (in the sense that the allocation benefits another person; see Thielmann et al., 2020). Recently, economic games specifically tailored to model whistleblowing behavior have been developed (e.g., Bartuli et al., 2016; Butler et al., 2020)



and Figure 5.1 illustrates the “Whistleblowing Game” introduced by Butler et al. (2020) in order to facilitate a better understanding of this paradigm.

Figure 5.1

Illustration of Experimental Procedure of the “Whistleblowing Game” Developed by Butler et al. (2020)



*Note.* In every experimental session, there were multiple firms each consisting of one manager and two employees. Participants were randomly assigned to the different roles (manager, employee, members of the public). Every firm had a collective “firm fund” and, in addition, every member of the firm had an additional “individual fund.” Members of the public only had “individual funds.” Whistleblowing was assessed with the strategy elicitation method. 2 credits corresponded to \$1. For details, see Butler et al. (2020).

### *What is the Wrongdoing?*

Wrongdoings that are implemented in “whistleblowing games” are typically unfair or unethical allocation of monetary resources. Butler et al. (2020), for example, assigned participants randomly to one of the experimental roles: First, there were members of a firm and members of the public. Within each firm, there were two members in the role of “employees” and one member in the role of a “manager.” During the whistleblowing game, both employees of each firm completed a number of real-effort tasks (i.e., adding two-digit numbers) that generated earnings for themselves as well as for the collective “firm fund.” Simultaneously, the manager also had the chance to contribute to the firm fund by completing a more difficult real-effort task (i.e., multiplying two-digit numbers). As an alternative to solving this real-effort task, the manager could also “break the law”, a behavioral option which deducted money from members of the public, but generated money for their firm. This law-breaking option modelled wrongdoings in which an organization exploits members of the public (e.g., the society), such as example tax fraud (see Figure 5.1).

A second implementation of an economic game modelling whistleblowing can be found in Bartuli et al. (2016). In their whistleblowing game, companies consisted of two members: one manager and one employee. Similar to Butler et al. (2020), members of a company individually completed a series of real-effort tasks (i.e., counting the occurrence of a certain number in a matrix). The company received money for each successfully completed task, and this money was shared between the manager and the employee at a 6:4 ratio. At a later stage of the experiment, the manager received an additional amount of money that they were instructed to transfer to a charity organization. Alternatively, the manager could transfer this money to the company’s fund, thereby generating a financial benefit for the own company at the costs of the charity organization. The latter option—exploiting a charity

organization for one's own (and for the other player's) benefit—served as the wrongdoing in this study.

### ***What is the Common Organizational Membership?***

Economic games are usually implemented as computer-mediated interactions. Thus, participants do engage vis-à-vis with their interaction partner and consequently do not know whether or not they share a common organizational membership (e.g., whether or not both players belong to the same university). Therefore, a common organizational membership has to be induced through the experimental procedure, for example, by assigning players to the same “company.” Moreover, in line with Anvari et al.'s (2019) notion that organizational membership needs to be psychologically experienced rather than only formally defined, researchers additionally often seek to create a feeling of cohesion or a common identity among players of the same company. We describe two procedures designed to create a common identity among players of the same “company” in the following.

Butler et al. (2020) instructed participants to individually solve a series of addition and multiplication tasks. In addition, participants also completed a variant of the “Kandinsky and Klee painting elicitation task” originally designed by Tajfel et al. (1971). In this version of the task, participants see a number of paintings and have to guess whether they were drawn by Kandinsky or Klee. Although each of the three tasks are solved individually, participants gained additional pay-off if at least one member of the company solved the respective task correctly. The interdependent outcomes in these tasks were designed to stimulate “a sense of identity and social cohesion among each firm's members” (Butler et al., 2020, p. 608). Similarly, Bartuli et al (2016) instructed the employee and the manager of a firm to complete a number of real-effort tasks (i.e., counting the occurrence of a specific number in matrices) and paid them according to the number of tasks their firm (i.e., their manager and themselves) had correctly solved.

### ***How and to Whom is the Information Disclosed?***

In Butler et al. (2020)'s study, participants were informed that whistleblowing would be costly for themselves and as well as for their manager, but would not have financial benefits for the public. To operationalize whistleblowing, employees of each firm were asked "whether they would blow the whistle if they found out that their manager broke the law" (p. 609), thereby implementing the so-called "strategy elicitation method." This method keeps participants uninformed about the manager's decision (i.e., whether or not the manager broke the law) as long as the dependent variable is not yet assessed. After participants had decided whether they would like to blow the whistle if their manager broke the law, they learned about the manager's actual behavior and – if the manager did indeed break the law and the participant opted for the whistleblowing option—the financial consequences of the whistleblowing option (i.e., financial costs for themselves and the manager) were implemented.

In Bartuli et al. (2016)'s study, employees were informed about the manager's decision, that is, whether he/she either transferred the money to the charity organization (in line with the instructions) or kept the money at the company ("embezzlement"). Only if the manager opted for the embezzlement option, the employee was asked whether they would like to blow the whistle. The whistleblowing option was costly for both the employee and the manager. As a major distinction of this game as compared to the paradigm by Butler et al. (2020), participants played this game over multiple rounds rather than once, thereby modeling that, in real-life whistleblowing situations, employees often have more than a single opportunity to report organizational wrongdoing.

### **Strength and Weaknesses of Whistleblowing Paradigms**

We now evaluate the strength and weaknesses of these four categories of whistleblowing paradigms. To this end, we will focus on three criteria: The extent to which participants' responses in these paradigms are fakeable vs. non-fakeable (henceforth: non-fakeability), the amount of monetary and time resources these paradigms require (henceforth: efficiency), and whether or not these paradigms can be implemented without deceiving participants about the real purposes of the experiment (henceforth: avoidance of deception). First, a paradigm is non-fakeable if the participant cannot influence their test result as desired (Kubinger, 2019), for example in the direction of more socially desirable responses. In principle, responses in all four whistleblowing paradigms are fakeable, but some are arguably more prone to socially desirable responding than others. More specifically, we argue that non-fakeability is particularly high either when participants cannot easily recognize which construct the researcher intends to measure or if faking one's responses in the socially desirable direction is costly. Applying these two criteria, we propose that economic games have high degrees of non-fakeability because they make socially desirable responding (i.e., whistleblowing) costly. Likewise, immersive behavioral paradigms should have high degrees of non-fakeability because these paradigms incorporate only few demand characteristics, thereby making it difficult for participants to understand that the situation was created to assess whistleblowing and to consequently influence their behavior towards more whistleblowing. By contrast, scenario studies possess a particularly low degree non-fakeability because participants can easily recognize which construct the experimenter seeks to measure, and additionally, faking one's behavior towards more whistleblowing intentions is non-costly. Lastly, autobiographical recall studies also provide cues that enable participants to easily recognize that the experimenter seeks to assess whistleblowing, and faking one's behavior towards more whistleblowing does not come at a monetary cost. However, faking

one's responses towards more whistleblowing in autobiographical recall studies would be dishonest and arguably, the threshold of indicating that one *has blown the whistle* (as in autobiographical recall studies) is higher than indicating that one *would blow the whistle* (as in scenario studies). Therefore, we evaluate the degree of non-fakeability in autobiographical recall studies as medium.

Second, the reviewed whistleblowing paradigms differ with regard to the resources they require, thereby referring to the criterion of efficiency (Kubinger, 2019). Arguably, scenario studies and autobiographical recall studies are highly efficient paradigms as they can be conducted online which creates low costs for compensating participants and few resources for creating the materials and setting the survey up. By contrast, immersive behavioral paradigms are typically conducted as single sessions and as lab-based studies. Therefore, the required resources (i.e., money, time) are arguably high for these paradigms or—viewed from the other angle—efficiency is low for immersive behavioral paradigms. Similarly, economic games are usually conducted as laboratory studies and participants need to be paid a flat “show-up” fee plus additional money in order to make their monetary decision within the game truly consequential. However, economic games can often be conducted as group sessions (see Bartuli et al., 2016; Butler et al., 2020), which saves resources as compared to immersive behavioral paradigms. We therefore evaluate the efficiency criterion as medium for economic games.

Third, some of the reviewed whistleblowing paradigms require deceiving participants—for example about the actual purpose of the study or the role of the experimenter. This can be problematic from an ethical perspective because, according to the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 2017), “psychologists do not conduct a study involving deception unless they have determined that the use of deceptive techniques is justified by the study’s significant prospective scientific,

educational, or applied value and that effective nondeceptive alternative procedures are not feasible.” (p. 11). Among the four categories of whistleblowing paradigms, only immersive behavioral paradigms usually employ deception (Bocchiaro et al., 2012; Miceli et al., 1991). In any case, whether or not whistleblowing research using immersive behavioral paradigms is likely to produce significant prospective scientific value, and whether or not nondeceptive alternative procedures (such as scenario studies, autobiographical recalls, or economic games) are feasible should be reviewed by an Ethics committee and thoroughly justified in the corresponding manuscript (see Hilbig et al., 2022).

Taken together, there is no clear “champion” when it comes to whistleblowing paradigms. Rather, each category of whistleblowing paradigms comes with individual strength and weaknesses with regard to its non-fakeability, its efficiency, and whether or not it avoids deception (see Table 5.3 for a summary).

**Table 5.3**

*Evaluation of Commonly Used Whistleblowing Paradigms*

	<b>Scenario Study</b>	<b>Autobiographical Recall</b>	<b>Immersive Behavioral Paradigm</b>	<b>Economic Game</b>
<b>Non-Fakeability</b>	low	medium	high	high
<b>Efficiency</b>	high	high	low	medium
<b>Avoidance of Deception</b>	yes	yes	no	yes

### **Recommendations for Future Research**

Given that each of the four categories of whistleblowing paradigms comes with individual strength and weaknesses, we advocate to select and implement a whistleblowing paradigm that fits the specific research question at hand. More specifically, if the prevalence



of whistleblowing is of central interest, it is inevitable to implement a paradigm capturing actual *whistleblowing behavior* and not to rely on scenario studies measuring *whistleblowing intentions*. Moreover, in such a setting, an ideal whistleblowing paradigm should also possess high degrees of non-fakeability; and we therefore advocate the implementation of immersive lab paradigms or economic games. By contrast, if the association of an independent variable (e.g., a personality trait) with whistleblowing is of central interest, scenario studies can provide a viable first approach. This is particularly true when the effect of interest is assumed to be rather small (for example, in personality research; see Gignac & Szodorai, 2016) and large samples are consequently required. Nonetheless, effects of an independent variable on whistleblowing intentions derived from scenario studies should later be replicated with paradigms that assesses actual whistleblowing behavior.

A second recommendation for future research that we want to put forward is to conduct multi-method studies in the field of whistleblowing. This recommendation seems warranted because the empirical convergence of the different whistleblowing paradigms has not yet been tested. Thus, we currently do not know how much variance the different whistleblowing paradigms share. A multi-method study in the field of whistleblowing should implement the four whistleblowing paradigms *within the same sample*. In order to decrease demand characteristics of this procedure, we propose to make extensive use of filler tasks and to implement a significant time interval between the measurement occasions. Such a multi-method study would be particularly fruitful because although all paradigms were designed to capture whistleblowing, they do, in fact, emphasize different aspects of a whistleblowing situation. For example, modelling whistleblowing as an economic game is particularly suitable to model the *monetary costs* of a whistleblowing decision, but it can potentially less adequately model the *emotional consequences* (e.g., distress, feeling ostracized by one's colleagues, etc.) that are usually associated with whistleblowing (e.g., Gundlach et al., 2003; Peters et al., 2011;

Rothschild & Miethe, 1999). Moreover, a multi-method study would also help to quantify the so-called “intention-behavior gap” in whistleblowing research, that is the association of whistleblowing intentions with actual whistleblowing behavior (Bjørkelo & Bye, 2014). Finally, in order to obtain robust evidence that a certain variable (e.g., a personality trait) is related to whistleblowing, it seems necessary to show that such an association not only exists in one single whistleblowing paradigm, but that it is generalizable to other paradigms modelling whistleblowing.

### **Conclusion**

Drawing on Near & Miceli’s well-established definition of whistleblowing (Near & Miceli, 1985), we have argued that scenario studies, autobiographical recall studies, immersive behavioral paradigms, and economic games are in principle suitable to capture the definitory features of whistleblowing. The selection of an ideal whistleblowing paradigm therefore requires a trade-off between different qualities such as non-fakeability, efficiency, and whether or not they avoid using deception. Future research will benefit from conducting multi-method studies in the field of whistleblowing.

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## **6 Manuscript 3: Personality effects on two types of whistleblowing decisions**

## **Personality Effects on Two Types of Whistleblowing Decisions**

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### Abstract

When employees witness an immoral practice under the control of their employer, they face a decision whether or not to act against it. If they do want to act, they need to decide how to report their concerns, that is, whether they want to use internal (i.e., to other members of the organization) or external reporting channels (e.g., to the media). In the present contribution, we investigate which personality traits relate to these two types of whistleblowing decisions. In a two-wave scenario study ( $N = 724$ ), we tested whether HEXACO Honesty-Humility drives a decision for whistleblowing (vs. inaction) and whether HEXACO Agreeableness drives a decision pro internal (vs. external) whistleblowing. Our predictions were not confirmed, and all in all, the six HEXACO dimensions jointly explained only a small amount of variance in these two whistleblowing decisions. There was, however, evidence from exploratory analyses showing that higher levels of Honesty-Humility were positively associated with a decision pro internal (vs. external) whistleblowing. We discuss the practical relevance of these findings for organizations.

[170 words]

*Keywords:* whistleblowing, personality, HEXACO, honesty-humility, agreeableness.

### Personality Effects on Two Types of Whistleblowing Decisions

Imagine Claire, an employee at a company that operates hospitals and nursing homes. Lately, her company's management has started to reduce operating costs and particularly cuts back on staff. These cost-cutting measures have drastically increased workloads for all employees including Claire. Owing to the fact that fewer employees are now responsible for delivering medical treatments and care, Claire fears deficits in the quality of their services. As she is not capable of stopping the company's cost-cutting measures on her own efforts, she decides to disclose them to a local newspaper in order to raise awareness of the situation.

Does Claire's behavior—known as whistleblowing (Near & Miceli, 1985)—represent a form of prosocial behavior? Today, there is no single agreed-upon definition of prosocial behavior (see Pfattheicher et al., 2022), but one influential definition describes prosocial behavior as a “broad range of actions intended to benefit one or more people other than oneself [...]” (Batson & Powell, 2003; p. 463). Applying this definition to the given whistleblowing case, we can indeed count her action as a prosocial behavior if we assume that Claire's behavior intended to benefit other people—for example, to achieve better medical conditions for her patients or better work conditions for her colleagues. It is important to note that Claire might also benefit *herself* from disclosing the cost-cutting measures to the newspaper (e.g., though better working conditions for herself), however, this does not exclude her behavior from being prosocial. In other words, her behavior does not need to be driven by purely unselfish motives as long as she pursued the intention to benefit one or more people other than herself (see Dozier & Miceli, 1985).

However, Claire's decision to publicly disclose the cost-cutting measures at her company may also yield (perhaps unintended) negative consequences for other members of her company. For instance, the company's public reputation might be damaged after an accusing newspaper report, and consequently, less patients might choose hospital or nursing

homes run by this company in future. This effect, in turn, might result in financial or career disadvantages for some of the company's employees. If this was the case, then one could argue that Claire's behavior would have avoided negative consequences for her company if she had raised her concerns internally (e.g., to the company's management) before disclosing them externally (i.e., to the local newspaper).

In the present contribution, we describe the whistleblowing decision-making process as a sequence of (1) the decision to blow the whistle vs. remaining silent (henceforth: "inaction"), and (2) the decision to blow the whistle via internal (vs. external) reporting channels. We then argue that these two types of whistleblowing decisions reflect two forms of prosocial behavior: An *unconditional* form of prosociality, that is, an unwillingness to exploit other people, and a *conditional* form of prosociality, that is, an unwillingness to cooperate with others that have acted unfairly. We theoretically link these forms of prosocial behavior to two broad personality dimensions—HEXACO Honesty-Humility and HEXACO Agreeableness—and empirically test whether these dimensions explain variance in the two forms of whistleblowing decisions.

### **Whistleblowing as a Prosocial Behavior**

By definition, whistleblowing represents "the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action" (Near & Miceli, 1985; p. 4). Applying this definition to the real-life example at the beginning of our manuscript suggests that Claire's behavior can indeed be viewed as whistleblowing because she (1) discloses information to an organization that may be able to effect action (i.e., to a newspaper which might raise public awareness) and (2) because she is an employee (therefore an organization member) of the organization in which the immoral practice occurred (i.e., the hospital).

It is interesting to note that, according to this definition, a prosocial motive pursued by the whistleblower is *not* a definitory feature of whistleblowing. As such, most researchers would also consider it whistleblowing if a disclosure about organizational misconduct is pursued by selfish motives (Roberts, 2014). Empirical evidence from real-life whistleblowing cases, however, show that whistleblowing usually aims at stopping organizational wrongdoing that harms people, groups or organizations other than the whistleblower, and is therefore likely pursued by prosocial motives: A survey among 1,000 whistleblowers, for example, found that the organizational wrongdoing that the whistleblower intended to rectify harmed other people in 81% of the reported cases (Vandekerckhove et al., 2013). Moreover, the assumption that whistleblowing represents a form of prosocial behavior is also reflected in various theoretical accounts (Dozier & Miceli, 1985; Gundlach et al., 2003; Miceli et al., 2008). In the following, we will refer to the decision to blow the whistle or remaining silent as *whistleblowing (vs. inaction) decision*.

### **Whistleblowing Reporting Channels**

Reporting concerns about misconduct within one's own organization to internal (e.g., to the company's management) or external (e.g., the media, authorities) recipients are known as internal and external whistleblowing, respectively (e.g., Dworkin & Baucus, 1998; Miceli et al., 2008).<sup>19</sup> A robust finding in whistleblowing research is that the vast majority of whistleblowers first voice their concerns internally before they blow the whistle externally (Bjørkelo et al., 2011; Vandekerckhove & Phillips, 2019). As an explanation for this preference for internal whistleblowing, researchers have argued that external whistleblowing

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<sup>19</sup> Of note, there is some disagreement among whistleblowing scholars whether internal whistleblowing represents a form of whistleblowing at all (e.g., Jubb, 1999). It has been argued that only external whistleblowing entails a moral dilemma between being loyal to one's organization while being fair to people or organizations outside of that organization (see Waytz et al., 2013) and that this conflict is a definitory feature of whistleblowing. Moreover, the construct of internal whistleblowing has conceptual overlap with several other constructs such as organizational dissent (Packer, 2008) or prohibitive voice (Liang et al., 2012). Nonetheless, we conceptualize internal whistleblowing as a special case of whistleblowing for the present manuscript but acknowledge that this is not undisputed.

is often seen as a breach of loyalty with one's organization. As such, external whistleblowing entails an inherent moral dilemma of being loyal to one's organization versus being fair to people outside of that organization who might suffer from the organizational wrongdoing (Jubb, 1999; Misch et al., 2018; Waytz et al., 2013). This so-called "whistleblower's dilemma" is not equally present in internal whistleblowing because addressing one's concerns internally does not necessarily communicate a lack of loyalty or disengagement from the organization, but rather that one highly identifies with the organization and therefore wants to change its norms and practices (see Anvari et al., 2019; Packer, 2008).

Referring back Claire's case from the beginning of our article, one could argue that Claire would have avoided negative consequences and a breach of loyalty with her company if she had raised her concerns internally (e.g., to the company's management) before disclosing it through external reporting channels (e.g., to the media). In the following, we will refer to the decision to engage in external or internal whistleblowing as the *internal (vs. external) whistleblowing decision*.

### **Antecedents of Both Whistleblowing Decisions**

Previous research has identified various contextual factors that shape the whistleblowing (vs. inaction) decision and the internal (vs. external) whistleblowing decision. For example, a meta-analysis demonstrated that whistleblowing (vs. inaction) was more likely when the observed wrongdoing was serious, when the whistleblower had strong evidence for the wrongdoing, and when the organizational climate favored whistleblowing (Mesmer-Magnus & Viswesvaran, 2005). Interestingly, there is much less research on the internal (vs. external) whistleblowing decision as compared to the whistleblowing (vs. inaction) decision. One study investigating this decision in a sample of more than 40,000 federal employees, however, found that internal whistleblowing became increasingly more

likely than external whistleblowing when employees perceived their organization as fair and when they had more education about whistleblowing procedures (Dungan et al., 2019).

As compared to contextual variables predicting both types of whistleblowing decision, we know considerably less about personality factors involved in these decisions. Specifically, research using broad personality taxonomies such as the Five-Factor model (FFM; John, 2021; McCrae & Costa, 1987, 1999) or the HEXACO model (Ashton & Lee, 2007) is scarce in the context of whistleblowing: We are only aware of four such studies (Bartuli et al., 2016; Bjørkelo et al., 2010; Bocchiaro et al., 2012; Helzer et al., 2022) and most of them contrasted whistleblowing with inaction but not internal with external whistleblowing.

Our current research seeks to overcome to this gap in the empirical literature by investigating the effects of the HEXACO model on both types of whistleblowing decision. We focus on the HEXACO model rather than the FFM because a major advantage of the former is that it distinguishes between active or unconditional cooperation (through the Honesty-Humility dimension) and reactive or conditional cooperation (through the Agreeableness dimension), and this distinction appears relevant for both whistleblowing decisions, as we will argue in the following.

### **HEXACO Traits in the Context of Both Whistleblowing Decisions**

Honesty-Humility and Agreeableness in the HEXACO model both capture individual differences in prosociality yet they emphasize different aspects of prosociality. More specifically, Honesty-Humility—defined as the “tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation” (Ashton & Lee, 2007, p. 156)—represents a tendency for *non-exploitation* of others (De Vries et al., 2016; Thielmann et al., 2020; Zettler et al., 2020). People with higher Honesty-Humility levels have, for example, been shown to share more money as dictators in Dictator Games, to offer more money as proposers in an Ultimatum



Game or to trust more as trustor in a Trust Game (for a meta-analysis, see Thielmann et al., 2020). Agreeableness, in turn, can be conceptualized as a tendency for *non-retaliation* (De Vries et al., 2016; Hilbig et al., 2016), or more precisely as “the tendency to be forgiving and tolerant of others, in the sense of cooperating with others even when one might be suffering exploitation by them” (Ashton & Lee, 2007, p. 156). People scoring high on Agreeableness have been shown not to retaliate when they have been taken advantage of, for example as recipients of unfair offers in the Ultimatum Game or as trustees in the Trust Game (Thielmann et al., 2020).

It is important to note that the prosocial consequences of Honesty-Humility and Agreeableness have been mostly investigated in interpersonal settings, for example between two players in an economic game. Whistleblowing, however, occurs by definition on an organizational level and is therefore more complex. Whistleblowing situations involve at least three different levels: (1) A whistleblower who is member of an organization, (2) this organization, in which the observed wrongdoing occurs, and (3) a superordinate entity (e.g., the society) whose members are usually negatively affected by the organizational wrongdoing. Referring back to the whistleblowing case at the beginning of our manuscript, for instance, there is one individual (i.e., Claire) and one organization (i.e., the hospital) involved, plus members of a superordinate entity (e.g., society) who are negatively affected by the organizational wrongdoing (i.e., patients).

How do these prosocial consequences of Honesty-Humility and Agreeableness on non-exploitation and non-retaliation, respectively, map onto this structure of whistleblowing situations? In whistleblowing situations, it is typically not the (potential) whistleblower him- or herself who exploits others for personal benefits, but rather that he/she does belong to an organization that exploits others. In such a situation, inaction (as compared to whistleblowing) can be seen as tolerating exploitation resulting from such organizational

misconduct, or as a passive form of exploitation. If this is the case, then we can expect that higher levels of Honesty-Humility relate to less inaction, or viewed from the other angle, to more whistleblowing (vs. inaction). This theorizing is in line with previous research showing (1) that Honesty-Humility correlated positively with whistleblowing in an economic game (Bartuli et al., 2016) and (2) that higher levels of Honesty-Humility related to decreased willingness to cover up another person's unethical behavior in an interpersonal game paradigm (Thielmann et al., 2021). Note, however, that Bocchiaro et al. (2012) found a non-significant and descriptively small effect of Honesty-Humility on whistleblowing in an immersive behavioral paradigm.

***Hypothesis 1: HEXACO Honesty-Humility is positively associated with a decision pro whistleblowing (versus inaction).***

We now turn to the internal (vs. external) whistleblowing decision. Arguably, this definition reflects a decision for or against continued cooperation with others who have acted wrongfully (e.g., the organization's management) through internal whistleblowing or, alternatively, for imposing a cost on the organization for its wrongdoing through external whistleblowing. Following this idea, we can assume that highly agreeable individuals should react leniently and patiently to an observation of organizational misconduct and should—according to its conceptualization—be willing to continuously cooperate with the organization. By contrast, individuals with low levels of Agreeableness should be more inclined to “break loyalty” with their organization by blowing the whistle externally.

***Hypothesis 2: HEXACO Agreeableness is positively associated with a decision pro internal (versus external) whistleblowing.***

It is, however, important to note that the conceptualization of Agreeableness suggests that this trait usually plays out when an injustice has occurred that was directed *against the individual* (i.e., the potential whistleblower) rather than *against others* (e.g., members of

society). However, other scholars have proposed that Agreeableness should also become relevant in situations that “allow people to punish others who treated them (or others) badly” (Zettler et al., 2020, p. 729). In addition, in the whistleblowing context, the negative consequences of a wrongdoing are often abstract and it is often ambivalent whether the wrongdoing only affects members outside of the respective organization negatively, or also affects the whistleblower personally. In the opening case, for example, not only patients suffered from the practices of that hospital, but Claire was also personally affected by the cost-saving measures (i.e., through a higher workload for herself). As such, we can expect a positive effect of HEXACO Agreeableness on the internal (vs. external) whistleblowing decision.

### **The Present Research**

To test our hypotheses, we conducted an online study in which measured HEXACO Honesty-Humility and Agreeableness and subsequently confronted participants with a whistleblowing scenario. We assessed (1) whether or not they intended to blow the whistle, and (2) and if they had decided to blow the whistle, whether they intended to use internal (vs. external) reporting channels to raise their concerns. In order to reduce demand characteristics of our materials and instructions, we implemented a two-wave design in which we measured the personality dimensions one week before we assessed the whistleblowing decisions.

Our study was pre-registered and the pre-registration is available via the following link: [https://osf.io/g7h64/?view\\_only=b64d957296db408e90c27bbc485bd9a6](https://osf.io/g7h64/?view_only=b64d957296db408e90c27bbc485bd9a6). Study materials, dataset, and analysis script can be found on the Open Science Framework (OSF; [https://osf.io/28h5c/?view\\_only=d5f88227215743e98c15f8cdf72433eb](https://osf.io/28h5c/?view_only=d5f88227215743e98c15f8cdf72433eb)).

We report how we determined our sample size, all data exclusions, and all measures (Simmons et al., 2012). To reduce the risk of false-positive discoveries, we followed the

recommendation by Benjamin et al. (2018) and interpret effects as “significant” if the  $p$ -value is  $< .005$ . We describe effects with  $p$ -values  $.05 \leq p \leq .005$  as “suggestive evidence.”

### **Research Ethics Statement**

Our study was conducted in accordance with the Ethical Guidelines of the German Psychological Society. Official ethics approval from an institutional review board was not mandatory for survey-based research in Germany when this research was conducted. Nonetheless, we voluntarily obtained ethics approval from our local ethics committee.

## **Methods**

### **Materials and Procedure**

Our survey was implemented in *SoSci Survey* (Leiner, 2021). In the first wave of this survey, participants completed the English version of the HEXACO-60 (for internal consistencies, see Table 6.1) which included an instructed attention check item. Participants also provided basic demographic information (i.e., age and gender) and were explicitly asked whether they participated attentively (a so-called use-me item; see Meade & Craig, 2012). This part of our survey took approx. 8 minutes to complete and was compensated with £0.80.

One week later, participants were invited to the second survey part, which took approx. 3 minutes and was compensated with additional £0.50. In this part, participants read the following scenario which was inspired by a real-life whistleblowing case and closely resembles the case we described at the beginning of this manuscript:

You work as a doctor in a hospital in a large city. During the course of your work for this hospital, you observe that resources are increasingly being saved and that the hospital is drastically overcrowded. In addition, from your medical perspective, patients are discharged very early in order to be able to admit new patients more quickly. You are now thinking about whether you want to do something about this organizational

practice—the cost savings, overcrowding, and early patient discharges in the hospital you work for.

We assessed the decision for whistleblowing (vs. inaction) and internal (vs. external) whistleblowing with one self-developed dichotomous item each (see study materials on OSF for details). For exploratory purposes, we also assessed a moral “wrongfulness” judgment of the organizational practice using four rating scale items ( $\alpha = .63$ ; see OSF for item wordings). To ensure data quality, our survey also included a single-choice comprehension check item (asking participants to recall a simple fact from the scenario) and again a use-me item.

### Participants

We conducted two a-priori power analyses for logistic regressions with one continuous predictor using the *pwr2ppl* package for R (Aberson, 2019), both with  $\alpha = .005$  and  $1 - \beta = .80$ . For the first hypothesis, we assumed a medium-sized effect of  $r = .20$  (Gignac & Szodorai, 2016) and an event ration of  $ER = .90$  which yielded a required sample size of 270 participants. For the second hypothesis, we assumed a small effect of  $r = .10$  (Gignac & Szodorai, 2016) and an event ration of  $ER = .80$  and found a required sample size of  $N = 626$ .<sup>20</sup> However, only participants who decided pro whistleblowing at the first decision would proceed to the second decision, and we therefore projected that 696 participants would be required to test the second hypotheses with sufficient statistical power.<sup>21</sup> We also added a buffer of 10% to account for possible exclusions of inattentive participants and an additional buffer of 10% in order to account for possible drop-outs between both measurement occasions. Thus, we aimed for a total sample of  $N = 843$  participants.

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<sup>20</sup> The event ratio  $ER$  represents the probability of choosing one of the two response options. In the absence of any studies with a similar methodological design, we chose an  $ER$  of .90 for the first hypothesis due to the fact that whistleblowing was uncostly in our scenario. The slightly lower  $ER$  for the second hypothesis was roughly based on previous research with autobiographical recall designs (Bjørkelo et al., 2011; Vandekerckhove & Phillips, 2019), but we lowered the estimate for internal (vs. external) whistleblowing because the negative consequences of external whistleblowing (e.g., retaliation) were non-immersive in our scenario.

<sup>21</sup> Specifically, we assumed that we would need 696 participants to adequately test the second hypothesis. However, given that only 90% of the sample were expected to reach the second decision (see footnote 20), we projected that our required sample was  $(626/9)*10 = 696$  participants.

Participants were recruited from the professional panel provider Prolific (see Peer et al., 2017). 883 individuals began the first wave of our survey and 852 completed it. 799 of those who completed the first also completed the second wave of our survey. Following our pre-registered exclusion criteria, we excluded participants who failed the instructed attention check ( $n = 35$ ), failed the single-choice comprehension check item (further  $n = 20$ ), or negated at least one of the two use-me items (further  $n = 5$ ). In addition, as pre-registered, we excluded participants (further  $n = 15$ ) based on signs of response overuse or incoherence across the HEXACO items (see Barends & De Vries, 2019). As a result, our final sample consisted of 724 participants ( $M_{\text{Age}} = 29.56$ ;  $SD_{\text{Age}} = 9.09$ ; 324 females, 392 males, 8 other).

## Results

We preprocessed and analyzed the data set with *R* (R Core Team, 2020), mostly by using the *tidyverse* (Wickham et al., 2019), *apaTables* (Stanley & Spence, 2018), *psych* (Revelle, 2021), and *sjPlot* (Lüdtke, 2021) packages.

### Descriptive Statistics

Means, standard deviations, and correlations among all HEXACO dimensions can be found in Table 6.1.

**Table 6.1***Means, Standard Deviations, Correlations, and Internal Consistencies of Personality Dimensions*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Honesty-Humility	3.31	0.60	.70 <i> [.66, .73]</i>					
2. Emotionality	3.31	0.63	.09* <i> [.02, .16]</i>	.76 <i> [.73, .78]</i>				
3. Extraversion	2.98	0.70	.03 <i> [-.04, .10]</i>	-.14** <i> [-.21, -.06]</i>	.82 <i> [.80, .84]</i>			
4. Agreeableness	3.14	0.53	.12** <i> [.05, .20]</i>	-.07 <i> [-.14, .01]</i>	.14** <i> [.06, .21]</i>	.68 <i> [.64, .71]</i>		
5. Conscientiousness	3.59	0.60	.22** <i> [.15, .29]</i>	.05 <i> [-.02, .13]</i>	.13** <i> [.06, .21]</i>	.05 <i> [-.02, .13]</i>	.79 <i> [.76, .81]</i>	
6. Openness to Experience	3.60	0.62	.12** <i> [.04, .19]</i>	.09* <i> [.02, .17]</i>	.11** <i> [.03, .18]</i>	.05 <i> [-.02, .12]</i>	.16** <i> [.08, .23]</i>	.74 <i> [.71, .77]</i>

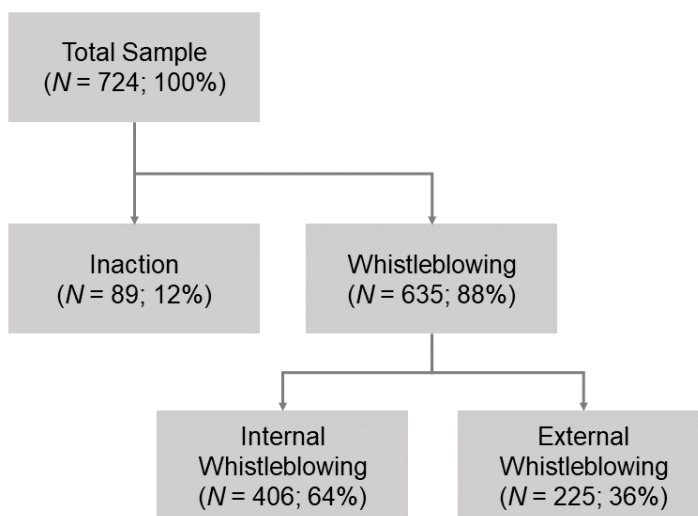
*Note.* The HEXACO items were assessed on five-point response scales, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. *M* and *SD* represent mean and standard deviation, respectively. Values in square brackets indicate 95% confidence intervals. Values on the diagonal in italics represent Cronbach's  $\alpha$ . \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

Participants judged the organizational practice as rather immoral,  $M = 4.98$ ;  $SD = 0.85$ , on a rating scale ranging from 1 to 6. Interestingly, this moral wrongfulness judgment was not independent of personality: Honesty-Humility ( $r = .12$ ), Emotionality ( $r = .17$ ), Conscientiousness ( $r = .16$ ), and Openness to Experience ( $r = .15$ ) were positively related to this variable.

Absolute and relative frequencies of both whistleblowing decisions are shown in Figure 6.1. Distributions of the six HEXACO dimensions broken down by the two whistleblowing decisions are illustrated in Figure 6.2.

**Figure 6.1**

*Absolute and Relative Frequencies of Both Whistleblowing Decisions*

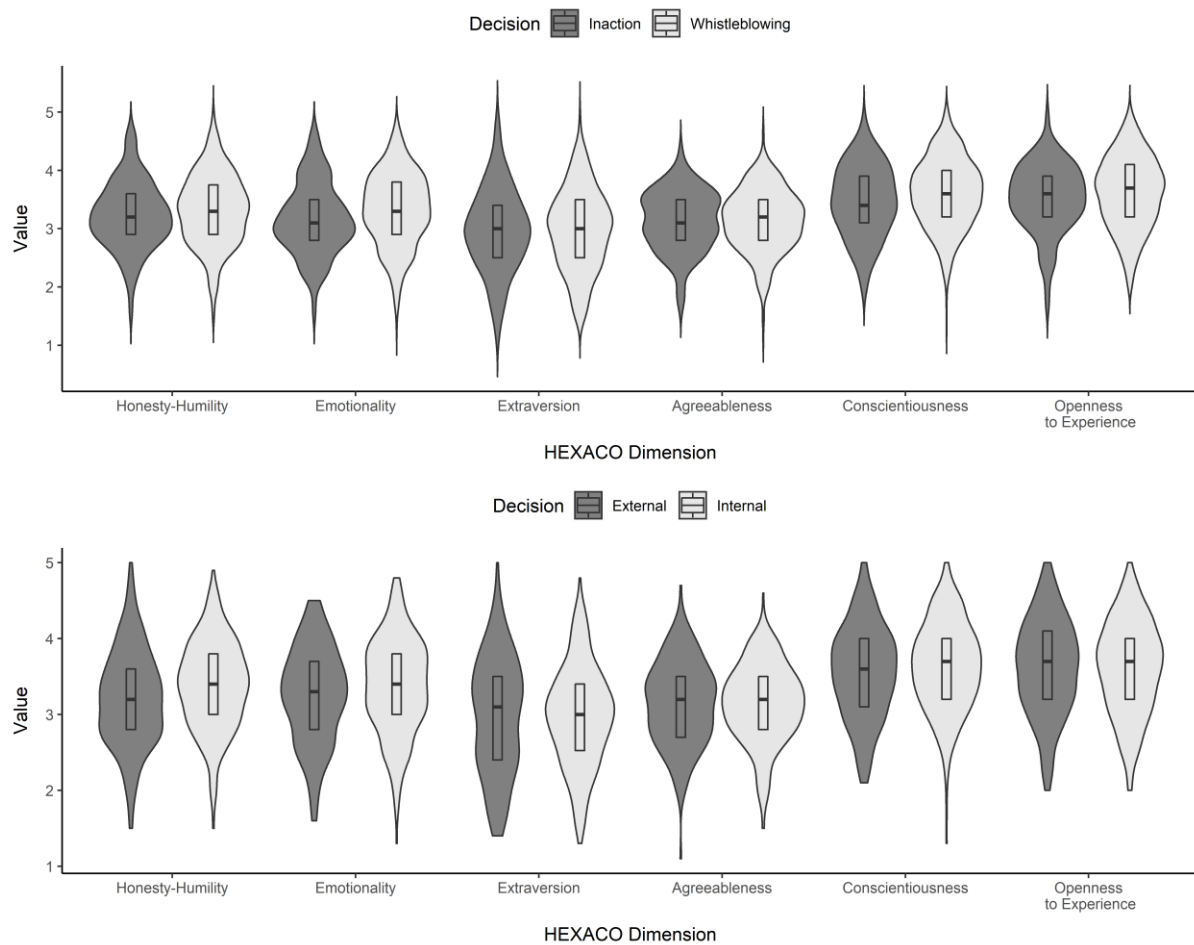


*Note.* At the internal (vs. external) whistleblowing decision, participants could also indicate that they changed their mind and did not want to blow the whistle, neither internally nor externally—therefore absolute frequencies of the *internal whistleblowing* and *external whistleblowing* categories do not exactly match the absolute frequency in the *whistleblowing* category.



**Figure 6.2**

*Distribution of all HEXACO Dimensions Broken Down by Both Whistleblowing Decisions*



*Note.* Violin plots for each personality dimension showing the density of the distributions. The upper half shows distribution of HEXACO dimensions for the whistleblowing (vs. inaction) decision ( $N = 724$ ). The lower half shows the distribution of HEXACO dimensions for the internal (vs. external) whistleblowing decision ( $N = 631$ ). Boxplots in the violins indicate 25% quartile, median, and 75% quartile.

### Hypothesis Testing

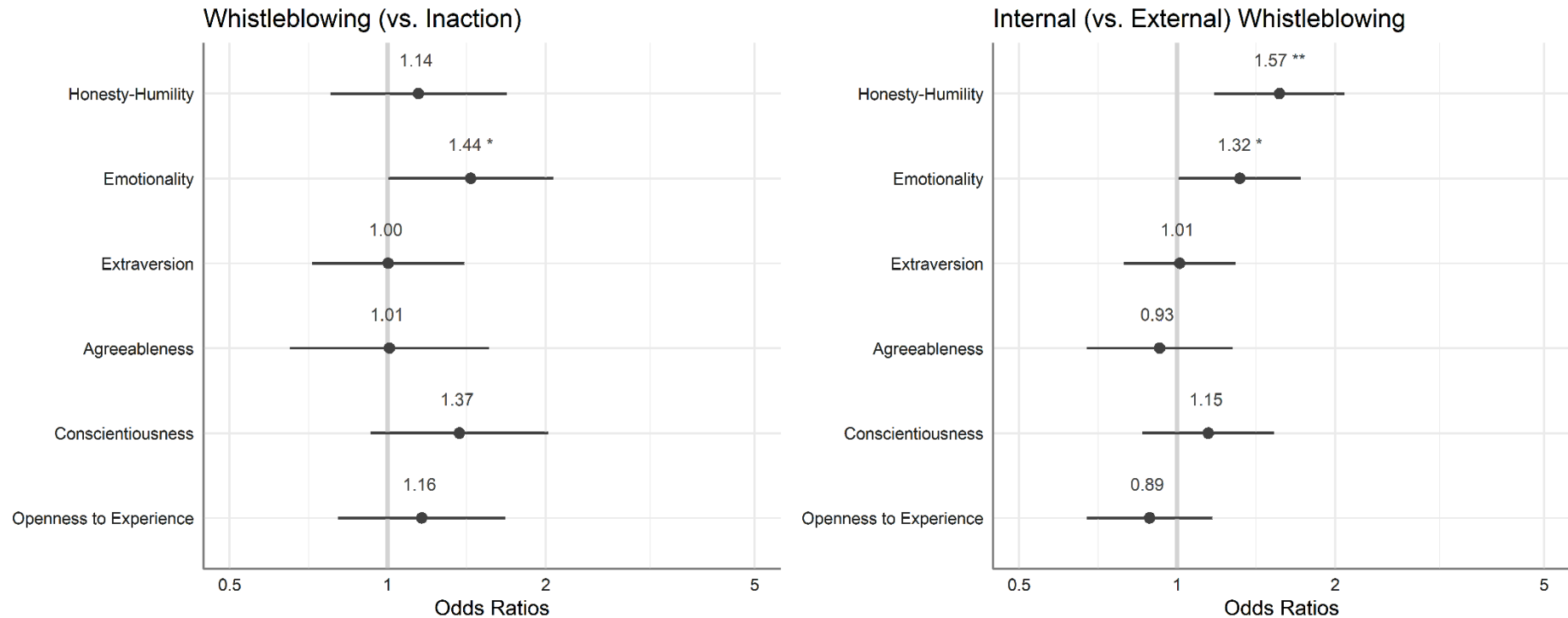
We tested our hypotheses with logistic regression analyses and entered the personality predictors as mean-centered variables. To test Hypothesis 1, which stated a positive effect of Honesty-Humility on the whistleblowing (vs. inaction) decision, we regressed the decision for whistleblowing (vs. inaction; coded as 0 = *inaction* and 1 = *whistleblowing*) onto Honesty-Humility. This analysis revealed a non-significant relationship,  $b = 0.26$ ,  $SE(b) =$

0.19, 95% CI for  $b$  [-0.10, 0.63],  $p = .161$ ,  $OR = 1.30$ , 95% CI for  $OR$  [0.90, 1.88],  $R^2_{Nagelkerke} = .01$ . We then conducted a second logistic regression analysis testing this hypothesis by entering all six HEXACO dimensions as simultaneous predictors of the whistleblowing (vs. inaction) decision. The results of this model are shown in Table A6.1 and Figure 6.3. All predictors including Honesty-Humility were non-significantly associated with whistleblowing (vs. inaction), except for a “suggestive evidence” effect of Emotionality,  $OR = 1.44$ ,  $p = .048$ . Descriptively, the six HEXACO dimensions jointly explained 3% of the variance in the whistleblowing (vs. inaction) decision. Taken together, we found no support for Hypothesis 1.

To test Hypothesis 2, which predicted a positive effect of Agreeableness on the internal (vs. external) whistleblowing decision, we regressed this decision (coded as 0 = *external whistleblowing* and 1 = *internal whistleblowing*) onto Agreeableness. Agreeableness did not significantly predict internal (vs. external) whistleblowing,  $b = -0.04$ ,  $SE(b) = 0.16$ , 95% CI for  $b$  [-0.35, 0.27],  $p = .818$ ,  $OR = 0.96$ , 95% CI for  $OR$  [0.71, 1.31],  $R^2_{Nagelkerke} < .01$ . Moreover, this effect remained non-significant when we controlled for the shared variance with the other five HEXACO dimensions (see Table A6.2 and Figure 6.3). Hence, results yielded no evidence for Hypothesis 2. In this analysis, Honesty-Humility was a significant (yet unexpected) predictor of internal (vs. external) whistleblowing,  $OR = 1.57$ ,  $p = .002$ . In addition, there was “suggestive evidence” for an effect of Emotionality,  $OR = 1.32$ ,  $p = .044$ . In sum, the six HEXACO dimensions accounted for 4% of the variance in the internal (vs. external) whistleblowing decision.

**Figure 6.3**

*Multiple Logistic Regression Analyses Predicting Whistleblowing (vs. Inaction) and Internal (vs. External) Whistleblowing.*



*Note.* The model on the left side shows the prediction of the whistleblowing (vs. inaction) decision, coded as 0 = *inaction* and 1 = *whistleblowing*. The model on the right side shows the prediction of the decision for internal whistleblowing (vs. external) whistleblowing, coded as 0 = *external whistleblowing* and 1 = *internal whistleblowing*. Whiskers represent 95% confidence intervals of the point estimates. All personality dimensions are mean-centered. The intercepts are omitted.

## Exploratory Analyses

In the HEXACO model of personality, traits are hierarchically structured with each of the six HEXACO dimensions comprising four facets (Ashton & Lee, 2007, 2009).

Definitions of these facets can be found on [hexaco.org](http://hexaco.org). One possible explanation for the non-significant effects in our confirmatory analyses is that some of the facets exerted opposite effects on the whistleblowing decisions, and consequently canceled each other out. To test this explanation, we separately regressed both whistleblowing decisions on the four facets of Honesty-Humility and the four facets of Agreeableness simultaneously (see Table A6.3 for the correlations and internal consistencies of these facets). On the whistleblowing (vs. inaction) decision, we found “suggestive evidence” for a positive effect of the Modesty facet,  $OR = 1.39, p = .013$ , but no other significant effects (see Table A6.4). These eight facets explained 4% of the variance in this whistleblowing decision. On the internal (vs. external) whistleblowing decision, we found none of the Agreeableness facets to be significantly associated with that decision, but interestingly, a positive “suggestive evidence” effect of the Greed Avoidance facet of Honesty-Humility,  $OR = 1.24, p = .031$  (see Table A6.5). These eight facets accounted for 4% of the variance in this whistleblowing decision.

## Discussion

The present research focused on the personality traits underlying the decisions pro whistleblowing (vs. inaction) and pro internal (vs. external) whistleblowing. Our predictions were that HEXACO Honesty-Humility would predict the whistleblowing (vs. inaction) decision and that HEXACO Agreeableness would predict the internal (vs. external) whistleblowing decision, but our hypotheses were not supported.

Specifically, we found no evidence that Agreeableness is relevant for either of the two whistleblowing decisions, neither when considering the Agreeableness dimensions nor its facets. Honesty-Humility, however, seems to be relevant for whistleblowing, but contrary to

our expectations, not for the whistleblowing (vs. inaction) decision but for the internal (vs. external) whistleblowing decision: Higher levels of Honesty-Humility were associated with an increased likelihood of internal (vs. external) whistleblowing. This in line with a recent study reporting that Honesty-Humility predicted intentions for internal whistleblowing but not for external whistleblowing (Helzer et al., 2022).

Importantly, our exploratory findings suggested that the HEXACO Honesty-Humility might be too broad for the whistleblowing context and that considering the facets of this dimensions is warranted. Precisely, we found suggestive evidence for an effect of one Honesty-Humility facet—Modesty—on the whistleblowing (vs. inaction) decision and suggestive evidence for an effect of another facet of Honesty-Humility—Greed Avoidance—on the internal (vs. external) whistleblowing decision.

Another interesting yet unexpected finding was that HEXACO Emotionality played a role for both types of whistleblowing decisions: Emotionality predicted the decision to blow the whistle (vs. inaction) and the decision for internal (vs. external) whistleblowing positively. We do not want to overemphasize these effects because they were not hypothesized and the strength of evidence for these effects correspond to “suggestive evidence” only. However, one explanation is that the scenario in our study described an organizational wrongdoing in the health sector (i.e., cost savings at a hospital) and Emotionality as conceptualized in the HEXACO model also encompasses fearfulness concerning physical danger (Ashton et al., 2014). Thus, it might be that the specific context of our scenario activated Emotionality. It might be plausible that Emotionality is only relevant for health-related wrongdoings but not for, for instance, financial malpractices. Future research should use multiple scenarios within the same study to scrutinize which personality effects generalize across whistleblowing scenarios (see Judd et al., 2012).

All in all, our study suggested that the role of broad personality dimensions as well as of narrow, facet-level personality traits on whistleblowing is limited: The six HEXACO dimensions jointly explained only 3% and 4% of the variance in the whistleblowing (vs. inaction) decision and in the internal (vs. external) whistleblowing decision, respectively. In fact, this finding corroborates Near and Miceli's (1996) proposition that person-variables (such as personality) play a limited role in the context of whistleblowing. It could be that situational factors are more important for the whistleblowing decision-making process (see Dungan et al., 2019; Mesmer-Magnus & Viswesvaran, 2005) than personality factors, although situation-related and person-related factors are not independent of one another (Furr & Funder, 2021). From a practical perspective, it would be good news if whistleblowing decisions were mostly predicted by situational factors, as this implies that organizations may encourage the use of internal whistleblowing channels (as compared to external reporting channels) through interventions such as educating staff about whistleblowing procedures (see Dungan et al., 2019). Nonetheless, our results indicate that dispositional Honesty-Humility might be another (yet rather small) factor in this decision. This also implies that considering Honesty-Humility in hiring procedures (for example, in a job interview, see Pike et al., 2021) might be a good idea because candidates with higher levels of this trait are more willing to choose an internal and thus less confrontative way of dealing with evidence of potential organizational misconduct.

### **Strength, Limitations, and Future Research Directions**

From a methodological perspective, our study had several strengths. First, our study scenario seemingly succeeded in describing an organizational practice that was perceived as immoral but without creating ceiling effects with regard to the whistleblowing decisions. Second, our results are based on a large sample ( $N = 724$ ) and an alpha level of 0.5% which decreases the risk of false-positive discoveries (Benjamin et al., 2018). Third, we measured

our independent variables (i.e., the HEXACO dimensions) and our outcomes (i.e., the two whistleblowing decisions) with a time lag of one week, thereby minimizing demand characteristics of our materials and instructions.

Nonetheless, some limitations of the current research are worth noting. First, our study was correlational and thus does not allow for causal inference. More specifically, we cannot rule out that variables other than the ones we measured influenced our results. Second, we used a scenario design in which our outcome variables were non-consequential for participants. This analytic decision was implied by the fact we could have hardly reached our sample size in lab-based whistleblowing paradigms that allows measuring actual whistleblowing behavior (e.g., immersive behavioral paradigms; see Bocchiaro et al., 2012; or within economic games; see Butler et al., 2020). However, we acknowledge that we do not know whether our results generalize to actual whistleblowing behavior in which the negative consequences for whistleblowing (e.g., negative reactions from co-workers, legal repercussions, or career disadvantages) are truly immersive. Third, our findings are based on the HEXACO-60 questionnaire (Ashton & Lee, 2009) which is suitable to measure the six HEXACO dimensions reliably, but for facet-level analyses, this inventory might be too short as the facets are only measured with two or three items each. Future research should use the HEXACO-PI-R in its 100-item version (Lee & Ashton, 2018) when personality facets are of central interest.

Moreover, our operationalization of the internal (vs. external) whistleblowing decision only contrasted these two options; but in real-life, it is well-established that majority of external whistleblowers had raised their concerns internally before going public (Bjørkelo et al., 2011; Vandekerckhove & Phillips, 2019). As such, future research will benefit from modelling this decision as an iterative process with the possibility of reporting one's concerns again in case the wrongdoing was not corrected after previous reports.

## **Conclusion**

Contrary to our expectations, we did not find evidence for our predictions that Honesty-Humility and Agreeableness would be uniquely associated with the decision to blow the whistle (vs. inaction) and to blow the whistle internally (vs. externally), respectively. Rather, Honesty-Humility seems to be relevant for the decision to blow the whistle internally (rather than externally). In addition, our study suggests that broad personality dimensions such as the HEXACO model might be too broad for the whistleblowing context and that narrow traits may outperform broad traits in the prediction of whistleblowing. We call for future research to test whether and under which circumstances narrow traits predict whistleblowing better than broad personality dimensions.



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## APPENDIX

Table A6.1

*Multiple Logistic Regression Analyses for Decision pro Whistleblowing (vs. Inaction)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>2.01</b>	<b>0.12</b>	<b>1.79</b>	<b>2.25</b>	<b>&lt; .001</b>	<b>7.49</b>	<b>5.94</b>	<b>9.44</b>
HH	0.14	0.20	-0.25	0.52	.493	1.14	0.78	1.69
<b>EM</b>	<b>0.36</b>	<b>0.18</b>	<b>0.00</b>	<b>0.73</b>	<b>.048</b>	<b>1.44</b>	<b>1.00</b>	<b>2.07</b>
EX	0.00	0.17	-0.33	0.34	.988	1.00	0.72	1.40
AG	0.01	0.22	-0.43	0.44	.971	1.01	0.65	1.56
CO	0.32	0.20	-0.07	0.71	.112	1.37	0.93	2.02
OP	0.15	0.19	-0.22	0.52	.424	1.16	0.80	1.68
<i>R</i> <sup>2</sup>	.03							

*Note.* The dependent variable was coded 0 = *inaction* and 1 = *whistleblowing*. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *SE* = standard error; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke's *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.



**Table A6.2**

*Multiple Logistic Regression Analyses for Decision for Internal (vs. External) Whistleblowing*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>0.60</b>	<b>0.08</b>	<b>0.43</b>	<b>0.76</b>	<b>&lt; .001</b>	<b>1.81</b>	<b>1.54</b>	<b>2.14</b>
<b>HH</b>	<b>0.45</b>	<b>0.15</b>	<b>0.17</b>	<b>0.74</b>	<b>.002</b>	<b>1.57</b>	<b>1.17</b>	<b>2.09</b>
<b>EM</b>	<b>0.27</b>	<b>0.14</b>	<b>0.01</b>	<b>0.54</b>	<b>.044</b>	<b>1.32</b>	<b>1.01</b>	<b>1.72</b>
EX	0.01	0.13	-0.23	0.26	.926	1.01	0.79	1.29
AG	-0.08	0.16	-0.40	0.24	.640	0.93	0.67	1.28
CO	0.14	0.15	-0.15	0.43	.354	1.15	0.86	1.53
OP	-0.12	0.14	-0.40	0.15	.390	0.87	0.67	1.17
<i>R</i> <sup>2</sup>	.04							

*Note.* The dependent variable was coded 0 = *external whistleblowing* and 1 = *internal whistleblowing*. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *SE* = standard error; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke's *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A6.3**

*Means, Standard Deviations, Correlations, and Internal Consistencies of Honesty-Humility and Agreeableness Facets*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. HH: Sincerity	3.48	0.83	.55 <i> [.50, .61]</i>							
2. HH: Fairness	3.26	1.01	.36** <i> [.30, .42]</i>	.70 <i> [.66, .74]</i>						
3. HH: Greed Avoidance	2.82	0.91	.24** <i> [.17, .31]</i>	.20** <i> [.13, .27]</i>	.50 <i> [.41, .59]</i>					
4. HH: Modesty	3.63	0.89	.19** <i> [.12, .26]</i>	.14** <i> [.06, .21]</i>	.25** <i> [.18, .32]</i>	.53 <i> [.45, .60]</i>				
5. AG: Forgiveness	2.84	0.98	.04 <i> [-.03, .12]</i>	.12** <i> [.05, .19]</i>	.05 <i> [-.02, .12]</i>	-.00 <i> [-.08, .07]</i>	.72 <i> [.67, .77]</i>			
6. AG: Gentleness	3.20	0.67	.08* <i> [.01, .15]</i>	.03 <i> [-.05, .10]</i>	.04 <i> [-.03, .11]</i>	.11** <i> [.04, .18]</i>	.25** <i> [.18, .32]</i>	.37 <i> [.29, .45]</i>		
7. AG: Flexibility	3.09	0.66	.02 <i> [-.05, .10]</i>	.10** <i> [.02, .17]</i>	.02 <i> [-.05, .09]</i>	.08* <i> [.00, .15]</i>	.23** <i> [.16, .29]</i>	.31** <i> [.24, .37]</i>	.35 <i> [.27, .43]</i>	
8. AG: Patience	3.44	0.96	.01 <i> [-.06, .08]</i>	.05 <i> [-.02, .12]</i>	.08* <i> [.00, .15]</i>	.05 <i> [-.02, .12]</i>	.17** <i> [.10, .24]</i>	.32** <i> [.25, .38]</i>	.37** <i> [.31, .43]</i>	.64 <i> [.59, .70]</i>

*Note.* The HEXACO items were assessed on five-point response scales, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. *M* and *SD* represent mean and standard deviation, respectively. Values in square brackets indicate 95% confidence intervals. Values on the diagonal in italics represent Cronbach's  $\alpha$  for all facets that were measured with three items (i.e., Sincerity, Fairness, Gentleness and Flexibility). Values on the diagonal for two-item facets (i.e., Greed Avoidance, Modesty, Forgiveness, and Patience) represent Spearman-Brown coefficients with bootstrapped confidence intervals (see Eisinga et al., 2013). \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Table A6.4**

*Multiple Logistic Regression Analyses Predicting the Decision Pro Whistleblowing (vs. Inaction) with the Honesty-Humility and Agreeableness Facets*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>2.03</b>	<b>0.12</b>	<b>1.80</b>	<b>2.27</b>	<b>&lt; .001</b>	<b>7.61</b>	<b>6.02</b>	<b>9.61</b>
HH: Sincerity	-0.17	0.15	-0.47	0.13	.277	0.85	0.62	1.14
HH: Fairness	0.16	0.13	-0.08	0.41	.192	1.18	0.92	1.51
HH: Greed Avoidance	-0.04	0.13	-0.31	0.22	.761	0.96	0.74	1.25
<b>HH: Modesty</b>	<b>0.33</b>	<b>0.13</b>	<b>0.07</b>	<b>0.59</b>	<b>.013</b>	<b>1.39</b>	<b>1.07</b>	<b>1.79</b>
AG: Forgiveness	-0.03	0.12	-0.27	0.21	.784	0.97	0.76	1.23
AG: Gentleness	0.37	0.19	-0.00	0.74	.051	1.44	1.00	2.08
AG: Flexibility	-0.11	0.19	-0.49	0.27	.583	0.90	0.62	1.31
AG: Patience	-0.17	0.13	-0.44	0.09	.204	0.84	0.65	1.10
<i>R</i> <sup>2</sup>	.04							

*Note.* The dependent variable was coded 0 = *inaction* and 1 = *whistleblowing*. HH = Honesty-Humility; AG = Agreeableness; *SE* = standard error; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke's *R*<sup>2</sup>. All personality facets are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A6.5**

*Multiple Logistic Regression Analyses Predicting the Decision Pro Internal (vs. External) Whistleblowing with the Honesty-Humility and Agreeableness Facets*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>0.61</b>	<b>0.08</b>	<b>0.45</b>	<b>0.78</b>	<b>&lt; .001</b>	<b>1.84</b>	<b>1.58</b>	<b>2.17</b>
HH: Sincerity	0.21	0.11	-0.01	0.44	.057	1.24	0.99	1.54
HH: Fairness	0.14	0.09	-0.04	0.31	.130	1.15	0.96	1.37
<b>HH: Greed Avoidance</b>	<b>0.21</b>	<b>0.10</b>	<b>0.02</b>	<b>0.41</b>	<b>.031</b>	<b>1.24</b>	<b>1.02</b>	<b>1.50</b>
HH: Modesty	-0.12	0.10	-0.32	0.08	.231	0.89	0.73	1.08
AG: Forgiveness	0.10	0.09	-0.07	0.28	.256	1.11	0.93	1.32
AG: Gentleness	-0.10	0.14	-0.38	0.17	.453	0.90	0.69	1.18
AG: Flexibility	-0.14	0.15	-0.43	0.14	.329	0.87	0.65	1.15
AG: Patience	0.01	0.10	-0.19	0.20	.928	1.01	0.83	1.23
<i>R</i> <sup>2</sup>	.04							

*Note.* The dependent variable was coded 0 = external whistleblowing and 1 = internal whistleblowing. HH = Honesty-Humility; AG = Agreeableness; *SE* = standard error; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke's *R*<sup>2</sup>. All personality facets are mean-centered. Predictors with *p* < .05 are printed in bold.

**7 Manuscript 4: Whistleblowing and the HEXACO model of personality: Evidence from an autobiographical recall study**

**Whistleblowing and the HEXACO Model of Personality: Evidence from an  
Autobiographical Recall Study**

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### **Abstract**

Whistleblowing is an important mechanism that enables the detection of organizational wrongdoing, however, research on broad personality dimensions underlying whistleblowing decisions is scarce. In the present study, we investigated the effects of the six HEXACO dimensions on autobiographically recalled whistleblowing instances. We found that Honesty-Humility, Emotionality, Agreeableness, and Conscientiousness shaped different stages of the whistleblowing process, and that these personality effects were partially of considerable size. Our findings challenge previous notions that person-related factors play a limited role for whistleblowing and highlight the suitability of the HEXACO model for whistleblowing research. Although our study provides substantial empirical evidence for the role of personality for whistleblowing, we call for research in more controlled settings to investigate the psychological mechanisms that translate traits into whistleblowing behavior.

[124 words]

*Keywords:* whistleblowing, personality, HEXACO, wrongdoing, retaliation.

## **Whistleblowing and the HEXACO Model of Personality: Evidence from an Autobiographical Recall Study**

In recent years, several instances of organizational malpractices have gained public interest: Recall, for example, the so-called “Wirecard scandal,” an instance of large-scale financial corporate fraud (McCrum, 2019; McCrum et al., 2021), Donald Trump’s “Ukraine scandal,” an instance of abuse of political power (Miller et al., 2019), or the case of scientific fraud committed by Diederik Stapel (Bhattacharjee, 2013). These cases seem unlike at first sight, but they have something in common: All of them have been exposed by whistleblowers, which anecdotally illustrates that whistleblowing is an important mechanism enabling the detection of wrongdoing in organizational contexts (Miceli & Near, 2005).

By definition, whistleblowers are former or current organization members that disclose “illegal, immoral, or illegitimate practices under the control of their employers, to person or organizations that may be able to effect action.” (Near & Miceli, 1985, p. 4). The fact that whistleblowers reports moral or legal norm violations that occurred *under the control of their employers* implicates an inherent moral dilemma—that is, in essence, a trade-off between integrity and loyalty (Jubb, 1999). On the one hand, whistleblowers intend to stop an organizational wrongdoing, thereby demonstrating integrity towards those who might be harmed by the organizational practice. On the other hand, blowing the whistle—particularly to persons or institutions outside of one’s organization—is often seen as incompatible with the organization’s interests, and therefore as a breach of loyalty (Dungan et al., 2015). Potentially as a result of this moral dilemma, many whistleblowers experience considerable reprisals in response to their actions, for example career disadvantages or being ostracized by colleagues (Rehg et al., 2008; Rothschild & Miethe, 1999).

Motivated by the importance of whistleblowing as a means to detect organizational wrongdoing, scholars from management science, psychology and other fields have been



investigating the conditions under which organization members blow the whistle vs. remain silent about an observed organizational wrongdoing since the 1980s (e.g., Brabeck, 1984; Dozier & Miceli, 1985; Near & Miceli, 1985). A meta-analysis published in 2005 synthesized quantitative studies on the predictors of whistleblowing (Mesmer-Magnus & Viswesvaran, 2005) by focusing on the effects of (1) characteristics of the whistleblower (e.g., age or job level), (2) contextual variables (e.g., organizational climate or supervisor support), and (3) characteristics of the wrongdoing (e.g., seriousness of the wrongdoing or strength of evidence for the wrongdoing) on whistleblowing behavior and whistleblowing intentions. It is interesting to note that this influential review did not include any *personality characteristics* that relate to whistleblowing. And even today, 17 years after this meta-analysis was published, empirical studies on the role of personality traits for whistleblowing behavior are still surprisingly scarce.

There are some studies pointing at personality traits that might be relevant for whistleblowing—for example, Locus of Control (Chiu, 2003; but also see Miceli et al., 1991), Machiavellianism (Dalton & Radtke, 2013), or Proactive Personality (Miceli et al., 2012). However, most of these traits are conceptually very or narrow (or “specific”) in sense that they reflect a limited bandwidth of behaviors, cognitions or emotions. By contrast, we know much less about which broad (or, “global”) traits—that is, traits encompassing a broader and more heterogeneous range of behaviors, cognitions or emotions—predict whistleblowing.

The scarcity of studies focusing on broad personality traits in the context of whistleblowing is problematic given that broad personality traits are better suited to explain behavior rather than merely predicting it. As Funder (1991) noted: “The more global a trait is, the more explanatory power it has. Connections between apparently distal phenomena are the most revealing of the deep structure of nature” (p. 35f.). Moreover, the usage of broad

personality traits is recommendable because taxonomies of global personality traits—specifically, the HEXACO model (Ashton & Lee, 2007) or the Big Five (Goldberg, 1990; John, 2021) respectively the Five Factor Model (FFM; McCrae & Costa, 1987, 2008)—capture the personality space *comprehensively* with a few broad dimensions only. Therefore, such basic trait taxonomies allow to estimate the overall predictive power of personality on whistleblowing.

## Literature Review

In order to validate our argument that the empirical literature on the associations of broad personality traits with whistleblowing is underdeveloped, we conducted a systematic (yet small-scale) literature search. More specifically, we searched for published articles in three databases for psychological and economic literature (*PsychInfo*, *PsychArticles*, and *EconLit*).<sup>22</sup> This search yielded only four results (i.e., Bjørkelo et al., 2010; Bocchiario et al., 2012; Helzer et al., 2022; Liu et al., 2016) of which one did not measure any Big Five, FFM, or HEXACO traits (Liu et al., 2016). We briefly discuss the findings of the other three studies in the following.<sup>23</sup>

Bjørkelo et al. (2010) conducted an autobiographical recall study in a sample of approx. 500 Norwegian municipal employees. Participants first completed a personality questionnaire assessing the FFM dimensions. Next, participants read a whistleblowing definition and were asked whether they had blown the whistle never, once, or more than once. Results of an ordinal logistic regression indicated that higher levels of FFM

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<sup>22</sup> This search, conducted in February 2022, used the following search string: (whistleblow\* OR whistle-blow\* OR whistle blow\*) AND (HEXACO OR Five Factor Model OR FFM OR Big Five OR BIG-5 OR Honesty-Humility OR Emotionality OR Neuroticism OR Extraversion OR Agreeableness OR Conscientiousness OR Openness to Experience).

<sup>23</sup> We are also aware of one additional study investigating whether or not HEXACO Honesty-Humility predicts whistleblowing (Bartuli et al., 2016). However, given that this study is a preprint and thus has not undergone peer-review yet, we refrain from discussing this manuscript in this section.

Extraversion and lower levels of FFM Agreeableness were associated with more autobiographic instances of whistleblowing.

Bocchiaro et al. (2012) developed a lab paradigm to operationalize whistleblowing in an immersive setting. Participants (who were university students) were invited to the lab and confronted with an unethical request by an experimenter: They were asked to write a testimonial of a potentially harmful study. Whistleblowing was operationalized as a behavioral measure, that is, whether or not participants informed the local ethics committee about the unethical behavior of the experimenter by leaving a note in a postbox. In this study, researchers tested whether whistleblowers scored differently on the six HEXACO dimensions than non-whistleblowers, and results suggested non-significant differences between these two groups of participants.

Helzer et al. (2022) focused on the role of HEXACO Honesty-Humility (but not the other five HEXACO dimensions) for whistleblowing. These authors developed a simulation (i.e., a text-based description of a fictional situation with multiple iterations) in which participants learned about accounting irregularities at work. More specifically, participants imagined working for a tech company and, over the course of four rounds, gained more and more information about a potentially illegal and unethical accounting practice. After each round, participants rated their intention to blow the whistle internally (i.e., reporting the wrongdoing to the corporate office) and their intention to blow the whistle externally (e.g., reporting the wrongdoing to the media). Results revealed that higher levels of Honesty-Humility related to more internal whistleblowing intentions, but not to more or less external whistleblowing intentions.

Taken together, these three studies provide vital first insights into the dispositional basis of whistleblowing, but their results are inconclusive: For instance, Honesty-Humility predicted internal whistleblowing intentions in one study (Helzer et al., 2022), but it did not

predict whistleblowing behavior in another (Bocchiaro et al., 2012). And in a third study, FFM Agreeableness, which is conceptually distinct yet empirically related to HEXACO Honesty-Humility (Ashton et al., 2014; Thielmann, Moshagen, et al., 2021), even negatively predicted whistleblowing (Bjørkelo et al., 2010). There are several explanations for these inconsistencies. First, it could be that the positive effect of Honesty-Humility only occurs for whistleblowing intentions (see Helzer et al., 2022) but does not translate to whistleblowing behavior (see Bocchiaro et al., 2012). Second, it could be that the non-significant effect of Honesty-Humility on whistleblowing behavior in the study reported by Bocchiaro et al. (2012) was a “false negative,” for example due to a limited sample size. Third, it could be that conceptual differences between HEXACO Honesty-Humility and FFM Agreeableness explain why the latter exerted negative effects on whistleblowing (see Bjørkelo et al., 2010) while the former seemingly exerts non-significant or even positive effects on whistleblowing (Bocchiaro et al., 2012; Helzer et al., 2022).

To resolve this inconsistency, a study which (1) measures whistleblowing behavior (rather than whistleblowing intentions), (2) has a sufficient sample size, and (3) measures the HEXACO rather than the FFM dimensions is needed. This motivated us to investigate the effects of the HEXACO dimensions on whistleblowing in an autobiographical recall study. This methodological decision was implied by the fact that autobiographical recall studies allow the assessment of actual (although self-reported) whistleblowing behavior while enabling the recruitment of large samples due to the possibility of conducting them online.

### **Theoretical Predictions**

Whistleblowing is not a single “one-off decision,” but rather a process that—at the very least—comprises two decisions to be made by the organization member: Whether or not an organizational practice is judged as morally (or legally) wrong and whether or not this

practice should be reported to someone who could act against it (Near & Miceli, 1985).<sup>24</sup> If both of these decisions have been affirmed, the organization member arguably also needs to decide to whom they should report the observed wrongdoing. First, a wrongdoing may be addressed by confronting the wrongdoer and demanding that they stop (and potentially correct) their actions (Jubb, 1999; also see Kaptein, 2011). Second, the organization member may inform someone within their organization (e.g., the management or an ombudsperson), a response that has been labeled “internal whistleblowing.” Third, the organization member may report the wrongdoing to someone external to the organization (e.g., to the media or to the authorities), which is known as “external whistleblowing” (see Dworkin & Baucus, 1998).

We will argue in the following that personality may shape the whistleblowing process at all of these stages, that is, whether or not a wrongdoing has been observed (henceforth: “wrongdoing observation”), if so, whether or not this wrongdoing has been reported to someone who could act against it (henceforth: “reporting of wrongdoing”), and if so, to whom the wrongdoing has been reported by distinguishing between “wrongdoer confrontation”, “internal whistleblowing” and “external whistleblowing.” We derive specific hypotheses about the effects of the HEXACO dimensions on whistleblowing (and the other whistleblowing-related outcomes) in the following section.

### ***Personality Effects on Wrongdoing Observation***

Personality may influence how readily organization members perceive and interpret an organizational activity as morally wrong. Specifically, Honesty-Humility should become

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<sup>24</sup> Note that other models of the whistleblowing decision-making process comprise additional phases, for example assuming personal responsibility for correcting the observed wrongdoing (Dozier & Miceli, 1985; Miceli et al., 2008). However, the main scope of this work was to collect autobiographical instances of *behavior* and these additional stages of the whistleblowing process do not necessarily manifest in a specific behavior other than whistleblowing. Therefore, these stages of the whistleblowing process are out of scope for the current manuscript, although we acknowledge that they are important elements of the whistleblowing decision-making process.

activated at this stage (see Manuscript 1 of this dissertation). By definition, Honesty-Humility captures “the tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation.” (Ashton & Lee, 2007, p. 156). This dimension contrasts characteristics such as being sincere, modest and fair-minded with being sly, pretentious, and hypocritical (Ashton & Lee, 2007). In whistleblowing situations, organizational wrongdoings usually harm or exploit people other than the whistleblower themselves (e.g., colleagues, customers, or other stakeholder; Vandekerckhove et al., 2013), and people with high levels of Honesty-Humility should have a low threshold of interpreting such activities as “wrong,” given their tendency of being fair-minded and their motivation to avoid hypocrisy. Thus, we predicted a positive association of Honesty-Humility with having observed (vs. not having observed) an illegal, immoral, or illegitimate practice under the control of one’s employer (Hypothesis 1a).

However, it is also plausible that personality shapes which work environments someone selects, in the sense that people with certain traits are more likely to apply for, work for, and stay in jobs or organizations that match their personality (e.g., Schneider, 1987). Coined to the context of whistleblowing, it seems plausible that people with high levels of Honesty-Humility select work environments which are less prone to unethical or illegal conduct, and therefore observe less organizational wrongdoing. We therefore also formulated a competitive hypothesis, predicting that Honesty-Humility is negatively associated with having observed (vs. not having observed) an illegal, immoral, or illegitimate practice under the control of one’s employer (Hypothesis 1b).

### ***Personality Effects on Reporting of Wrongdoing***

Among those who have observed wrongdoing in the context of their organization, personality might also influence whether or not they will to report it to a person or an institution that may be able to act against it. More specifically, building on the notion that

Honesty-Humility corresponds to a tendency for non-exploitation of others (De Vries et al., 2016; Thielmann et al., 2020; Zettler et al., 2020) and the idea that non-reporting an organizational wrongdoing could be seen as tolerating exploitation of others, we predicted that Honesty-Humility is positively related to having reported (vs. not having reported) the observed wrongdoing to a person or body that may be able to effect action (Hypothesis 2a).

Moreover, we expected Emotionality to be relevant for this whistleblowing decision. Emotionality is defined as “[...] tendencies relevant to the construct of kin altruism (Hamilton, 1964), including not only empathic concern and emotional attachment toward close others (who tend to be one’s kin) but also the harm-avoidant and help-seeking behaviors that are associated with investment in kin (see also Lee & Ashton, 2004).” (Ashton & Lee, 2007, p. 156). This dimension contrasts characteristics such as being fearful, anxious, and emotional as opposed to being brave, tough and stable (Ashton & Lee, 2007). Organization members who report malpractices at work are known to experience intimidation and other forms of social pressure from colleagues, arguably as an attempt to deter further reports of the wrongdoing (Gundlach et al., 2003). As such, reporting an organizational wrongdoing typically requires emotional stability and—to some extent—toughness. We therefore predicted that Emotionality is negatively related to having reported (vs. not having reported) the observed wrongdoing (Hypothesis 2b).

In addition, we expected Conscientiousness to be positively related to this whistleblowing decision. By definition, Conscientiousness denotes a tendency for “engagement in task-related endeavors (such as working, planning, and organizing)” (Ashton & Lee, 2007, p. 156). Characteristics of this personality dimension are being diligent, disciplined and careful as contrasted with being negligent, reckless, and irresponsible (Ashton & Lee, 2008). In most whistleblowing situations, more than one employee learns about the organizational wrongdoing and, thus, there is some potential for diffusion of responsibility

among those who observed the wrongdoing (e.g., Dozier & Miceli, 1985). In such a setting, we can expect that Conscientiousness corresponds to judgments of personal responsibility to correct the wrongdoing, which should eventually translate into more reporting of wrongdoing. We therefore predicted that Conscientiousness is positively related to having reported (vs. not having reported) the observed wrongdoing to a person or body who may be able to effect action (Hypothesis 2c).

### ***Personality Effects on Wrongdoer Confrontation, Internal and External Whistleblowing***

Personality arguably also shapes to whom a report of organizational wrongdoing is filed. Here, we assumed that Emotionality should be relevant for the decision to confront the wrongdoer. As we argued in the previous section, higher levels of this trait capture characteristics such as anxious or emotional (vs. brave and tough; Ashton & Lee, 2007). Coined to whistleblowing situations, individuals with high levels of Emotionality should be reluctant to criticize or expose a wrongdoer as they should be afraid of the emotionally stressful consequences of such a direct confrontation, for example verbal arguments. We therefore predicted that Emotionality is associated with less wrongdoer confrontation (Hypothesis 3a).

Moreover, we hypothesized that Agreeableness should be relevant for the decision to engage in internal and external whistleblowing. By definition, “Agreeableness represents the tendency to be forgiving and tolerant of others, in the sense of cooperating with others even when one might be suffering exploitation by them.” (Ashton & Lee, 2007, p. 156). The positive pole of this trait subsumes characteristics such as being patient, tolerant, and lenient, while the negative pole is represented by characteristics such as being quarrelsome, stubborn, or choleric (Ashton & Lee, 2007). Moreover, highly agreeable individuals tend to compromise and cooperate more following unfair conduct by others (Ashton et al., 2014). Following this idea, and assuming that internal whistleblowing represents a form of



continued cooperation with one's organization after the wrongdoing, we predicted that HEXACO Agreeableness is positively related to having reported the wrongdoing internally (Hypothesis 3b). Likewise, presuming that external whistleblowing constitutes a form of non-cooperation with one's organization after the wrongdoing, we predicted that HEXACO Agreeableness is negatively related to having reported the wrongdoing externally (Hypothesis 3c).

### ***Personality Effects on Experiencing Organizational Retaliation in Response to Reporting of Wrongdoing***

Lastly, personality is also likely to predict how much organizational retaliation someone who reported organizational wrongdoing experiences—or, perceives to experience—and we expected HEXACO Agreeableness to be relevant at this stage of the whistleblowing process, too. More specifically, given that HEXACO Agreeableness represents a tendency for mildness and leniency in response to others unfair behavior (Ashton et al., 2014; Ashton & Lee, 2007), we expected that people with higher levels of this trait should be less inclined to interpret certain ambivalent actions as retaliatory responses to one's report of the wrongdoing. By contrast, people with lower levels of HEXACO Agreeableness should readily perceive ambivalent actions of their employer—for example, a poor performance review—as an act of retaliation in response to their report of the wrongdoing. Hence, we predicted that Agreeableness should be negatively related to experiencing organizational retaliation in response to having reported a wrongdoing (Hypothesis 4).

### **The Present Study**

Table 7.1 summarizes the hypotheses we tested in the present study. We report how we determined our sample size, all exclusions, and all measured variables in this study (see Simmons et al., 2012). This study was pre-registered and the pre-registration document is available here: [https://osf.io/vca2y/?view\\_only=389ebfa21c6d4d81824500f6eac76d16](https://osf.io/vca2y/?view_only=389ebfa21c6d4d81824500f6eac76d16). Study

materials and analysis scripts can be found on the Open Science Framework (OSF; [https://osf.io/6x5af/?view\\_only=2adcaa5125c34ace8b342a077177bdbc](https://osf.io/6x5af/?view_only=2adcaa5125c34ace8b342a077177bdbc)). Due to the confidential nature of our research topic, we refrain from sharing our data set online.

This research was conducted in accordance with the ethical guidelines of the German Society for Psychology. Although not formally required, we obtained approval from our local ethics committee.

**Table 7.1***Overview of Hypotheses*

#	HEXACO Dimension	Whistleblowing-Related Outcome	Hypothesized Direction	Hypothesis
1a	Honesty-Humility	Wrongdoing Observation	positive	Hypothesis 1a: HEXACO Honesty-Humility is positively related to having observed (vs. not having observed) an illegal, immoral, or illegitimate practice under the control of one's employer.
1b	Honesty-Humility	Wrongdoing Observation	negative	Hypothesis 1b: HEXACO Honesty-Humility is negatively related to having observed (vs. not having observed) an illegal, immoral, or illegitimate practice under the control of one's employer.
2a	Honesty-Humility	Reporting of Wrongdoing	positive	Hypothesis 2a: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer, HEXACO Honesty-Humility is positively related to having reported (vs. not having reported) this practice to a person or body who may be able to effect action.
2b	Emotionality	Reporting of Wrongdoing	negative	Hypothesis 2b: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer, HEXACO Emotionality is negatively related to having reported (vs. not having reported) this practice to a person or body who may be able to effect action.
2c	Conscientiousness	Reporting of Wrongdoing	positive	Hypothesis 2c: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer, HEXACO Conscientiousness is positively related to having reported (vs. not having reported) this practice to a person or body who may be able to effect action.
3a	Emotionality	Wrongdoer Confrontation	negative	Hypothesis 3a: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer and reported this practice to a person or body who may have been able to effect action, HEXACO Emotionality is negatively related to having confronted (vs. not having confronted) the wrongdoer/s.
3b	Agreeableness	Internal Whistleblowing	positive	Hypothesis 3b: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer and reported this practice to a person or body who may have been able to effect action, HEXACO Agreeableness is positively related to having reported the wrongdoing internally (vs. not having reported the practice internally).
3c	Agreeableness	External Whistleblowing	negative	Hypothesis 3c: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer and reported this practice to a person or body who may have been able to effect action, HEXACO Agreeableness is negatively related to having reported the wrongdoing externally (vs. not having reported the practice externally).
4	Agreeableness	Organizational Retaliation	negative	Hypothesis 4: Among people who observed an illegal, immoral, or illegitimate practice under the control of their employer and reported this practice to a person or body who may have been able to effect action, HEXACO Agreeableness is negatively related to having experienced retaliation in response to one's report.

## Methods

### *Materials*

**Personality.** We employed the German version (Moshagen et al., 2014) of the HEXACO-60 (Ashton & Lee, 2009) with five-point rating scales ranging from 1 = *strongly disagree* to 5 = *strongly agree*. All items were presented in random order on one survey page. Internal consistencies for all HEXACO dimensions are shown in Table 7.3. An instructed attention check item was embedded in the HEXACO questionnaire (see Meade & Craig, 2012).<sup>25</sup>

**Whistleblowing-Related Outcomes.** Following the idea that whistleblowing is a sequential process encompassing (1) the observation of wrongdoing, (2) a decision whether or not to report it, and (3) a decision to whom to report the wrongdoing, we implemented a survey mirroring these three decision stages. Specifically, we first asked participants whether or not they had observed wrongdoing, and asked only those who had observed wrongdoing whether or not they had reported it. Likewise, we asked only those who indicated that they had reported a wrongdoing to someone with the capacity of acting against it, to whom this report was directed. Lastly, as we were also interested in the experience of organizational retaliation in response to reporting wrongdoing, we asked those who indicated that they had reported the observed wrongdoing to what extent they had experienced retaliation from their employer or colleagues in response to their report.

To measure *wrongdoing observation*, we asked participants whether they had ever observed an illegal, illegitimate or immoral practice under the control for their employer (using yes/no as response options), thereby mirroring an influential whistleblowing definition

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<sup>25</sup> For exploratory purposes, we also assessed Justice Sensitivity (Schmitt et al., 2010) with its 8-item short inventory (Baumert et al., 2014) which measures the four perspectives (i.e., Victim Sensitivity, Observer Sensitivity, Perpetrator Sensitivity, and Beneficiary Sensitivity) with two items each. As the focus of our manuscript is the HEXACO model, we will not discuss the results for Justice Sensitivity further.

(Near & Miceli, 1985). To clarify what was meant by “under the control of their employer,” we explained that this could, for example, mean that this practice was performed at the request, with consent, or toleration of one’s employer. We explicitly instructed participants who had observed more than one wrongdoing to refer to the most serious case in all following questions.

To measure *reporting of wrongdoing*, we asked participants who had observed wrongdoing whether they had reported the wrongful practice. Responses options were (1) “No, I kept it for myself,” (2) “Yes, I reported it but only to friends/family,” and (3) “Yes, I reported it to someone who could take action.” As we were interested in reports that were made with the intention to change or stop the observed practice, we only interpreted the latter response category as reporting of wrongdoing.

To assess *wrongdoer confrontation* and *whistleblowing*, we asked participants who had indicated that they had reported the wrongful practice, to whom they had reported it. More specifically, this multiple-choice question distinguished (1) the wrongdoer(s), (2) internal persons or institutions, and (3) external persons or institutions (see study materials for details).

To measure *organizational retaliation*, we presented 15 retaliatory reactions of one’s organization or colleagues (e.g., relocation of workplace within the building) and asked participants whether or not they had experienced this in response to their report. The 15 statements were taken from a study by Rehg et al. (2008). “Yes” responses to the 15 items were counted within participants to obtain a global measure of organizational retaliation.<sup>26</sup>

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<sup>26</sup> In order to keep our survey short, we only selected statements from the study by Rehg et al. (2008) that were experienced by at least 5% of their sample. Moreover, we dropped one additional item that specifically referred to withdrawing staff/personnel because this item would only be meaningful for a subset of our participants (i.e., those working in a leadership role).

**Control Measures.** Our survey also included several control questions, for example the nature of the organizational wrongdoing (e.g., discrimination) or who was affected by the organizational wrongdoing (i.e., the whistleblower themselves, persons or institutions within the same organization, persons or institutions outside of this organization). In addition, we asked participants to judge the moral “wrongfulness” of the organizational wrongdoing with four rating scale items ( $\alpha = .77$ ). Participants also evaluated the extent to which their decision to report the organizational wrongdoing was carefully planned (rather than spontaneous) on four additional rating scale items ( $\alpha = .84$ ). Lastly, we also assessed whether or not participants believed that reporting the wrongdoing had been effective in the sense that it had terminated the wrongdoing. As these control measures are not central for our hypotheses testing, we refrain from reporting them in the following.

### *Procedure*

We first obtained informed consent from all participants. Participants then completed the personality measures. Next, participants read detailed instructions about the autobiographic recall part of this survey before they proceeded to the first whistleblowing-related question. After the autobiographic recall part was completed, participants were asked to provide basic demographic information and completed a “use me” item.<sup>27</sup> We then debriefed participants by informing them about the purposes of our study and provided contact information for any upcoming inquiries including requesting the results of this research. Lastly, as an incentive for participation, participants could voluntarily obtain automated, individualized feedback regarding their HEXACO scores.

### *Participants*

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<sup>27</sup> A use-me item asks participants explicitly whether or not they participated attentively and whether or not the researchers should use their data in their analyses (see Meade & Craig, 2012).

Participants were recruited through the WISO panel (for more information, see <https://www.wisopanel.net/>). We invited panel subscribers who (1) had indicated in a screening survey that they worked under a supervisor, and (2) who had signed up for the panel since the screening survey. Thus, sample size was limited by pragmatic constraints (i.e., the number of eligible participants in the panel) and we consequently refrained from conducting an a-priori power analysis. Instead, our sampling strategy was to collect as many responses as possible within two weeks.

On April 14th 2022, we invited 14,615 panel subscribers to our survey. The study was online until April 27th 2022. 1,141 participants began to participate and 971 individuals completed our survey. As preregistered, we excluded 62 participants who failed an instructed attention check item embedded in the HEXACO questionnaire and further 5 participants who negated the use-me item. Moreover, we analyzed signs of response overuse and response incoherence across the HEXACO items using the procedure and cut-off values suggested by Barends and De Vries (2019). This procedure led to the exclusion of further 30 participants. As a result, our final sample consisted of 874 participants.

504 participants identified as female, 364 as male, and six identified as “other” or did not indicate their gender. In order to maximize data privacy, we asked for participants’ age by providing response categories spanning 10 years (e.g., 20 to 29 years) rather than exact numbers. Most participants indicated that they were between 50 and 59 years old (28.95%). Only few participants were younger than 30 or older than 79 years old (see Table A7.1 for the complete age distribution).

Note that the autobiographical recall questions in our survey were only presented to those who had indicated that they currently worked under a supervisor. Thus, our hypotheses tests were based on smaller samples (see Figure 7.1). To estimate whether these sample sizes were sufficiently large, we conducted multiple power analyses for logistic regressions using

the *pwr2ppl* package for *R* (Aberson, 2019). Results showed that our sample was large enough to detect small effects ( $r = .10$ ) for wrongdoing observation, typical effect sizes ( $r = .20$ ) for reporting of wrongdoing and wrongdoer confrontation, and large effect sizes ( $r = .30$ ) for internal and external whistleblowing (see Gignac & Szodorai, 2016) with at least 90% power ( $1-\beta$ ) for the observed event ratios and a Type-1 error  $\alpha$  of 5% (see Table 7.2).



**Table 7.2***Power Analyses for Different Whistleblowing-Related Outcomes with Varying Effect Sizes*

Outcome	Observed Event Ratio	Effect Size		
		Small ( $r = .10$ )	Typical ( $r = .20$ )	Large ( $r = .30$ )
Wrongdoing Observation	199/596 = .33	<b>356</b>	<b>87</b>	<b>37</b>
Reporting of Wrongdoing	97/191 = .51	317	<b>77</b>	<b>33</b>
Wrongdoer Confrontation	44/96 = .46	319	<b>78</b>	<b>33</b>
Internal Whistleblowing	80/96 = .83	570	138	<b>59</b>
External Whistleblowing	12/96 = .13	723	176	<b>74</b>

*Note.* Cells contain required sample sizes for a logistic regression with one continuous predictor, given the observed event ratio, Type-1 error ( $\alpha$ ) = .05, and power ( $1 - \beta$ ) = .90. Numbers in bold represent required samples sizes that are below our achieved sample size, thus, our power was at least .90 for detecting effects of that size. Classification of effect sizes as small, typical, and large are based on Gignac & Szodorai (2016).

## Results

We used *R* (R Core Team, 2020) for data preprocessing and all statistical analyses.

We applied functions from the *tidyverse* (Wickham et al., 2019), *DescTools* (Signorell, 2020), *psych* (Revelle, 2021), and *sjPlot* (Lüdtke, 2021) packages, among others.

### *Descriptive Statistics*

The majority of observed wrongdoings pertained to instances of discrimination (21.11%), safety violations (17.59%), deception/forgery (15.58%), or power abuse (15.08%, see Table A7.2 for details). Participants who had observed wrongdoing in the context of their organization judged it as substantially morally wrong ( $M = 4.80$ ,  $SD = 1.20$ ; on a scale from 1 to 6).

Frequencies of our outcome variables—i.e., wrongdoing observation, reporting of wrongdoing, wrongdoer confrontation as well as internal and external whistleblowing—are

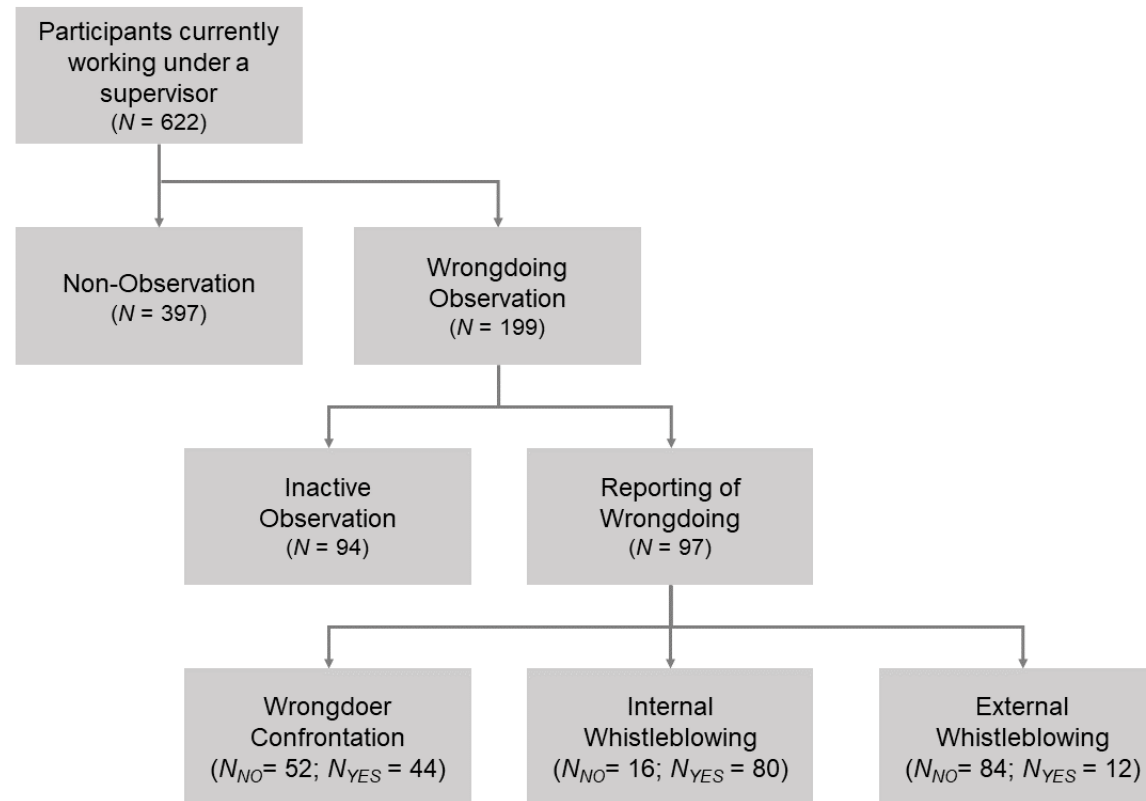
shown in Figure 7.1. Approximately one third of those who worked under a supervisor at the time of our survey had observed an illegal or immoral practice under the control of their employer. Of those, roughly half indicated that they had reported this wrongdoing, mostly by the means of internal whistleblowing or wrongdoer confrontation. Only a small portion of those who had reported an observed wrongdoing indicated that they had used external reporting channels. Means, standard deviations, and zero-order correlations of all HEXACO dimensions are shown in Table 7.3. Means and standard deviations of all six HEXACO dimensions broken down by the outcomes are shown in Table A7.3 and A7.4.

### ***Hypotheses Testing***

We conducted several regression analyses to test our hypotheses. We mean-centered the HEXACO dimensions for all analyses. For each hypothesis, we report one regression analysis with a single HEXACO dimension included (henceforth: “single-predictor analysis”) and one analysis entering all six HEXACO dimensions in order to account for shared variances among them (henceforth: “multiple-predictor analysis”).

**Figure 7.1**

*Frequencies of Wrongdoing Observation, Reporting of Wrongdoing, Wrongdoer Confrontation as well as Internal and External Whistleblowing*



*Note.* All autobiographical recall questions could be left unanswered. Therefore, the absolute frequencies across subcategories do not necessarily sum up to the absolute frequency of the higher-order category.

**Table 7.3**

*Means, Standard Deviations, Correlations, and Internal Consistencies for all Personality Variables*

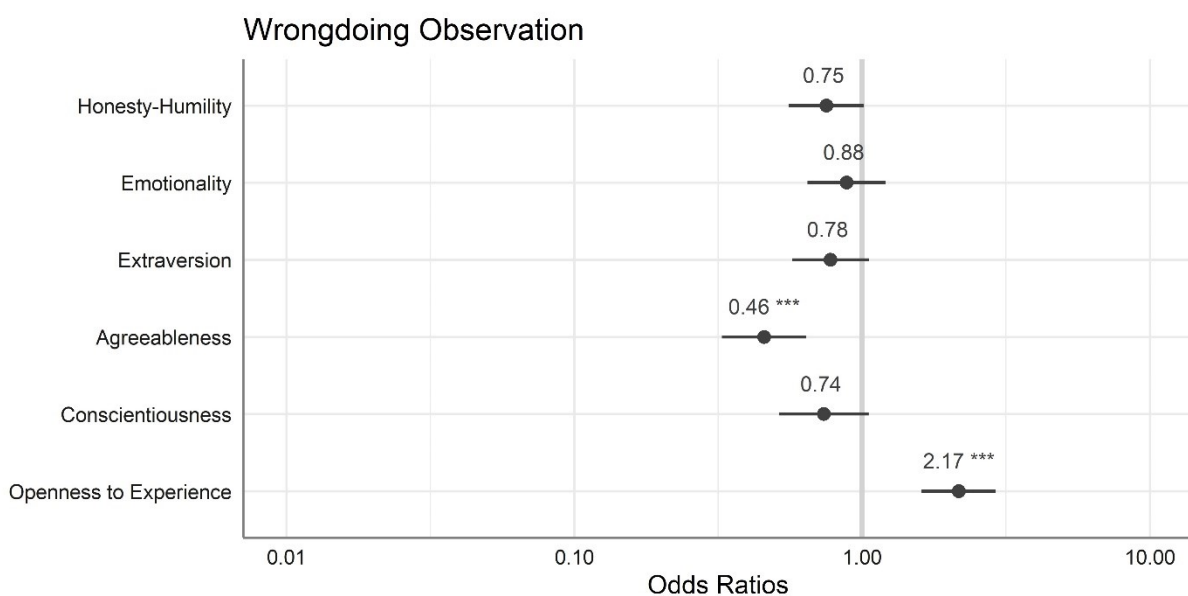
Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Honesty-Humility	3.69	0.62	.74 <i> [.71, .76]</i>					
2. Emotionality	3.07	0.62	-.11** <i> [-.18, -.05]</i>	.78 <i> [.76, .80]</i>				
3. Extraversion	3.32	0.63	.09** <i> [.02, .15]</i>	-.30** <i> [-.36, -.23]</i>	.80 <i> [.78, .82]</i>			
4. Agreeableness	3.16	0.56	.28** <i> [.22, .34]</i>	-.19** <i> [-.25, -.12]</i>	.18** <i> [.11, .24]</i>	.76 <i> [.73, .78]</i>		
5. Conscientiousness	3.63	0.52	.17** <i> [.11, .24]</i>	-.13** <i> [-.19, -.06]</i>	.21** <i> [.14, .27]</i>	.03 <i> [-.03, .10]</i>	.71 <i> [.68, .74]</i>	
6. Openness to Experience	3.37	0.68	.01 <i> [-.05, .08]</i>	-.05 <i> [-.11, .02]</i>	.28** <i> [.22, .34]</i>	.01 <i> [-.05, .08]</i>	.12** <i> [.05, .18]</i>	.77 <i> [.74, .79]</i>

*Note.* All HEXACO items were assessed on five-point response scales, ranging from 1 = *strongly disagree* to 5 = *strongly agree*. *M* and *SD* represent mean and standard deviation, respectively. Values in square brackets indicate 95% confidence intervals. Values on the diagonal in italics represent Cronbach's  $\alpha$ .  $N = 874$ . \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Prediction of Wrongdoing Observation.** We had predicted that Honesty-Humility could be positively (Hypothesis 1a) or negatively (Hypothesis 1b) associated with observing organizational wrongdoing. A logistic regression analysis with Honesty-Humility as a single predictor of this outcome yielded a negative association,  $OR = 0.64$ , 95% CI for  $OR [0.48, 0.84]$ ,  $p = .001$ ,  $R^2_{Nagelkerke} = .02$ , indicating that higher levels of this trait related to a decreased likelihood of having observed wrongdoing in the context of one's organization. However, this association turned non-significant when controlling for the shared variance of Honesty-Humility with the other five HEXACO dimensions in the multiple-predictor analysis,  $OR = 0.75$ ,  $p = .064$  (see Figure 7.2). Beyond our predictions, this multi-predictor analysis also suggested that higher levels of Agreeableness related to less wrongdoing observation,  $OR = 0.46$ ,  $p < .001$ , and that higher levels of Openness to Experience related to more wrongdoing observation,  $OR = 2.17$ ,  $p < .001$ . Altogether, the HEXACO dimensions explained 13.58% of the variance in wrongdoing observation (see Table A7.5).

**Figure 7.2**

*Multiple Logistic Regression Predicting Wrongdoing Observation*

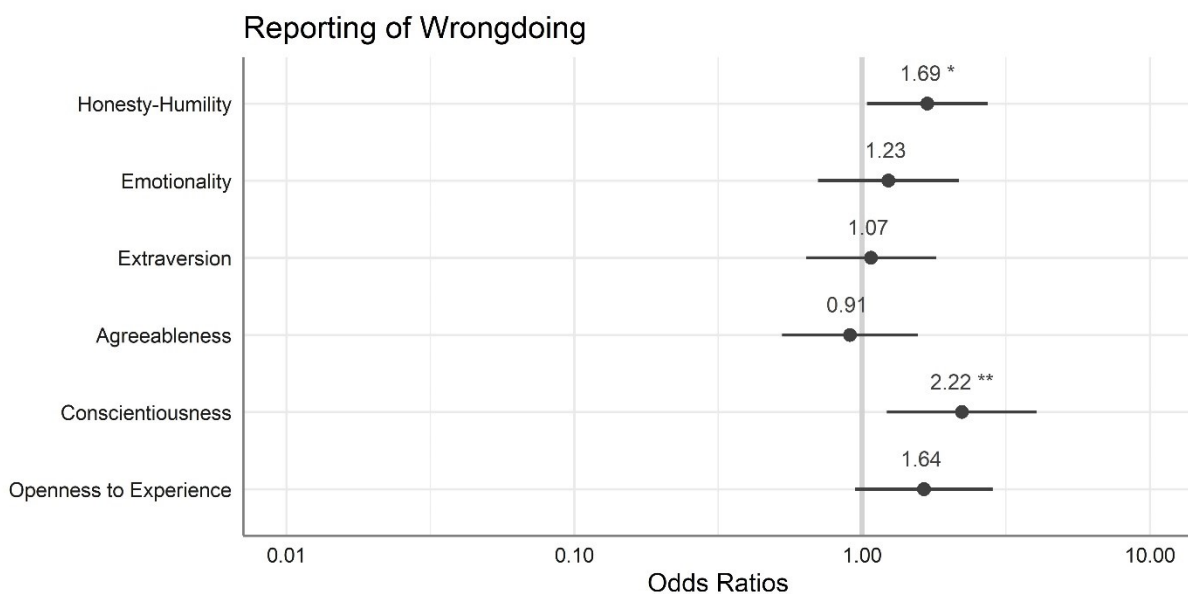


*Note.* The intercept is omitted in this figure. Error bars represent 95% confidence intervals. \*\*\* indicates  $p < .001$ .

**Prediction of Reporting of Wrongdoing.** We predicted a positive effect of Honesty-Humility (Hypothesis 2a), a negative effect of Emotionality (Hypothesis 2b), and a positive effect of Conscientiousness (Hypothesis 2c) on having reported the observed wrongdoing. As predicted, single-predictor analyses yielded a positive effect of Honesty-Humility,  $OR = 1.95$ , 95% CI for  $OR [1.25, 3.07]$ ,  $p = .004$ ,  $R^2_{Nagelkerke} = .06$ , and a positive effect of Conscientiousness,  $OR = 2.64$ , 95% CI for  $OR [1.49, 4.71]$ ,  $p < .001$ ,  $R^2_{Nagelkerke} = .08$ . Unlike expected, however, Emotionality did not predict reporting of wrongdoing,  $OR = 1.06$ , 95% CI for  $OR [0.66, 1.72]$ ,  $p = .801$ ,  $R^2_{Nagelkerke} < .01$ . A multiple-predictor analysis incorporating all six HEXACO dimensions mirrored these findings by yielding significant effects of Honesty-Humility  $OR = 1.69$ ,  $p = .035$ , and Conscientiousness  $OR = 2.22$ ,  $p = .009$ , but a non-significant effect of Emotionality,  $OR = 1.23$ ,  $p = .465$  (see Figure 7.3). The HEXACO dimensions jointly explained 15.19% of the variance in reporting of wrongdoing (see Table A7.6).

**Figure 7.3**

*Multiple Logistic Regression Predicting Reporting of Wrongdoing*

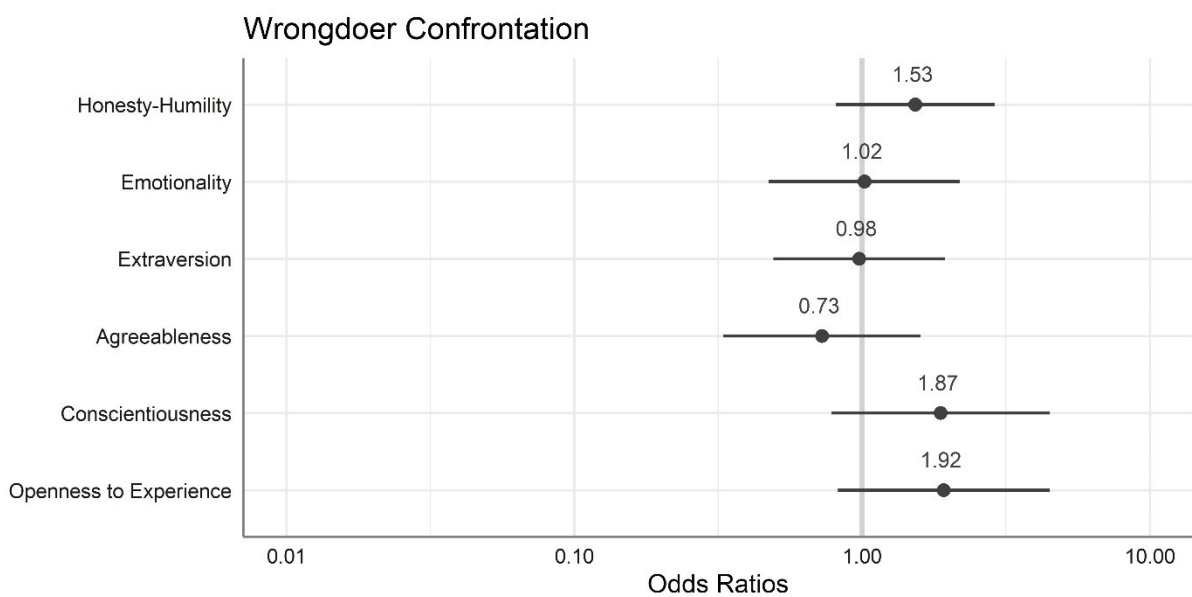


*Note.* The intercept is omitted in this figure. Error bars represent 95% confidence intervals. \* indicates  $p < .05$ . \*\* indicates  $p < .01$ .

**Prediction of Wrongdoer Confrontation.** Our hypothesis was that Emotionality would be negatively related to wrongdoer confrontation. Contrary to our expectation, the corresponding single-predictor logistic regression analysis revealed a non-significant association,  $OR = 0.89$ , 95% CI for  $OR [0.47, 1.67]$ ,  $p = .702$ ,  $R^2_{Nagelkerke} < .01$ . The effect of Emotionality on wrongdoer confrontation remained non-significant in a multiple logistic regression with all six HEXACO dimensions included,  $OR = 1.02$ ,  $p = .961$  (see Figure 7.4). The six HEXACO dimensions accounted for 11.18% of the variance in wrongdoer confrontation (see Table A7.7).

**Figure 7.4**

*Multiple Logistic Regression Predicting Wrongdoer Confrontation*

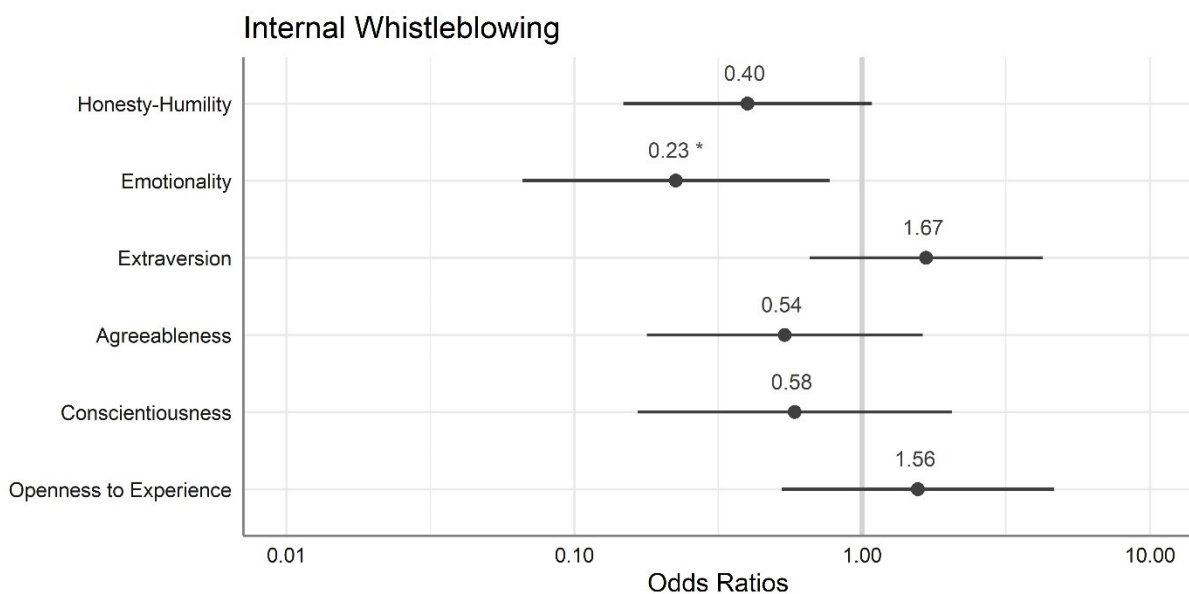


*Note.* The intercept is omitted in this figure. Error bars represent 95% confidence intervals.

**Prediction of Internal and External Whistleblowing.** We hypothesized that Agreeableness would be positively related to internal whistleblowing (Hypothesis 3b) and negatively related to external whistleblowing (Hypothesis 3c). Separate single-predictor logistic regressions yielded no support for these predictions: Agreeableness did neither predict internal whistleblowing,  $OR = 0.88$ , 95% CI for  $OR [0.34, 2.29]$ ,  $p = .804$ ,  $R^2_{Nagelkerke} < .01$ , nor external whistleblowing,  $OR = 0.97$ , 95% CI for  $OR [0.34, 2.79]$ ,  $p = .951$ ,  $R^2_{Nagelkerke} < .01$ . Turning to the multiple-predictor analysis, we found that the predicted effects of Agreeableness on internal and external whistleblowing remained non-significant,  $OR = 0.54$ ,  $p = .272$  and  $OR = 1.14$ ,  $p = .814$ , respectively (see Figure 7.5 and Figure 7.6). Beyond our predictions, we found that Emotionality exerted negative effects on internal whistleblowing,  $OR = 0.23$ ,  $p = .018$ . The six HEXACO dimensions accounted for 24.69% and 8.57% of the variance in internal and external whistleblowing, respectively (see Table A7.8 and A7.9).

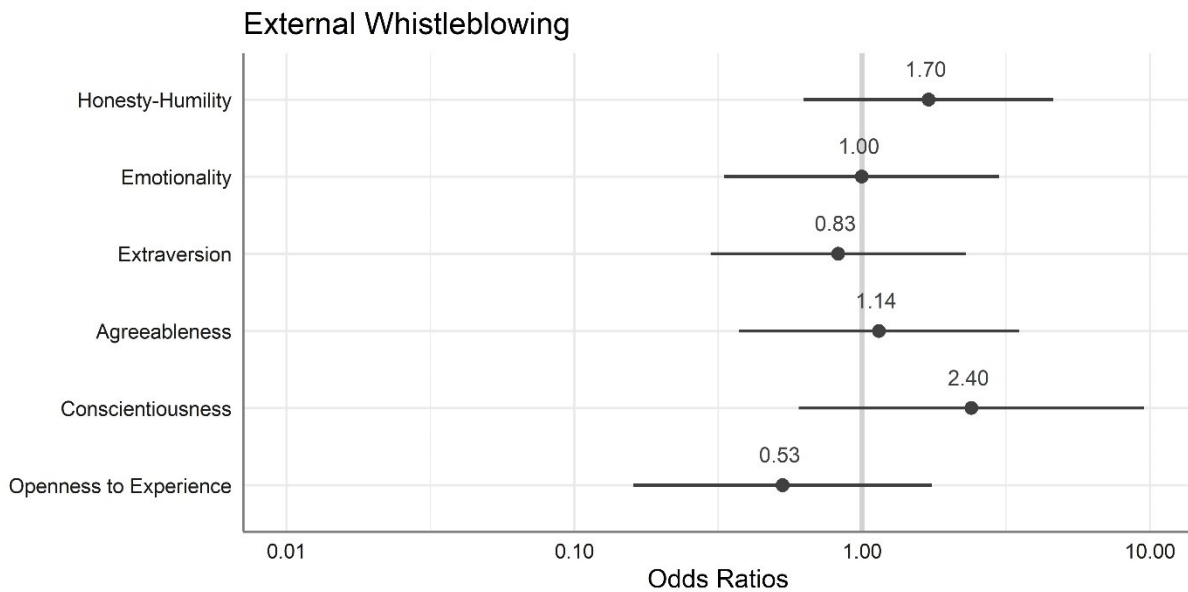
**Figure 7.5**

*Multiple Logistic Regression Predicting Internal Whistleblowing*



*Note.* The intercept is omitted in this figure. Error bars represent 95% confidence intervals. \* indicates  $p < .05$ .



**Figure 7.6***Multiple Logistic Regression Predicting External Whistleblowing*

*Note.* The intercept is omitted in this figure. Error bars represent 95% confidence intervals.

**Prediction of Experiencing Organizational Retaliation.** Descriptively, 61 of 90 (67.77%) participants who completed the retaliation items indicated that they had experienced at least one retaliatory reaction from their organization. The median number of experienced retaliatory activities was two. The most commonly experienced organizational retaliation activity was withholding of relevant information (34.44%), followed by verbal insults and intimidation (30.00%; see Table A7.10). In Hypothesis 4, we had predicted that Agreeableness would be negatively related to having experienced organizational retaliation in response to one's report of the wrongdoing. We tested this hypothesis with Poisson regressions as our outcome measure was a count variable. This analysis yielded non-significant effects of Agreeableness, both in the single-predictor,  $b = -0.12$ ,  $SE(b) = 0.10$ , 95% CI for  $b$   $[-0.33, 0.08]$ ,  $p = .238$ , as well as in the multiple-predictor analysis,  $b = -0.15$ ,  $p = .189$ . In the latter model, we found an unexpected effect of Openness to Experience on organizational retaliation,  $b = -0.29$ ,  $p = .010$  (see Table A7.11).

## Discussion

Our autobiographical recall study was designed to test specific hypotheses regarding the effects of the HEXACO dimensions on whistleblowing-related outcomes (see Table 7.1) and to estimate the predictive power of these traits in the context of whistleblowing. Generally speaking, our results confirmed that Honesty-Humility, Emotionality, Agreeableness, and Conscientiousness are relevant predictors for whistleblowing behavior: Each of these four traits was a significant predictor of our whistleblowing-related outcomes (see Figures 7.2 to 7.6 and Tables A7.5 to A7.9 as well as Table A7.11). Yet, not all personality effects emerged on the specific outcome variables we had predicted.

First, our results revealed an interesting pattern for the role of Honesty-Humility: This dimension was both positively as well as negatively related to whistleblowing-related outcomes: While Honesty-Humility was associated with a *decreased* likelihood of having observed organizational wrongdoing, it was associated with an *increased* likelihood of having reported an observed wrongdoing to someone who may be able to effect action (given that a wrongdoing had been observed).<sup>28</sup> The latter finding aligns well with previous research showing that Honesty-Humility correlates with a decreased willingness to cover up another person's unethical behavior (Thielmann, Böhm, et al., 2021) and with an increased willingness for whistleblowing in an economic game (Bartuli et al., 2016). However, the finding that Honesty-Humility relates to less wrongdoing observation is novel, and we see two potential explanations for this effect: On the one hand, as we sketched in the introduction section, it is plausible that people with high levels of Honesty-Humility work in positions, organizations, and sectors which are less prone to unethical conduct and therefore “objectively” observed less instances of organizational wrongdoing (e.g., Schneider, 1987).

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<sup>28</sup> Note that the effect of Honesty-Humility on observation of wrongdoing was only significant in the single-predictor analysis but not in the multiple-predictor analysis (see Table A7.5).

On the other hand, it could also be that individuals scoring high on Honesty-Humility tended to rely more on the ethicality of their colleagues or their employer, and therefore perceived less wrongdoing than individuals scoring low on this dimension. This explanation would, for example, follow from research showing that Honesty-Humility leads to increased trustworthiness expectations towards others (Thielmann & Hilbig, 2014). Because organizational wrongdoing is often not easily identifiable, whistleblowers usually need to actively search for evidence that an organizational activity is actually morally reprehensible. People with high Honesty-Humility scores, however, might start such an active information search less often as these individuals tend to rely more on the ethicality of their colleagues. Disentangling whether the negative correlation of Honesty-Humility with the observation of organizational wrongdoing is explained by “blind trust” in others versus the selection of work environments with less unethical conduct is a promising direction for future research.

We now turn to the effects of Emotionality in our study. We had expected that this dimension relates to less wrongdoer confrontation, but instead, we found that this trait related to less internal whistleblowing. Arguably, this finding might point to a methodological caveat in our design: Potentially, wrongdoer confrontation and internal whistleblowing are not distinct categories because—in many cases of organizational wrongdoing—a recipient of internal whistleblowing (e.g., the management) might also be viewed as being (a passive or active) wrongdoer. Consider, for example, a case of accounting fraud in which the whistleblower believes that this practice is executed by employees of the accounting department, but at least tolerated by the management. In this case, reporting the wrongdoing to the organization’s Chief Financial Officer could be seen as both wrongdoer confrontation as well as internal whistleblowing. In any case, the finding that Emotionality predicted less internal whistleblowing is in line with our theorizing that individuals with high levels on this dimension avoid direct confrontation of colleagues.

Turning to the role of Agreeableness for whistleblowing, we found—contrary to our expectations—no significant associations of this dimensions with internal nor with external whistleblowing. Beyond our predictions, however, we found an association of Agreeableness with a decreased likelihood of having observed wrongdoing in the first place (see Figure 7.2 and Table A7.5). Although we had not hypothesized this effect in the present study, it is compatible with the conceptualization of Agreeableness as “the tendency to be forgiving and tolerant of others” (Ashton & Lee, 2007, p. 156). Hence, higher levels of Agreeableness seem to be associated with judging dubious organizational activities more mildly and less morally condemnable. In addition, our finding that HEXACO Agreeableness related negatively to wrongdoing observation might help to explain a somewhat counter-intuitive finding reported by Björkelo et al. (2010). In their autobiographical recall study, FFM Agreeableness was negatively related to whistleblowing. This finding is surprising given that FFM Agreeableness is conceptualized as a prosocial trait (John, 2021) and that whistleblowing is usually interpreted as a prosocial behavior (e.g., Dozier & Miceli, 1985) which would suggest a positive relation between these constructs. However, Björkelo et al. (2010) did not differentiate between observing wrongdoing and blowing the whistle (given that a wrongdoing had been observed). Rather, participants simply read a definition of whistleblowing and asked whether or not this applies to them. Hence, considering the negative effect of HEXACO Agreeableness on wrongdoing observation in our study, the negative effect of FFM Agreeableness on whistleblowing reported by Björkelo et al. (2010) might be explained by the fact that FFM Agreeableness related to less wrongdoing observation, but not necessarily to less whistleblowing. This explanation implicates that future whistleblowing research should conceptualize whistleblowing as sequence of decisions distinguishing (at least) the observation of wrongdoing from reporting an observed wrongdoing, rather than modelling whistleblowing as a single “one-off decision.”

Another interesting contribution of our study is that it highlights the relevance of Conscientiousness for whistleblowing. To the best of our knowledge, there are no previous studies providing evidence for the predictive power of Conscientiousness in the context of whistleblowing. In our study, higher levels of Conscientiousness were associated with an increased likelihood of having reported an observed wrongdoing, and Conscientiousness was even the strongest predictor of this outcome (see Table A7.6). Our theorizing suggested this effect can be explained by assuming personal responsibility to correct the wrongdoing, which should increase with higher levels of Conscientiousness (also see Manuscript 1 of this dissertation). Testing whether the positive effects of Conscientiousness on whistleblowing can be indeed explained by this mechanism is subject to future research.

Beyond our predictions, our results also suggest Openness to Experience to be relevant for whistleblowing as this trait strongly predicted wrongdoing observation (see Figure 7.2 and Table A7.5). We call for more empirical research replicating the association of Openness to Experience with whistleblowing, specifically because FFM Openness was unrelated to whistleblowing in the autobiographical recall study by Bjørkelo et al. (2010). One post-hoc explanation for the positive effect of Openness to Experience on the observation of wrongdoing is that people with higher levels of this trait are less prejudiced (Zettler et al., 2020), and might accordingly have a lower threshold of perceiving transgressions related to sexism, racism, or discrimination in other people.

### ***Theoretical Implications***

Our study has important implications for whistleblowing research. First, our results empirically confirm our recent theoretical framework (see Manuscript 1 of this dissertation) in the sense that HEXACO Honesty-Humility, Emotionality, Agreeableness, and Conscientiousness are important predictors of whistleblowing-related outcomes. In order to achieve a more nuanced understanding of the psychological mechanism and processes that

link these traits to whistleblowing, research under more controlled settings is desirable. This would, for example, allow to experimentally manipulate certain situational features and to test the interactional effects of these features with personality traits on whistleblowing. More specifically, economic games seem to provide a useful toolbox for personality research in the context of whistleblowing (see Bartuli et al., 2016; Butler et al., 2020), as they allow clean and parsimonious manipulations of relevant situational features (e.g., beliefs about consequences of blowing the whistle).

Second, beyond the specific effects of the broad personality dimensions on whistleblowing-related outcomes, our study also demonstrates more generally that personality is an important predictor of whistleblowing: We found that the six HEXACO dimensions jointly explained between 9% and 25% of the variance in whistleblowing-related outcomes. This finding is in stark contrast to previous notions arguing that person-related factors play a limited role for whistleblowing (see Near & Miceli, 1996).

Third, our research suggests that the HEXACO model of personality seems to be well suited for the whistleblowing context—arguably even better than the FFM model of personality. This argument follows from the fact that prosocial tendencies—which are highly relevant for whistleblowing (Dozier & Miceli, 1985; Gundlach et al., 2003)—are in the FFM mostly captured by the Agreeableness dimension (John, 2021). By contrast, the HEXACO model differentiates multiple aspects of prosocial tendencies in several dimensions: Honesty-Humility, Emotionality and Agreeableness (Ashton et al., 2014). As our results indicate, all of these three prosociality-related HEXACO dimensions shape the whistleblowing decision process, but partially in opposite directions (see Figures 7.2 to 8.5). Therefore, subsuming prosocial tendencies under one broad personality dimensions (e.g., FFM Agreeableness) might be too unspecific for predicting and explaining whistleblowing behavior.

## Limitations and Future Research Directions

Every whistleblowing paradigm comes with specific strength and weakness with regard to its psychometric properties (see Manuscript 2 of this dissertation), and autobiographical recall studies are no exception. On the positive side, this paradigm allows to investigate whistleblowing behavior (rather than whistleblowing intentions) in large samples which are typically required in personality research (Gignac & Szodorai, 2016).

Nonetheless, an important limitation of this paradigm is that it relies on self-reports and is therefore to some extent prone to socially desirable responding and other biases inherent to self-report measures (e.g., Moorman & Podsakoff, 1992). In addition, even though our overall sample size was larger than previous research on personality-whistleblowing associations (Bjørkelo et al., 2010; Bocchiaro et al., 2012), not all of our participants had observed wrongdoings in the context of their organization and thus, did not qualify for a whistleblowing decision. As a result, we had sufficient power for detecting small and typical effects on wrongdoing observation, reporting of wrongdoing, and wrongdoer confrontation, but only sufficient power for detecting large effects on internal and external whistleblowing (see Table 7.2). Thus, our finding that only Emotionality (but no other HEXACO dimensions) significantly predicted internal or external whistleblowing might be due to power constraints on these outcomes. Future research should therefore recruit even larger samples when using a similar research design.

In addition, autobiographical recall designs provide little experimental control over the whistleblowing situation, for example regarding the types of wrongdoings participants recalled or for what kind of organizations they worked. Thus, our study cannot rule out that these variables influenced our results. Similarly, it could be that the personality dimensions not only affected the perception and interpretation of whistleblowing-related outcomes at the time they occurred, but also that personality traits influence how whistleblowing instances are

remembered and recalled. We therefore call for future research studying the effects of personality on whistleblowing under more controlled circumstances.

### **Conclusion**

Previous research has yielded inconsistent evidence regarding which personality traits predict whistleblowing. Our results demonstrate that HEXACO Honesty-Humility, Emotionality, Agreeableness, and Conscientiousness shape different stages of the whistleblowing process. These personality effects were partially of substantial size, thereby challenging previous notions that person-related factors play a limited role for whistleblowing. Future research under more controlled settings will be needed to further advance our understanding of personality-whistleblowing associations, for example by studying the psychological mechanisms that link traits to whistleblowing.



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## APPENDIX

**Table A7.1***Age Distribution of Final Sample*

Age	Frequency	
	<i>n</i>	%
Younger than 20	2	0.23
20 to 29	26	2.97
30 to 39	131	14.99
40 to 49	171	19.57
50 to 59	253	28.95
60 to 69	198	22.65
70 to 79	81	9.27
Older than 79	11	1.26
Missing Values	1	0.11

**Table A7.2***Frequencies of Wrongdoing Categories*

Wrongdoing Category	Frequency	
	<i>n</i>	%
Discrimination, harassment, or mobbing (e.g., insults or harassment of a person based on their gender, ethnicity, etc.)	42	21.11
Safety violations (e.g., ignoring safety regulations)	35	17.59
Deception or forgery (e.g., intentional communication of untruths, withholding relevant information, or manipulation of file records)	31	15.58
Power abuse (e.g., inappropriate instructions or threat towards employees)	30	15.08
Violation of professional norms (e.g., negligence in examination or documentation)	16	8.04
Other	14	7.04
Financial irregularities (e.g., accounting fraud)	11	5.53
Corruption (e.g., Misuse of own professional function in order to obtain a financial benefit)	9	4.52
Theft (e.g., theft of objects that belong to the organization)	6	3.02
Missing Values	5	2.51

**Table A7.3**

*Means and Standard Deviations of the six HEXACO Dimensions Broken Down by Whistleblowing-Related Outcomes*

Personality Dimension	DV: Wrongdoing Observation				DV: Reporting of Wrongdoing			
	Non-Observation ( <i>n</i> = 397)		Wrongdoing Observation ( <i>n</i> = 199)		Inactive Observation ( <i>n</i> = 94)		Reporting of Wrongdoing ( <i>n</i> = 97)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
HH	3.73	0.59	3.56	0.67	3.40	0.58	3.69	0.74
EM	3.03	0.61	3.08	0.59	3.07	0.55	3.09	0.63
EX	3.33	0.63	3.27	0.67	3.22	0.63	3.32	0.70
AG	3.24	0.54	2.98	0.59	2.98	0.6	2.97	0.57
CO	3.65	0.52	3.58	0.54	3.46	0.54	3.72	0.51
OP	3.30	0.68	3.57	0.65	3.45	0.66	3.72	0.57

**Note.** HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience. All HEXACO items were assessed on five-point response scales, ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

**Table A7.4**

*Means and Standard Deviations of the six HEXACO Dimensions Broken Down by Whistleblowing-Related Outcomes*

Personality Dimension	DV: Wrongdoer Confrontation				DV: Internal Whistleblowing				DV: External Whistleblowing			
	No ( <i>n</i> = 52)		Yes ( <i>n</i> = 44)		No ( <i>n</i> = 16)		Yes ( <i>n</i> = 80)		No ( <i>n</i> = 84)		Yes ( <i>n</i> = 12)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
HH	3.57	0.78	3.82	0.67	3.91	0.78	3.64	0.73	3.66	0.76	3.89	0.55
EM	3.12	0.63	3.07	0.65	3.46	0.49	3.02	0.64	3.10	0.66	3.03	0.40
EX	3.30	0.62	3.33	0.79	2.92	0.76	3.39	0.67	3.34	0.69	3.16	0.78
AG	2.99	0.57	2.94	0.58	3.00	0.54	2.96	0.58	2.97	0.58	2.96	0.56
CO	3.64	0.50	3.82	0.51	3.78	0.51	3.71	0.51	3.70	0.51	3.91	0.46
OP	3.62	0.60	3.83	0.52	3.62	0.65	3.74	0.56	3.74	0.55	3.57	0.75

**Note.** HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience. All HEXACO items were assessed on five-point response scales, ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

**Table A7.5**

*Multiple Logistic Regression Analysis Predicting Wrongdoing Observation (vs. Non-Observation)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>-0.80</b>	<b>0.09</b>	<b>-0.99</b>	<b>-0.62</b>	<b>&lt; .001</b>	<b>0.45</b>	<b>0.37</b>	<b>0.54</b>
HH	-0.29	0.15	-0.59	0.02	.064	0.75	0.56	1.02
EM	-0.12	0.16	-0.44	0.19	.436	0.88	0.65	1.21
EX	-0.25	0.16	-0.56	0.05	.107	0.78	0.57	1.06
<b>AG</b>	<b>-0.78</b>	<b>0.17</b>	<b>-1.13</b>	<b>-0.45</b>	<b>&lt; .001</b>	<b>0.46</b>	<b>0.33</b>	<b>0.64</b>
CO	-0.31	0.18	-0.67	0.05	.095	0.74	0.51	1.05
<b>OP</b>	<b>0.77</b>	<b>0.15</b>	<b>0.48</b>	<b>1.08</b>	<b>&lt; .001</b>	<b>2.17</b>	<b>1.62</b>	<b>2.91</b>
<i>R</i> <sup>2</sup>	.14							

*Note.* The dependent variable was coded 0 = “non-observation” and 1 = “wrongdoing observation”. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke’s *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A7.6**

*Multiple Logistic Regression Analysis Predicting Reporting of Wrongdoing (vs. Inactive Observation)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
Intercept	0.01	0.18	-0.35	0.36	.974	1.01	0.71	1.43
<b>HH</b>	<b>0.52</b>	<b>0.25</b>	<b>0.04</b>	<b>1.02</b>	<b>.035</b>	<b>1.69</b>	<b>1.04</b>	<b>2.77</b>
EM	0.21	0.29	-0.35	0.78	.465	1.23	0.70	2.18
EX	0.07	0.26	-0.45	0.59	.786	1.07	0.64	1.81
AG	-0.10	0.28	-0.64	0.45	.724	0.91	0.53	1.56
<b>CO</b>	<b>0.80</b>	<b>0.31</b>	<b>0.21</b>	<b>1.41</b>	<b>.009</b>	<b>2.22</b>	<b>1.22</b>	<b>4.04</b>
OP	0.50	0.28	-0.05	1.06	.078	1.64	0.95	2.84
<i>R</i> <sup>2</sup>	.15							

*Note.* The dependent variable was coded 0 = “inactive observation” and 1 = “reporting of wrongdoing”. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke’s *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A7.7**

*Multiple Logistic Regression Analysis Predicting Wrongdoer Confrontation (vs. No Wrongdoer Confrontation)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
Intercept	-0.53	0.28	-1.12	0.01	.060	0.59	0.33	1.01
HH	0.43	0.32	-0.19	1.09	.188	1.53	0.82	2.97
EM	0.02	0.39	-0.75	0.80	.961	1.02	0.47	2.21
EX	-0.02	0.35	-0.72	0.67	.948	0.98	0.49	1.95
AG	-0.32	0.40	-1.13	0.47	.427	0.73	0.32	1.60
CO	0.63	0.44	-0.23	1.53	.157	1.87	0.80	4.61
OP	0.65	0.43	-0.18	1.54	.131	1.92	0.84	4.65
<i>R</i> <sup>2</sup>	.11							

*Note.* The dependent variable was coded 0 = “non-confrontation” and 1 = “wrongdoer confrontation”. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke’s *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A7.8**

*Multiple Logistic Regression Analysis Predicting Internal Whistleblowing (vs. No Internal Whistleblowing)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>1.83</b>	<b>0.40</b>	<b>1.11</b>	<b>2.71</b>	<b>&lt; .001</b>	<b>6.24</b>	<b>3.03</b>	<b>15.08</b>
HH	-0.92	0.51	-2.00	0.01	.071	0.40	0.14	1.01
<b>EM</b>	<b>-1.49</b>	<b>0.63</b>	<b>-2.84</b>	<b>-0.34</b>	<b>.017</b>	<b>0.23</b>	<b>0.06</b>	<b>0.71</b>
EX	0.51	0.48	-0.43	1.47	.282	1.67	0.65	4.35
AG	-0.62	0.56	-1.77	0.47	.272	0.54	0.17	1.60
CO	-0.54	0.64	-1.85	0.70	.400	0.58	0.16	2.01
OP	0.45	0.56	-0.66	1.55	.422	1.56	0.52	4.73
<i>R</i> <sup>2</sup>	.25							

*Note.* The dependent variable was coded 0 = “no internal whistleblowing” and 1 = “internal whistleblowing”. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke’s *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.



**Table A7.9**

*Multiple Logistic Regression Analysis Predicting External Whistleblowing (vs. No External Whistleblowing)*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>	<i>OR</i>	95% <i>CI</i> for <i>OR</i>	
			<i>LB</i>	<i>UB</i>			<i>LB</i>	<i>UB</i>
<b>Intercept</b>	<b>-1.96</b>	<b>0.40</b>	<b>-2.82</b>	<b>-1.25</b>	<b>&lt; .001</b>	<b>0.14</b>	<b>0.06</b>	<b>0.29</b>
HH	0.53	0.51	-0.41	1.61	.298	1.70	0.66	5.00
EM	0.00	0.56	-1.11	1.13	.995	1.00	0.33	3.10
EX	-0.19	0.52	-1.21	0.86	.713	0.83	0.30	2.37
AG	0.13	0.57	-1.00	1.29	.814	1.14	0.37	3.63
CO	0.87	0.70	-0.46	2.34	.215	2.40	0.63	10.37
OP	-0.63	0.61	-1.87	0.56	.298	0.53	0.15	1.75
<i>R</i> <sup>2</sup>	.09							

*Note.* The dependent variable was coded 0 = “no external whistleblowing” and 1 = “external whistleblowing”. HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*; *OR* = Odds Ratio. *R*<sup>2</sup> value represents Nagelkerke’s *R*<sup>2</sup>. All personality dimensions are mean-centered. Predictors with *p* < .05 are printed in bold.

**Table A7.10***Frequencies of Retaliation Experienced by Participants Who Had Reported an Observed Wrongdoing*

Type of Retaliatory Reaction	Frequency	
	<i>n</i>	%
Withholding of relevant information	31	34.44
Verbal insults or intimidation	27	30.00
Coworkers not socializing with me	24	26.67
Professional reputation was harmed	24	26.67
Pressure from coworkers to stop complaint	23	25.56
Poor performance appraisal	21	23.33
Tighter scrutiny of daily activities by management	21	23.33
Charged with committing an unrelated offense	17	18.89
Denial of promotion	16	17.78
Denial of award	14	15.56
Assignment to less desirable or less important duties	14	15.56
Relocation of desk or work area in office	12	13.33
Denial of opportunity for training	10	11.11
Imposed access restrictions to areas necessary to perform job	9	10.00
Reassignment to a different job with less desirable or less important duties	7	7.78

**Table A7.11***Poisson Regression Analysis Predicting Organizational Retaliation*

Predictor	<i>b</i>	<i>SE</i>	95% <i>CI</i> for <i>b</i>		<i>p</i>
			<i>LB</i>	<i>UB</i>	
<b>Intercept</b>	<b>1.17</b>	<b>0.07</b>	<b>1.02</b>	<b>1.31</b>	<b>&lt; .001</b>
HH	0.08	0.09	-0.10	0.25	.391
EM	-0.12	0.11	-0.33	0.10	.275
EX	0.03	0.10	-0.16	0.23	.748
AG	-0.15	0.11	-0.37	0.07	.189
CO	-0.14	0.12	-0.39	0.10	.251
<b>OP</b>	<b>-0.29</b>	<b>0.11</b>	<b>-0.52</b>	<b>-0.07</b>	<b>.010</b>

*Note.* The dependent variable was a count variable ranging from 0 to 15 (see Method section for details). HH = Honesty-Humility; EM = Emotionality; EX = Extraversion; AG = Agreeableness; CO = Conscientiousness; OP = Openness to Experience; *CI* = confidence interval; *LB* = lower bound of *CI*; *UB* = upper bound of *CI*. All personality dimensions are mean-centered. Predictors with  $p < .05$  are printed in bold.

## 8 General Discussion

Unethical behavior in organizations can go against the “greater good” (e.g., the welfare of a society), but it is hardly ever detectable for outsiders of the respective organization (e.g., members of society) without insider information. However, anecdotal evidence from recent corporate scandals such as the Wirecard case suggest that some people are not willing to tolerate unethical behavior by (members of) their organization (see McCrum, 2019; McCrum et al., 2021). Instead, some organization members disclose unethical practices within their organization to people or institutions who can take appropriate action—a behavior known as whistleblowing (Near & Miceli, 1985).

While previous research has contributed to a better understanding of situational conditions that increase individuals’ willingness to blow the whistle (for a meta-analysis, see Mesmer-Magnus & Viswesvaran, 2005), knowledge about whether and how the whistleblower’s personality traits influence the whistleblowing decision-making process is comparably scarce. Overcoming this gap in the literature was the goal of this dissertation, which I pursued with a theoretical, a methodological, and an empirical approach. Specifically, I developed an integrative framework that provides testable hypotheses regarding which personality traits (under which situational circumstances) make a whistleblowing decision more or less likely (Manuscript 1). This framework is rooted in the idea that the expression of certain personality traits depend on situational characteristics (e.g., Reis, 2008). For example, most whistleblowing situations entail a trade-off between costs for the whistleblower (e.g., career disadvantages) and benefits for others (e.g., the termination of a harmful practice). This situational characteristic should activate prosocial traits such as Big Five Agreeableness or HEXACO Honesty-Humility. As another example, I have argued that Conscientiousness should be afforded in whistleblowing situations, particularly when there is potential for diffusion of responsibility among multiple organization members who are aware

of the wrongdoing (see Dozier & Miceli, 1985). In Manuscript 2, I adopted a methodological perspective on whistleblowing research by reviewing and evaluating four commonly used paradigms that researchers have employed to model whistleblowing behavior and intentions: Scenario studies, autobiographical recall studies, immersive behavioral paradigms, and economic games. This review suggested that the selection of an ideal whistleblowing paradigm depends not only on psychometric criteria (e.g., the non-fakeability of the participants' responses), but also—specifically in the context of research on the role of personality for whistleblowing decisions—on how well these paradigms capture the affordances of whistleblowing situations that are theoretically relevant. Subsequently, I conducted two empirical studies—one scenario study (Manuscript 3) and one autobiographical recall study (Manuscript 4)—to test some of the theoretical predictions proposed in Manuscript 1 while applying the methodological considerations delineated in Manuscript 2. I discuss the empirical findings of these studies and their theoretical implications in the following section.

### **8.1 Summary of the Empirical Studies and Theoretical Implications**

The two empirical studies measured different types of whistleblowing-related outcome variables which aggravates direct comparisons of their results. Yet, two variables were similarly worded and conceptually akin, thereby enabling a comparative analysis of the personality traits underlying them. More specifically, for the summary of my empirical studies, I focus on the outcome variables measuring (1) whether or not participants intended to report the described wrongdoing (in the scenario study), and (2) whether or not participants who had observed an organizational wrongdoing reported it to someone with the capacity to act against the wrongdoing (in the autobiographical recall study).<sup>29</sup> Of note, these outcome

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<sup>29</sup> Specifically, the corresponding variables were labeled “whistleblowing (vs. inaction) decision” in Manuscript 3 and “reporting of wrongdoing” in Manuscript 4.

variables follow the whistleblowing definition by Near and Miceli (1985), but not necessarily align with other definitions, which, for example, restrict whistleblowing to disclosures directed at external entities (e.g., Jubb, 1999). Nonetheless, for the sake of clarity, I refer to responses on these variables as “whistleblowing” in the following section.

On the broadest level, I found that the six HEXACO dimensions jointly explained 3% of the variance in whistleblowing intentions in the scenario study and approximately 15% of the variance in retrospectively reported whistleblowing behavior in the autobiographical recall study. Two theoretically relevant conclusions can be drawn from these findings: First, the finding that six personality traits explained 15% of the variance in whistleblowing is in stark contrast to earlier notions suggesting that person-related factors play a limited role for whistleblowing (see Near & Miceli, 1996). Second, the strong discrepancy of the explained variance between the scenario and the autobiographical recall study (3% vs. 15%, respectively) is an interesting finding in itself. There are, of course, many possible explanations for this discrepancy, most importantly, that it reflects methodological artefacts, in the sense that demographic features or the specific wording of the instructions differentially affected the effects of personality on whistleblowing between studies. Yet, it is also plausible that these differences are grounded in systematic and psychologically meaningful differences between paradigms, in the sense that scenario studies systematically underestimate the effects of personality traits on whistleblowing because personality effects on whistleblowing “in the wild” (i.e., as measured in autobiographical recall studies) result from an accumulation of (possibly small) personality effects over a series of decision stages (see Funder & Ozer, 2019). More specifically, personality traits arguably not only affect the decision pro vs. contra whistleblowing, but also earlier decision stages, for example to what extent an observed wrongdoing is judged as how morally condemnable or the extent to which organization members assume personal responsibility for correcting the wrongdoing (see

integrative review in Manuscript 1). These stages of the whistleblowing process are not mirrored in most scenario studies in the context of whistleblowing, and they were not modeled in the scenario study reported in Manuscript 3 either. As a result, many scenario studies may underestimate the predictive power of personality traits in the context of whistleblowing.

On a more specific level, I now turn to the effects of the HEXACO dimensions on whistleblowing and interpret their implications for the theoretical predictions delineated in Manuscript 1. In order to facilitate a more nuanced interpretation of the empirical findings of this dissertation, I leave the statistical significance of these effects aside and rather focus on the magnitude of the observed effects. To this end, I calculated standardized mean differences (i.e., Cohen's  $d$ ) for the six HEXACO dimensions between (1) participants in the scenario study who indicated that they intended to blow the whistle (vs. intended not to blow the whistle) and (2) between participants in the autobiographical recall study who had engaged in whistleblowing (vs. had not engaged in whistleblowing although they had observed a wrongdoing). Likewise, in order to facilitate a comparison of the two empirical studies reported in this dissertation with previous empirical research investigating the effects of the HEXACO traits on whistleblowing, I also calculated Cohen's  $d$  for two other studies: The immersive behavioral study reported by Bocchiaro et al. (2012) and the economic game reported by Bartuli et al. (2016).<sup>30</sup> The result of this effect size comparison is shown in Table 8.1. For my interpretation of these effects, I will focus on personality effects that were descriptively at least small, according to recent effect sizes guidelines (i.e.,  $d > .20$ ; Funder & Ozer, 2019; Gignac & Szodorai, 2016).

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<sup>30</sup> A description of the methodology of these two studies can be found in Manuscript 2 and Manuscript 4.

**Table 8.1***Standardized Mean Differences of HEXACO Dimensions between Whistleblowers and Non-Whistleblowers*

	Manuscript 3	Manuscript 4	Bocchiaro et al. (2012)	Bartuli et al. (2016)
Whistleblowing paradigm	scenario	autobiographical recall	immersive behavioral paradigm	economic game
Sample description	crowd workers (Prolific)	general population	university students	university students
Sample size	724	199	128 <sup>a</sup>	88 <sup>b</sup>
Whistleblowing incidence	87.70%	48.74%	9.4%	37.50%
Language	English	German	Dutch	German
Personality inventory	HEXACO-60	HEXACO-60	HEXACO-60	HEXACO-60 <sup>c</sup>
Cohen's <i>d</i>				
Honesty-Humility	0.17	<b>0.44</b>	0.03	<b>0.64</b>
Emotionality	<b>0.25</b>	0.03	<b>-0.51</b>	-
Extraversion	0.01	0.15	0.18	-
Agreeableness	0.02	-0.02	0.14	-
Conscientiousness	<b>0.24</b>	<b>0.50</b>	<b>0.23</b>	-
Openness to Experience	0.15	<b>0.44</b>	<b>0.47</b>	-

*Note.* Effect sizes that are at least small, that is  $|r| > .10 \approx |d| > .20$  (Gignac & Szodorai, 2016; Funder & Ozer, 2019) are printed in bold. A positive value of Cohen's *d* indicates a higher mean among whistleblowers as compared to non-whistleblowers. The study by Bartuli et al. (2016) measured Honesty-Humility but not the other five HEXACO dimensions.

a) This study also provided a third behavioral option besides blowing the whistle or not, that was to disobey the unethical request but without informing anyone who could act against the observed wrongdoing. The sample size here reflects only those who blew the whistle or did not blow the whistle excluding disobedient participants.

b) Some participants did not observe any wrongdoing in the economic game because their "organization" did not engage in unethical behavior. Thus, these participants did not have a chance to blow the whistle and are therefore not included in the sample size shown here.

c) This study only used eight of the ten Honesty-Humility items from the HEXACO-60 by excluding two items pertaining to the Modesty subscale.



### **8.1.1 *HEXACO Honesty-Humility***

First, the integrative framework (see Manuscript 1) suggested a positive effect of Honesty-Humility on whistleblowing. Partially in line with this prediction, Honesty-Humility predicted whistleblowing in two of the four studies shown in Table 8.1. The effect sizes of the association of Honesty-Humility with whistleblowing ranged from  $d = 0.03$  to  $d = 0.64$ . My interpretation of this finding is that higher levels of Honesty-Humility seem to be positively associated with whistleblowing, but that this effect also depends on methodological features, for example the paradigm that was used to operationalize whistleblowing. This would be in line with our integrative review, in which we proposed that personality effects on whistleblowing are method-dependent. In other words, some whistleblowing paradigms might be better suited to model the situational characteristics that afford the expression of personality traits in whistleblowing situations than others. For example, we have proposed that a trade-off between benefits for others and a cost for the whistleblower affords the expression of Honesty-Humility in whistleblowing situations. This situational affordance, in turn, can arguably be best operationalized in an economic game, where the costs and benefits of whistleblowing are explicitly mentioned in the instructions and truly consequential for participants. Hence, we can expect a larger effect of Honesty-Humility on whistleblowing in economic games as compared to other paradigms in which costs for the whistleblower and benefits for others are only imagined and therefore non-consequential (e.g., in scenario studies). Similarly, whistleblowing was non-costly in a financial or monetary sense in the immersive behavioral study by Bocchiaro et al. (2012), which might be an explanation of the small association of Honesty-Humility and whistleblowing in this study.

### **8.1.2 *HEXACO Emotionality***

Second, our integrative framework suggested a negative effect of Emotionality on whistleblowing, but the empirical results in that regard are equivocal. As shown in Table 8.1,

Emotionality had a positive effect on whistleblowing intentions in the scenario study (see Manuscript 3), a close-to-zero effect on whistleblowing in the autobiographical recall study (see Manuscript 4), but a negative effect on whistleblowing in the immersive behavioral study reported by Bocchiaro et al. (2012). Here again, the best explanation for this variation of effect sizes is methodological. Recall that we have proposed in our integrative review that the emotional consequences of whistleblowing (e.g., distress, feeling isolated, etc.) should afford the expression of Emotionality. Arguably, the best method to model this situational characteristic are immersive behavioral paradigms, in which participants' truly experience reactions of the wrongdoer to their whistleblowing behavior, which, in turn, entails the risk of being confronted with aggressive or antisocial behavior by the wrongdoer. By contrast, these consequences are only imagined and non-immersive in scenario studies (see Parkinson & Manstead, 1993, for a discussion of this issue), and this could explain why the effect of Emotionality was descriptively more negative in the study by Bocchiaro et al. (2012) as compared to the scenario study reported in Manuscript 3 of this dissertation.

### **8.1.3 *HEXACO Extraversion***

Third, our integrative framework did not include any theoretical arguments for the relevance of Extraversion in whistleblowing situations. With regard to the four whistleblowing studies summarized in Table 8.1, HEXACO Extraversion showed only very small effects on whistleblowing (all  $d$ 's  $\leq 0.18$ ). It is interesting to note, however, that a previous empirical study found a positive effect of Extraversion as conceptualized in the Five Factor Model (FFM; McCrae & Costa, 1987) on whistleblowing in an autobiographical recall study (Bjørkelo et al., 2010). Thus, it could be that the slightly different conceptualization of Extraversion in the HEXACO vs. the FFM makes a difference in the context of whistleblowing. Specifically, traits relating to boldness or assertiveness typically load on the negative pole of HEXACO Emotionality but not on HEXACO Extraversion (Ashton et al.,

2004). In the Big Five (Goldberg, 1990) or the closely related FFM (McCrae & Costa, 1987), however, traits such as being bold, confident, or assured often show their highest loadings on Extraversion (Saucier & Goldberg, 1996). As such, it could be useful to incorporate Extraversion as conceptualized in the Big Five or the FFM into revisions of our theoretical framework, as this dimension could be additionally afforded by the presence of emotional whistleblowing costs. For instance, as noted in the discussion of the findings regarding HEXACO Emotionality, whistleblowing might entail a risk of being confronted with aggressive or antisocial behavior by the wrongdoer, and dealing with this risk requires some sense of boldness or toughness—traits that fall into the Extraversion dimension of the Big Five and the FFM.

#### **8.1.4 *HEXACO Agreeableness***

Fourth, our theoretical framework suggested that HEXACO Agreeableness is negatively linked to whistleblowing, because highly agreeable individuals might interpret (certain) organizational practices more leniently and less morally condemnable, and because highly agreeable individuals should prefer “mild” alternatives (i.e., voicing one’s concerns to colleagues or one’s supervisor) over blowing the whistle. The four empirical studies, however, indicate that Agreeableness had rather negligible effects on whistleblowing across all whistleblowing paradigms, with effect sizes ranging from  $d = -.02$  to  $d = 0.14$ . Thus, apparently, HEXACO Agreeableness seems not to be as crucial for whistleblowing as we expected in our theoretical review. In order to further scrutinize the robustness of this finding, future research could make use of paradigms that emphasize the loyalty vs. integrity conflict inherent to whistleblowing situations more strongly (see Manuscript 1), for example by creating a close relationship between the wrongdoer and the potential whistleblower. This methodological feature would accentuate this affordance (i.e., the conflict between loyalty and integrity), activate HEXACO Agreeableness even stronger (see Table 4.3), and would

therefore allow a strong test of our proposed trait activation mechanism at this stage of the whistleblowing decision-making process.

### **8.1.5 *HEXACO Conscientiousness***

Fifth, in our integrative review, we had predicted that Conscientiousness should be relevant for whistleblowing decisions because highly conscientious individuals assume more personal responsibility to correct an observed wrongdoing. This proposed mechanism should ultimately produce a positive effect of Conscientiousness on whistleblowing. In line with this prediction, Conscientiousness was the most consistent predictor of whistleblowing, with effect sizes ranging from  $d = 0.23$  to  $d = 0.50$ , indicating that whistleblowers showed higher levels of Conscientiousness than non-whistleblowers. This finding is—to the best of my knowledge—novel and somewhat incompatible with Bjørkelo et al. (2010) who reported a non-significant and close-to-zero effect of FFM Conscientiousness on autobiographically recalled whistleblowing instances (see Table 4.1).

### **8.1.6 *HEXACO Openness to Experience***

Lastly, our integrative review did not assume Openness to Experience to be essential for whistleblowing. This dimension was, however, positively associated with whistleblowing in two studies, with effect sizes ranging from  $d = 0.15$  to  $d = 0.47$ . There may be two post-hoc explanations for this effect. First, higher levels of Openness to Experience are linked to being less prejudiced (Zettler et al., 2020), and this aspect of Openness to Experience might lead to an enhanced likelihood for observing (and blowing the whistle on) certain types of wrongdoing. More specifically, individuals scoring high on Openness to Experience might have a lower threshold of perceiving organizational practices related to discrimination than people with lower levels of Openness to Experience. This could, however, only explain the positive effect of Openness to Experience on whistleblowing in the autobiographical recall study (where participants recalled real wrongdoings), but it cannot explain the positive effects

of Openness to Experience in the other paradigms. This is because the scenario study, the economic game, and the immersive behavioral study used standardized descriptions or depictions of organizational wrongdoings that were unrelated to discrimination. An alternative explanation, that helps to explain the positive effect of Openness to Experience on whistleblowing in these paradigms is that the conceptualization of HEXACO Openness to Experience encompasses traits such as unconventionality (Ashton & Lee, 2007), and whistleblowing can be viewed as an unconventional response to organizational wrongdoing. Thus, it could be that people with low levels of Openness to Experience do not think of whistleblowing as a potential reaction to an observed wrongdoing, potentially as they perceive it as too unconventional. If this was true, then this could be a psychological mechanism operating at the “Considering and Choosing Response Options” phase of the proposed whistleblowing-decision making process (see Table 4.3).

## **8.2 Whistleblowing as a Function of the Person and the Situation**

Taken together, these findings corroborate the basic premise of this dissertation which was that personality plays an important role for whistleblowing. With that being said, I would like to emphasize that this does *not* imply that situational factors are less important for whistleblowing than previously thought. By contrast, the present research program shows that personality factors and situational factors are indivisibly intertwined. For example, a number of studies have revealed—perhaps unsurprisingly—that whistleblowing is more likely in response to more (vs. less) severe organizational wrongdoings (Mesmer-Magnus & Viswesvaran, 2005). Severity of the wrongdoing is typically conceptualized as a situational factor, but the scenario study reported in Manuscript 3 shows that severity or “wrongfulness” judgments of organizational wrongdoing also depends on the perceiver’s personality (e.g., their level of HEXACO Honesty-Humility). Likewise, referring back to Near & Miceli’s claim (1996) that whistleblowers are often “in the wrong place at the wrong time” (p. 515),

the results of the autobiographical recall study reported in Manuscript 4 show that HEXACO Agreeableness (and partially HEXACO Honesty-Humility) predicted whether or not such a wrongdoing was observed in the first place. In sum, this illustrates that asking whether whistleblowing is better predicted by personality *or* situational factors is misleading. Instead, the effects of personality and situational characteristics on whistleblowing are intertwined with each other, and thus, one cannot be understood without considering the other (see also Rauthmann & Sherman, 2020).

### **8.3 Practical Implications**

The findings reported in this dissertation also have practical implications. Precisely, my research is informative for the management of organizations regarding their ethical culture. Organizations striving for an ethical culture that favors quick and appropriate ways of responding to unethical behavior over ignoring or concealing it can benefit from considering personality traits as part of their personnel selection procedures. As my theoretical considerations and empirical results suggest, higher levels of Honesty-Humility seem to increase the willingness to report an observed wrongdoing (see Manuscript 1 and Manuscript 4), and additionally to increase the willingness of using internal over external reporting channels (see Manuscript 3). Consequently, considering higher levels of Honesty-Humility as a selection criterion could be an effective way for establishing or maintaining an ethics-oriented organizational culture. Needless to say, when assessing Honesty-Humility in a personnel selection procedure, organizations should not resort to self-report measures because they can be easily influenced in the desired direction. Rather, it would be useful to employ observer-reports, for example trained experts judging applicants' levels of Honesty-Humility from specifically tailored questions in job interviews (see Pike et al., 2021).

## 8.4 Limitations

Several limitations should be considered when interpreting the results of this dissertation. First, the empirical studies were only correlational, and thus, do not allow any causal inferences on the observed associations of personality and whistleblowing. More specifically, I conceptualized personality as the predictor and whistleblowing as the outcome (and not vice versa). From a methodological perspective, however, the empirical studies cannot rule out that whistleblowing (or whistleblowing-related experiences such as organizational retaliation) may influence individuals' personality. If this was true, then some of the effects reported in the autobiographical recall study (Manuscript 4) may actually reflect an effect operating in the opposite direction of causality. To address this limitation, future research can benefit from using large-scale, prospective, cross-lagged designs that allow to compare the effects of personality on whistleblowing as well as the effects of whistleblowing on personality.

Second, the empirical studies (Manuscript 3 and Manuscript 4) relied on self-reports to measure personality and to operationalize whistleblowing, both of which are somewhat prone to demand characteristics. Therefore, future research would benefit from using observer-reports to assess personality (e.g., by using standardized observer forms of the HEXACO inventory; see Lee & Ashton, 2018) and from using behavioral measures to operationalize whistleblowing. Regarding the latter suggestion, Manuscript 2 of this dissertation provides a helpful starting point for researchers trying to implement whistleblowing paradigms that allow the observation of actual whistleblowing behavior.

Third, the empirical studies reported in this dissertation were not only designed to test dispositional differences in tendencies for whistleblowing (vs. non-whistleblowing), but also regarding tendencies for specific reporting channels. To this end, I contrasted internal reporting channels (e.g., reporting to an ombudsperson) and external reporting channels (e.g.,

reporting to the authorities), but—from a practical perspective—it is arguably useful to also model the sequential use of these channels. Empirical research has shown that most whistleblowers first report their concerns through internal channels and only use external channels if internal reporting did not correct the wrongdoing (Vandekerckhove & Phillips, 2019). Although it is plausible that individuals pursuing this sequential reporting strategy would select the internal whistleblowing option in the design of my empirical studies, it could be worth differentiating between participants who consider (vs. not consider) external reporting subsequently. Moreover, given that the EU Whistleblowing Directive—which strives for a better protection of whistleblowers against organizational retaliation (see European Union, 2019)—not only distinguishes between internal and external reporting channels, but also public reporting channels (e.g., reporting to the media), it would be informative for future research to likewise disentangle the personality effects underlying reporting to authorities vs. reporting to the media.

### **8.5 Open Questions and Future Research Directions**

Beyond research designed to overcome the methodological limitations discussed in the previous section, I see potential for further research clarifying some more conceptual issues. Specifically, I call for more research scrutinizing the psychological mechanisms that translate personality dispositions into whistleblowing behavior. As our integrative review in Manuscript 1 suggests, the hypothesized personality effects are expected if certain situational characteristics are present (e.g., a trade-off between benefits for others and costs for the whistleblower), but less so if these situational characteristics are absent. Thus, a strong test of these trait activation mechanisms was to experimentally manipulate the presence (vs. absence) of these situational affordances, and investigate whether these affordances moderate the hypothesized personality effects on whistleblowing. For instance, an economic game arguably is an ideal paradigm to manipulate the (monetary) benefits and costs for the



whistleblower vs. others, for instance by varying the individual costs for whistleblowing as well as the collective benefits of whistleblowing, and testing how that affects the association of prosocial traits (e.g., Honesty-Humility) with whistleblowing (e.g., in a paradigm similar to Butler et al., 2020). In a similar vein, a promising approach to test how the presence (vs. absence) of moral ambiguity affects the association of certain personality traits (e.g., HEXACO Agreeableness) with whistleblowing is to manipulate whether or not the involved organization has an “ethics code” that explicitly labels the described wrongdoing as incompatible to the organization’s values (see Treviño et al., 2014). Under the presence of such an ethics code, we can expect a weaker effect of HEXACO Agreeableness on whistleblowing as compared to settings in which no ethics code exists.

Another direction for future research could be to investigate whether individuals strategically avoid information about a suspected wrongdoing in their organization if the costs for whistleblowing are deemed too high. If we assume that the phases of a whistleblowing decision are not strictly sequential, but rather, that individuals may complete these phases repeatedly (e.g., in loops; see Manuscript 1), one could expect that an organization member who vaguely suspects that their organization is involved in some kind of wrongdoing, but that the costs for reporting are tremendously high, could “go back” in the decision process. Specifically, they might actively avoid more information regarding the wrongdoing in order to decrease obligations to act against the transgression. Thus, in order to maintain a positive moral self-image without blowing the whistle on organizational wrongdoing, that is to morally disengage from the situation (Bandura, 1999), one might “look away” strategically (see Golman et al., 2017).

Lastly, considering the high prevalence of organization retaliation in response to reporting organizational wrongdoing in form of verbal intimidation, ostracism, or poor performance appraisals (see Manuscript 4, also see Rehg et al., 2008), I see potential for

future research identifying the goals that managers or colleagues who retaliate against a whistleblower pursue. Drawing on previous research on punishment and revenge, one could assume that punishment of whistleblowers is dominantly motivated by retributive goals (e.g., Carlsmith, 2006), that is to “pay back” and to balance the scales of suffering. Alternatively, it could also be that punishment of whistleblowers is more motivated by utilitarian goals, for instance to deter future whistleblowing acts by the same whistleblower or by other organization members. Fortunately, psychological research has developed a set of tools and paradigms that allow to operationalize punishment goals (e.g., Carlsmith, 2006), and applying these methods to investigate the goals underlying punishment against whistleblowers might be a promising direction for future research.

## **8.6 Conclusion**

The present research program was designed to advance the understanding of personality effects in whistleblowing decisions. Throughout this dissertation, I approached this topic from a theoretical, a methodological, and an empirical perspective. Overall, the theoretical considerations and empirical findings revealed that personality is an important predictor at various stages of the whistleblowing decision-making process, implying that future research in this domain should conceptualize whistleblowing as the result of a complex process rather than a one-off decision. On a specific level, when taking the theoretical and empirical insights of this dissertation together, the present dissertation shows that particularly higher levels of HEXACO Honesty-Humility and Conscientiousness render a whistleblowing decision more likely. Despite the present contribution, future empirical research is needed to enhance our understanding of how other broad personality dimensions (e.g., the Big Five) or narrower traits influence whistleblowing. In conclusion, I hope that this research inspires more research on the nexus of personality and whistleblowing.

## 8.7 References

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## 9 Deutsche Zusammenfassung

Nicht erst seit dem Wirecard Skandal ist bekannt, dass Unternehmen und andere Organisationen gelegentlich auf unmoralische oder illegale Praktiken zurückgreifen. Eine aktuelle Umfrage ergab beispielsweise, dass 46% der befragten Unternehmen innerhalb der letzten zwei Jahre Kenntnis von Betrug oder anderen Formen von Wirtschaftsdelikten erlangt hatten, viele davon innerhalb des eigenen Unternehmens (PwC, 2022). Solch organisationales Fehlverhalten ist für Außenstehende ohne „Insiderinformationen“ oft nicht zu erkennen. Allerdings gibt es gelegentlich Organisationsmitglieder, die nicht bereit sind, Fehlverhalten innerhalb ihrer Organisation mitzutragen. Diese Personen reagieren zum Beispiel mit (1) Weigerungen, selbst zu dem Fehlverhalten beizutragen, (2) dem Verlassen der Organisation (z.B. durch Kündigung), oder (3) offene geäußerte Bedenken gegenüber Kolleginnen bzw. Kollegen oder Vorgesetzten (Anvari et al., 2019; Jetten & Hornsey, 2014; Packer, 2008). In manchen Fällen erreichen diese Maßnahmen jedoch nicht, dass das Fehlverhalten anschließend beendet wird, zum Beispiel wenn die betroffene Organisation stark von dem Fehlverhalten profitiert. Einige Organisationsmitglieder, die bestrebt sind, das Fehlverhalten zu beenden, greifen dann zu einer radikaleren, aber häufig effektiveren Maßnahme: Sie geben Informationen über das Fehlverhalten an Personen oder Institutionen *außerhalb* ihrer Organisation oder ihres Teams weiter, die etwas dagegen unternehmen können. Dieses Verhalten ist als Whistleblowing bekannt (Jubb, 1999).

Angesichts der hohen gesellschaftlichen Relevanz von Whistleblowing als Kontrollmechanismus für Organisationen ist ein tieferes Verständnis der psychologischen Ursachen von zentraler Bedeutung. Darüber hinaus bieten Whistleblowing-Situationen auch aus theoretischer Perspektive einen relevanten Kontext, da Whistleblowing-Entscheidungen komplexe Abwägungen auf mehreren Ebenen zugrunde liegen: Einerseits geht Whistleblowing häufig mit negativen Konsequenzen für die jeweilige Person (d.h. für die



Whistleblowerin bzw. für den Whistleblower) einher. Zu nennen sind hier insbesondere Vergeltungsmaßnahmen seitens des Managements oder durch Kolleginnen bzw. Kollegen, wie zum Beispiel Entlassungen, rechtliche Konsequenzen oder soziale Ausgrenzung (Rehg et al., 2008; Rothschild & Miethe, 1999). Daher ist Whistleblowing auf den ersten Blick mit der Theorie der rationalen Entscheidung unvereinbar, welche postuliert, dass Menschen bestrebt sind, ihren individuellen Nutzen zu maximieren. Darüber hinaus hat Whistleblowing häufig negative Auswirkungen auf die betroffene Organisation, wie beispielsweise unternehmerische Nachteile oder Imageschäden. Andererseits hat Whistleblowing eine wichtige gesellschaftliche Funktion, die insbesondere darin besteht, dass organisationales Fehlverhalten erkannt, korrigiert und gegebenenfalls rechtlich verfolgt werden kann. Angesichts der negativen Konsequenzen von Whistleblowing auf individueller und organisationaler Ebene sowie der positiven Konsequenzen von Whistleblowing auf gesellschaftlicher Ebene stellt sich die Frage, wie Menschen diese verschiedenen Konsequenzen abwägen, um letztendlich eine Entscheidung für oder gegen Whistleblowing zu treffen.

Die bisherige Forschung hat diese Frage insbesondere hinsichtlich situativer Determinanten von Whistleblowing betrachtet und dabei eine Reihe relevanter Prädiktoren identifiziert, beispielsweise die Schwere des Fehlverhaltens oder bestimmte Formen einer Organisationskultur (Mesmer-Magnus & Viswesvaran, 2005). Deutlich weniger Forschung gibt es hingegen zu personenbezogenen Einflussfaktoren von Whistleblowing, insbesondere hinsichtlich der Persönlichkeit des Whistleblowers bzw. der Whistleblowerin. Die vorliegende Arbeit schließt diese Lücke, indem sie theoretische Vorhersagen über die Effekte bestimmter Persönlichkeitseigenschaften auf Whistleblowing-Entscheidungen trifft (Manuskript 1), methodologische Überlegungen dahingehend anstellt, wie Whistleblowing im Rahmen (persönlichkeits-)psychologischer Forschung untersucht werden kann

(Manuskript 2), und zwei Studien präsentiert, die die Rolle von Persönlichkeit in Whistleblowing-Entscheidungen empirisch untersuchen (Manuskript 3 und Manuskript 4).

In Manuskript 1 strukturiere ich—basierend auf einem vorherigen theoretischen Prozessmodell zur Entscheidungsfindung in Whistleblowing-Situationen (Dozier & Miceli, 1985)—den Entscheidungsprozess eines Whistleblowers bzw. einer Whistleblowerin anhand von vier Phasen: (1) der Wahrnehmung und Interpretation eines organisationalen Fehlverhaltens, (2) der Übernahme von persönlicher Verantwortung, dieses Fehlverhalten zu korrigieren, (3) der Abwägung verschiedener Verhaltensoptionen (u.a. Whistleblowing), und (4) einer Kosten-Nutzen-Analyse. Darauf aufbauend identifiziere ich situative Charakteristika dieser vier Phasen, die wiederum unterschiedliche Persönlichkeitseigenschaften aktivieren (Reis, 2008). Daraus resultieren Vorhersagen über die Rolle von konzeptuell breiten Eigenschaften aus grundlegenden Persönlichkeitstaxonomien wie den Big Five (Goldberg, 1990) oder dem HEXACO Modell der Persönlichkeit (Ashton & Lee, 2007), sowie Vorhersagen über die Rolle von konzeptuell schmalere Persönlichkeitseigenschaften (z.B. Ungerechtigkeitssensibilität; Schmitt et al., 2005).

Anschließend wende ich mich in Manuskript 2 der Frage zu, wie Whistleblowing im Rahmen von psychologischer Forschung operationalisiert werden kann. Diese Frage ist entscheidend, da Organisationen, in denen Fehlverhalten stattgefunden hat, häufig nicht bereit sind, „ihre Türen“ für Forschende zu öffnen. Daher haben Forschende verschiedene Paradigmen entwickelt, mit denen man Whistleblowing in Online-Studien oder in Laboruntersuchungen modellieren kann. Insbesondere identifiziere ich vier solcher Paradigmen—Szenario-Studien, autobiographische Erinnerungsstudien, ökonomische Spiele, und immersive Verhaltensstudien—und diskutiere, wie diese Paradigmen die definitorischen Aspekte von Whistleblowing abbilden (siehe Near & Miceli, 1985). Anschließend bewerte ich diese Paradigmen anhand von psychometrischen Gütekriterien wie der

Unverfälschbarkeit des Verhaltens, der Ökonomie und ethischen Überlegungen dahingehend, ob sie Täuschung der Versuchspersonen vermeiden.

In Manuskript 3 habe ich eines dieser Paradigmen angewendet, um einige theoretische Vorhersagen aus Manuskript 1 empirisch zu überprüfen. Genauer gesagt berichte ich über die Ergebnisse einer zweiteiligen Szenario-Studie, bei der die Versuchspersonen ( $N = 724$ ) zunächst einen Persönlichkeitsfragebogen ausgefüllt haben, der die sechs HEXACO Dimensionen erfasst (Ashton & Lee, 2009). Eine Woche später wurden die Versuchspersonen mit einem fiktiven Whistleblowing-Szenario konfrontiert, in dem sie (1) eine Entscheidung für oder gegen Whistleblowing sowie (2) eine Entscheidung für „internes Whistleblowing“ (d.h. die Weitergabe von Informationen über das Fehlverhalten an organisationsinterne Stellen, z.B. an eine Ombudsperson) oder „externes Whistleblowing“ (d.h. die Weitergabe von Informationen über das Fehlverhalten an organisationsexterne Stellen, z.B. an die Aufsichtsbehörde) treffen sollten. Die Ergebnisse zeigten entgegen meiner Erwartungen, dass HEXACO Emotionalität positiv mit einer Entscheidung pro (vs. kontra) Whistleblowing und einer Tendenz für internes (vs. externes) Whistleblowing einherging. Zudem waren höhere Werte von HEXACO Ehrlichkeit-Bescheidenheit mit einer Tendenz für internes (vs. externes) Whistleblowing assoziiert. Insgesamt waren diese Persönlichkeitseffekte jedoch überwiegend klein.

In Manuskript 4 habe ich ein weiteres der in Manuskript 2 diskutierten Whistleblowing-Paradigmen eingesetzt: eine autobiographische Erinnerungsstudie. In dieser Studie habe ich die Versuchspersonen gebeten, sich an eine echte, autobiographische Situation, in der sie ein Fehlverhalten in ihrer Organisation beobachtet haben, zu erinnern. Anschließend haben die Versuchspersonen Fragen dahingehend beantwortet, wie sie auf dieses Fehlverhalten reagiert haben. Die Ergebnisse dieser Studie ( $N = 622$ ) zeigen deutlich mehr und größere Persönlichkeitseffekte in Whistleblowing-Situationen als die Ergebnisse

der Szenario-Studie aus Manuskript 3. So waren HEXACO Ehrlichkeit-Bescheidenheit und HEXACO Verträglichkeit negativ damit korreliert, ein Fehlverhalten beobachtet zu haben. HEXACO Ehrlichkeit-Bescheidenheit und HEXACO Gewissenhaftigkeit waren positiv damit korreliert, ein beobachtetes Fehlverhalten gemeldet zu haben, und HEXACO Emotionalität war negativ mit internem Whistleblowing assoziiert.

Zusammenfassend lässt sich sagen, dass die Ergebnisse der Szenario-Studie (Manuskript 3) teilweise inkompatibel mit den theoretischen Vorhersagen (Manuskript 1) sind, während die Ergebnisse der autobiographischen Erinnerungsstudie (Manuskript 4) diese theoretischen Vorhersagen überwiegend stützen. Dies legt nahe, dass die zu erwartenden Effekte von Persönlichkeitseigenschaften auf Whistleblowing-Entscheidungen methodenabhängig sind. Diese Interpretation ist wiederum mit unseren theoretischen Überlegungen vereinbar, da nicht jedes Whistleblowing-Paradigma alle situativen Charakteristika einer typischen Whistleblowing-Situation abbilden kann und demnach nicht alle theoretisch-relevanten Persönlichkeitseigenschaften aktiviert werden. Zudem zeigen meine Ergebnisse, dass situative und personenbezogene Einflüsse auf Whistleblowing-Entscheidungen nicht getrennt voneinander betrachtet werden können, sondern zwei verknüpfte Betrachtungsebenen darstellen. Diese Interpretation folgt beispielweise aus der Beobachtung, dass die (autobiographisch erinnerte) Beobachtung eines Fehlverhaltens (Manuskript 4) sowie die moralische Bewertung einer beschriebenen Organisationspraktik (Manuskript 3) bereits von Persönlichkeit geformt werden, während diese Faktoren in der bisherigen Forschung eher als situative Variablen konzeptualisiert wurden.

Das vorliegende Forschungsprogramm liefert damit theoretische Erkenntnisse darüber, wie Menschen mit bestimmten Persönlichkeitseigenschaften—in Abhängigkeit spezifischer situativer Merkmale—komplexe moralische Entscheidungen treffen. Auch aus anwendungsorientierter Perspektive bietet das Forschungsprogramm Implikationen,

beispielsweise dahingehend, dass die Verwendung von Persönlichkeitstests in Personalauswahlverfahren und -entscheidungen positive Effekte auf den Umgang mit Fehlverhalten in Organisationen haben kann.

Mit der vorliegenden Dissertation hoffe ich, zu einem tieferen Verständnis für die komplexen psychologischen Abwägungsprozesse zwischen den Interessen der Whistleblowerin bzw. des Whistleblowers, der betroffenen Organisation sowie der Gesellschaft beizutragen. Letztendlich ist es wünschenswert, dass Unternehmen und Gesellschaften einen angemessenen und effektiven Umgang mit Fehlverhalten in Organisationskontexten finden, bei dem Whistleblowerinnen bzw. Whistleblower legitime moralischen Bedenken ohne Sorge vor Repressalien äußern können.

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