Revised: 2 March 2021

### ORIGINAL ARTICLE

# **Business Ethics**

### WILEY

# Intention without action? Differences between whistleblowing intention and behavior on corruption and fraud

# Sebastian Oelrich 🕩

Faculty of Economics and Management, Otto-von-Guericke University Magdeburg, Magdeburg, Germany

#### Correspondence

Sebastian Oelrich, Faculty of Economics and Management, Otto-von-Guericke University Magdeburg, Magdeburg, Germany. Email: sebastian.oelrich@ovgu.de

**Funding information** This study was financially supported by a DFG research grant (Gz: BU 919/8-3)

### Abstract

Whistleblowing is an effective tool against fraud and corruption in organizations. However, as researchers have struggled to acquire data on actual whistleblowers, research relies on hypothetical intention data and student samples, which is seen as a major limitation. Using a field study of 1,416 employees from China, Germany, and Russia, the purpose of this article is to identify differences and similarities between intention and actual whistleblowing decisions, thus aiding research and interpretation of prior and future studies. I also contribute by analyzing whether findings can be generalized across different cultures and whether status and power influence the whistleblowing process. My results reveal that the key difference between hypothetical and real decisions is not in variables that affect the process, but in effect sizes: Employees underestimate the effect of situational (retaliation) and organizational (compliance measures) variables in hypothetical compared to actual whistleblowing. Thus, reliance on intention research is not inherently problematic, when effect sizes are interpreted with caution. I also find that results are similar across countries and that status and power may not be decisive factors in whistleblowing. My findings should also be of interest to practitioners and policymakers, as they assist in designing effective whistleblowing systems and environments in organizations.

### 1 | INTRODUCTION

Fraud and corruption cause not only billions of U.S. dollars in damages annually (Association of Certified Fraud Examiners, 2018) but also halt the proper functioning of markets, while numerous scandals continue to harm trust in our system. Many cases were and are uncovered with the help of whistleblowers, the act is defined 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). Such whistleblowers have been shown to be an effective way to reduce damages and discipline organizations (Bowen et al., 2010; Call et al., 2018; Wilde, 2017). But although countries continue to pass laws that protect or reward whistleblowing (Oelrich, 2019) and organizations implement whistleblowing systems (Association of Certified Fraud Examiners, 2018), whistleblowers still face severe negative consequences, such as loss of employment, retaliation by colleagues, and superiors, or even prosecution (e.g., Alford, 2001; Kenny et al., 2019; Park et al., 2020). Due to its importance, research on whistleblowing spans across several professions and disciplines, including auditing (e.g., Curtis & Taylor, 2009; Latan et al., 2018), accounting and management (e.g., Andon et al., 2018; Cassematis & Wortley, 2013; Keenan, 1995), nursing and medicine (e.g., Moore & McAuliffe, 2012; Ohnishi

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2021 The Authors. Business Ethics, the Environment & Responsibility published by John Wiley & Sons Ltd.

448

WILEY–Business Ethics

et al., 2008), sports (e.g., Erickson et al., 2018), military (e.g., Rehg et al., 2008), and police (e.g., Park & Blenkinsopp, 2009).

By trying to understand the process that influences people to turn from a silent bystander to a whistleblower, a majority of empirical research measures these decision-making processes in the organizational environment as whistleblowing intention (for a discussion see Culiberg & Mihelič, 2017; Gao & Brink, 2017; Lee & Xiao, 2018). That is, the likelihood or propensity to whistleblow, most often by means of a hypothetical dilemma in which someone has to decide on their hypothetical course of action. A typical line found in the limitation section of such papers is as follows: "Students may not actually act as they say they would in the comfort of an anonymous questionnaire setting out hypothetical dilemmas" (Brennan & Kelly, 2007, p. 84). Similar lines accompany studies that use employees instead: "Despite our study of 'real' professionals in a 'real' setting, there may be a difference between an individual's stated likelihood of whistleblowing and that person actually whistleblowing" (Taylor & Curtis, 2010, p. 34).

The major concern is that hypothetical decision processes and student samples on whistleblowing are not predictive of behavior and actual whistleblowing in organizations (Miceli et al., 2009, p. 386) and thus intention results are somewhat limited or produce "unrealistic findings" (Culiberg & Mihelič, 2017, p. 790), leading to ineffective policies. After all, according to Kant a "want" is not a "will" to act.<sup>1</sup> This concern lacks empirical evidence yet is repeated throughout many whistleblowing studies. This dilemma has persisted in literature for decades and scholars have so far refrained from advancing our understanding since Mesmer-Magnus and Viswesvaran in 2005. In this study I aim to address this question by looking at differences and similarities between factors that are though to influence intention and actual whistleblowing behavior in organizations.

As many studies survey students (cf. Gao & Brink, 2017 for a review) or employees from a single or only few companies (e.g., Latan et al., 2018; Rehg et al., 2008), the effect of implemented measures in and across real organizations can often not be ascertained and validity of results across cultures are questionable. In addition to the methodological contribution above, I also analyze whether findings can be generalized across different cultures and whether status and power influence the whistleblowing process. For this purpose, I compare survey responses of 1,416 employees from China, Germany, and Russia, using z-tests for regression coefficient comparison and structural equation modeling to assess differences between intention and behavior in a single moderated mediation model.

Not only does this research point toward methodological improvements and interpretation of whistleblowing research but it is also important for practitioners and policymakers. Firstly, I contribute—methodologically and substantively—to whistleblowing research, in particular whether and how whistleblowing intention research may be conducted and interpreted more meaningfully. I propose and find that intention results only differ from actual behavior when differences in perceived and actual behavioral control are present. Such differences may be hindrances (i.e., retaliation) or aiding channels (i.e., compliance programs). That is, people under- or overestimate the influence of hindrances and aids in the decision process when confronted with a hypothetical decision in contrast to actually having to decide. The difference between hypothetical and real decisions is therefore not in variables that affect the process, but in effect sizes of influential variables. Thus, reliance on intention research is not inherently problematic, as long as effect sizes are interpreted with caution.

Secondly, my findings also challenge an early notion in whistleblowing research that power and status within organizations positively affect whistleblowing (e.g., Mesmer-Magnus & Viswesvaran, 2005; Milliken & Morrison, 2003; Near & Miceli, 1985, 1995), as I find no such effect within my samples.

A third contribution of my findings is particularly relevant for practitioners and policymakers. By showing that implications are somewhat consistent across cultures, I am able to assess compliance and policy measures that may be most effective in fostering whistleblowing within different organizations. I also point toward limitations of such efforts, both within organizations as well as the larger legislative context.

The remainder of the paper is structured as follows: First, I discuss prior literature and develop my hypotheses in regard to the individual, situational, and organizational factors. In particular, I advance the argument that a miscalibration of behavioral control antecedents is present between intention to whistleblow and actually blowing the whistle. I test my hypotheses using survey responses from employees in organizations across three countries and conduct several robustness checks to ensure reliability and validity of findings. Results are discussed in regard to implications for practitioners and research.

### 2 | LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

### 2.1 | Studying actual whistleblowing

One major reason why researchers draw on intention studies is pragmatic in nature. Conducting research in organizations on actual wrongdoing is difficult to implement, because managers and directors might be reluctant to assist in such research (Chiu, 2003; Mesmer-Magnus & Viswesvaran, 2005) and locating real whistleblowers beyond the ones involved in scandals cited in newspapers is difficult (Mesmer-Magnus & Viswesvaran, 2005; Park & Lewis, 2019). Park and Lewis (2019) reveal that it took them four years to identify and contact a sample of 127 whistleblowers. This also explains the reliance on single case studies in actual whistleblowing (e.g., Erickson et al., 2018; Ohnishi et al., 2008) and lack of quantitative approaches which dominate whistleblowing intention research. After an extensive search in commonly used databases, I was only able to identify a handful of research that measures whistleblowing behavior.

An often-cited paper in the conversation about limitations of whistleblowing intention research is authored by Mesmer-Magnus and Viswesvaran (2005).<sup>2</sup> They conduct a meta-study of

26 empirical research results, consisting of intention and behavior samples. Correlation tests show some significant differences between whistleblowing intention and actual behavior. Their results are somewhat limited, as they were unable to find data on several variables in both sample groups. In addition, their correlation tests are not suited for more complex relationships of dependent and independent factors or even direction of influence (Mesmer-Magnus & Viswesvaran, 2005). Their samples stem from several studies which used different research designs. To my knowledge, there is no study that compares whistleblowing intention and behavior in a single study design.

I develop my hypotheses along the typical classification of whistleblowing antecedents (Miceli & Near, 1988; Near & Miceli, 1985): Individual/personal, situational, and organizational influences. In particular, I look at the sociodemographic (individual) factors tenure in company, hierarchy in company, age, and gender. Fear of retaliation is included as a situational factor and compliance measures constitute as organizational factors.

# 2.2 | Individual factors: Tenure, hierarchy, age, and gender

In general, findings on demographic influences are among the most controversial. Recent reviews on whistleblowing studies conclude that they are not a major antecedent of whistleblowing (i.e., Culiberg & Mihelič, 2017; Gao & Brink, 2017; Lee & Xiao, 2018; Vadera et al., 2009). Rothschild and Miethe (1999) argue that a "demographic profile" of a whistleblower cannot be constructed. Mesmer-Magnus and Viswesvaran (2005) found that demographic variables differed for tenure and gender between intention and actual whistleblowing (explained below in detail) but were unable to find enough studies to compare age.

### 2.2.1 | Tenure, hierarchy, and age

To some extent, tenure, hierarchy, and age are correlated and interconnected. Being more tenured within an organization may afford better chances to climb the internal hierarchy, whereas longer tenure and higher position are associated with older employees. Thus, studies use composite scores to measure the combined effects of these variables (e.g., Miceli & Near, 1988; Stansbury & Victor, 2009). Other studies did not include all of these variables, which may lead to contradictory findings.

More tenured employees were found to be more likely to actually whistleblow (Mesmer-Magnus & Viswesvaran, 2005), while other studies found no significant influence for public sector tenure (Cassematis & Wortley, 2013). An argument for a positive influence of tenure and hierarchy on whistleblowing is that it affords one a better knowledge of the company and its controls (Keenan, 2000) and more power in terms of influence due to higher ranks or a more respected position (Mesmer-Magnus & Viswesvaran, 2005; Milliken **Business Ethics** 

& Morrison, 2003; Near & Miceli, 1985, 1995). Whereas an argument against this is that tenure and hierarchy do not protect from negative consequences as the cases around Sherron Watkins (Enron) or Cynthia Cooper (WorldCom) demonstrated. In regard to power dynamics, Kenny and Bushnell (2020) argue that the whistleblower comes from a weak position of power against the organization in any case.

Age is seen as a proxy for power within the organization (Vadera et al., 2009). Employing the same reasoning as above for tenure and hierarchy, one might assume a positive relationship, and some studies confirm this (Miceli & Near, 1988; Stansbury & Victor, 2009; also Mesmer-Magnus & Viswesvaran, 2005 for intention, no data on behavior). On the other hand, as seen in high-profile cases, power within the organization did little to aid these whistleblowers. In addition, being older might also contribute to the fact that other obligations emerge (e.g., family) and thus the employee is more cautious in their reporting. This would be in line with other studies that found no influence (Cassematis & Wortley, 2013).

It is acknowledged that much research on tenure, hierarchy, and age is contradictory and especially intention research indicates that these demographic factors are not a major antecedent of whistleblowing (Culiberg & Mihelič, 2017; Vadera et al., 2009). The research hypothesis here is based on the meta-study by Mesmer-Magnus and Viswesvaran (2005) and given the high interdependence of these three variables formulated similarly.

- **Hypothesis 1** Employees with longer tenure are more likely to whistleblow.
- **Hypothesis 2** Employees in higher ranked positions (hierarchy) are more likely to whistleblow.

Hypothesis 3 Older employees are more likely to whistleblow.

### 2.2.2 | Gender

Research on gender and whistleblowing is often connected to either moral stances (e.g., Brabeck, 1984; Near & Miceli, 1985) or retaliatory aspects (Liyanarachchi & Adler, 2011; Rehg et al., 2008). Near and Miceli (1985) argued that male employees should be more likely to whistleblow, as they inherit more diverse positions in companies and may have higher self-esteem. Only a minority of studies confirmed this hypothesis (e.g., Mayer et al., 2013 in their second study design). In a whistleblowing intention scenario, Liyanarachchi and Adler (2011) find that this effect holds for younger accountants, only. Gender is not a predictor for older accountants. Cassematis and Wortley (2013) found no differences for gender among public sector accountants. Brabeck (1984) on the other hand conducted an experiment on whistleblowing on professor-errors and found that female students were more likely to whistleblow. However, she points out that her findings on gender differences should be interpreted with caution due to the very small sample size. Such a positive effect is also reported by Mesmer-Magnus and Viswesvaran (2005) ILEY-Business Ethics

in their meta-study for actual whistleblowing. Rehg et al. (2008) find a similar positive effect for external whistleblowing among female soldiers in the US. The hypothesis is based on Mesmer-Magnus and Viswesvaran (2005) and their meta-analyses results.

**Hypothesis 4** Female employees are more likely to blow the whistle than male employees.

### 2.3 | Situational factors: Fear of retaliation

Many whistleblowers experience some form of retaliation after reporting misconduct (e.g., Alford, 2001). This may range from bullying by colleagues (Park et al., 2020), denunciating whistleblowers as mentally unstable (Kenny et al., 2019) to formal reprisals, or even job loss and legal action was taken against them. Thus, fear of such retaliatory actions may prohibit employees from speaking up. Research on fear of retaliation is vast and the majority of studies report that it has a negative effect on whistleblowing (Brown et al., 2016; Culiberg & Mihelič, 2017; Liyanarachchi & Adler, 2011; Mayer et al., 2013; Mesmer-Magnus & Viswesvaran, 2005 for intention; Miceli & Near, 1984) across several disciplines, for example in the military (Rehg et al., 2008), accounting (Cassematis & Wortley, 2013) or nursing and medicine (Moore & McAuliffe, 2012; Ohnishi et al., 2008). Park and Lewis (2019) show that perceived negative consequences even influence the intention to blow the whistle again. Fear of retaliation is therefore thought to negatively influence whistleblowing.

**Hypothesis 5** A higher fear of retaliation by the employee decreases their likelihood to whistleblow.

### 2.4 | Organizational factors: Compliance measures

Organizational factors such as adequate whistleblowing channels (Miceli & Near, 1984) or a positive organizational climate toward whistleblowing (Bussmann & Niemeczek, 2019; Mayer et al., 2013; Mesmer-Magnus & Viswesvaran, 2005) have been shown to have positive effects on reporting behavior. Erickson et al. (2018) argue that education about whistleblowing and guidance on how to whistleblow would be an enabling factor. As such, I look specifically at compliance measures taken by companies and known to the questioned employees. These include a designated compliance officer, a code of conduct that gives such guidance, as Erickson et al. (2018) propose, as well as training. Such communicated standards teach employees about the "right thing to do" (Moore & McAuliffe, 2012), which may give the confidence to report misconduct and is in line with results reported by Curtis and Taylor (2009) who find that "measures of trust" by the employer increase whistleblowing intention. Compliance is also thought of in terms of sanction, where breaches in company values are penalized (Bussmann, 2015). Bussmann and Niemeczek (2019) find that researchers studying the influence of compliance measures on whistleblowing is scarce and

needs testing. Given the evidence on the positive effects of soft organizational factors, such as climate and values, I argue that the same should hold true for hard organizational factors, as they are the expression of values (Bussmann, 2015). Such expressions of "virtue" by companies were found to positively correlate to whistleblowing (Kaptein, 2011).

# **Hypothesis 6** More thoroughly implemented compliance measures increase the employee's likelihood to whistleblow.

### 2.5 | On differences between intention and action

Research on whistleblowing has drawn on several models and theories, including several motivation theories (Near & Miceli, 1985; expectancy theory: Miceli & Near, 1985), social information processing theory (Mayer et al., 2013), the whistleblowing triangle (Brown et al., 2016), prospect theory (Oelrich, 2019), moral development theory (Brabeck, 1984), or as a protracted (Vandekerckhove & Phillips, 2019) or influence process (Near & Miceli, 1995), among others. In order to examine possible differences between whistleblowing intention and actual whistleblowing, Ajzen's theory of planned behavior (Ajzen, 1991) seems most appropriate.

Ajzen proposes that any planned action is based on attitude, subjective norm, and perceived behavioral control. Attitude is one's own attitude toward the behavior and subjective norm describes the perceived pressure by others, e.g., family members or colleagues. Perceived behavioral control "refers to the perceived ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (Ajzen, 1991, p. 188). According to the theory of planned behavior, intention, and behavior only differ when perceived and actual behavioral control deviate.

Looking at the variables considered in this study, this may be true for compliance measures as well as retaliation aspects. Both influences may differ between the hypothetical context and the actual one in that a person miscalibrates *how much* they impact their actual decision. Such an effect was already reported for organizational climate in the meta-study by Mesmer-Magnus and Viswesvaran (2005). I, therefore, expect the effect size of compliance measures and fear of retaliation to differ between hypothetical and real decisions.

- **Hypothesis 7** The impact of fear of retaliation on whistleblowing is moderated by whether employees are faced with a hypothetical or real decision.
- **Hypothesis 8** The impact of compliance measures on whistleblowing is moderated by whether employees are faced with a hypothetical or real decision.

In light of this possible miscalibration, it is not surprising that Near and Miceli (2016) argue that intention to blow the whistle is reported far more frequently than actual whistleblowing—however, antecedents may still be the same. In line with Near and Miceli (2016), I assume that employees report a higher whistleblowing intention than those faced with a real decision (actually performing the behavior). This is also in line with the limitation sections of many studies cited above, as researchers believe that intention may not be equal to action.

**Hypothesis 9** Reported whistleblowing is higher among the group who states their intention compared to the group that had to make a real decision.

### 2.6 | Control variables

This sample is drawn from three different countries. Since prior research has suggested that cultural (Chwolka & Oelrich, 2020; Park & Blenkinsopp, 2009; Park et al., 2008; Patel, 2003) and legislative (Oelrich, 2019) effects may play a role in the whistleblowing process, I include country dummies as controls. Issues associated with such cross-cultural research are discussed in the limitations section.

# 3 | STUDY DESIGN AND SAMPLE SELECTION

### 3.1 | Sample and data collection

As part of a larger research project on corruption in businesses, employees working in private sector companies in the People's Republic of China, Germany, and Russia were contacted. Such a random field survey design allows capturing responses from multiple sources: different companies, sizes, and sectors, as well as different sociodemographic structures of employees.

The countries China, Germany, and Russia were selected for their distinct cultural (Hofstede n.d.; House et al., 2004) and economic environments, as research outside of the United States is still scarce (Chwolka & Oelrich, 2020; Culiberg & Mihelič, 2017; Park et al., 2008; Patel, 2003). China and Russia have higher levels of corruption, according to the Corruption Perception Index (Transparency International, 2019) compared to Germany (see also Graf Lambsdorff, 2007). Prior research on Asian countries (e.g., Malaysia and India) also suggested that compared to Western cultures (e.g., Germany, United States, United Kingdom, Australia), people are less inclined to whistleblow (Park & Blenkinsopp, 2009; Park et al., 2008; Patel, 2003). Prior research questions the effectiveness of control systems especially in Asian cultures due to specific cultural attitudes (Park & Blenkinsopp, 2009; Patel, 2003). Thus, I am interested in how compliance measures have similar or diverging effects across countries and cultures. As studies are still scarce and mostly rely on intention results, this research will also help to interpret findings in these cultures more meaningfully.

The questionnaire was only distributed among persons 21 years and older and if they worked for a company of 100 or more employees in size. The respondents were assured of confidentiality and Business Ethics

remained anonymous. All questions were translated and administered in the respective languages. Questionnaire similarity across languages was ensured using back-to-back translation, although English translations are used throughout this paper for convenience.

After a pre-test round of n = 25 responses per country, small changes to the questionnaire were made and data were gathered throughout 2017. The final sample includes 473 responses from Germany, 468 from Russia, and 475 responses from China. The response statistics show that organizations are almost split half between smaller (<500) and larger sizes ( $\geq$ 500). Employees in Germany are on average the oldest (59.7% over 40 years), followed by Russia (41.0% over 40) and China with the youngest average (29.5% over 40). According to the Central Intelligence Agency World Factbook, this is in line with general population statistics (Central Intelligence Agency, 2019). Average study length is almost double in Germany compared to China and Russia (Knoema, 2014), which does explain the divergence in bachelor and master degrees or equivalents (master degree in Germany: 82.9%, Russia: 80.6%, China: 12.0%). 45.8% of respondents are female, with only small differences across countries surveyed. These differences in working population according to gender are in line with reported economic participation of population in the respective countries, where Germany ranks behind Russia (World Economic Forum, 2018). On average, 20 to 25% of companies were listed on a stock exchange, this share being smaller for companies with fewer employees and larger at companies having more employees.

### 3.2 | Study design

Figure 1 illustrates the relevant parts of the questionnaire and categorization procedure. When respondents said they have not witnessed a case of fraud at their workplace before, they were given a hypothetical scenario (Figure 1: *situation*) and asked about their intention to report such an incident (*whistleblowing*). Similarly, the group who witnessed a fraud or corruption case was asked about their subsequent behavior. The questionnaire is built in a way that questions for the hypothetical group mirror questions given to the group who witnessed such unethical and illegal behavior as close as possible. Afterwards, they were asked about fears of retaliation (*fear of retaliation*)—either hypothetical or actual fears before deciding (not) to report. Implemented compliances measures were elicited prior to this block of questions (*compliance measures*) and sociodemographic factors were elicited at the end (*tenure, hierarchy, age, gender*).

### 3.3 | Measures

### 3.3.1 | Intention versus behavior situation

The variable *situation* is used to distinguish between people who faced a real decision to blow the whistle, that is an actual situation, and those



**FIGURE 1** Study and questionnaire design with elicited variables in italic. In a first step, respondents are grouped according to their prior experience with an observed wrongdoing and then asked on their experiences. When no such experience exists, they are given a short hypothetical scenario and asked on their hypothetical decisions and opinions

who have not been in such a situation. Employees were asked: "Have you ever had a suspicion of a significant economic crime such as fraud or corruption in the working environment of your current company?," with possible answers "yes" and "no" and the option not to answer. The emphasis on "serious" was added to create a reference point, as prior studies have shown that the seriousness of wrongdoing (Andon et al., 2018) is positively correlated to whistleblowing. To respondents, this reference point clearly indicates that petty crimes such as a colleague stealing a pencil is not of interest here. Answering "yes" classifies respondents as belonging to the "real" group, that is they had to make a real decision, whereas "no" groups them into "hypothetical," as they have not experienced such a situation before and were given a hypothetical scenario. Non-responses are dropped. *Situation* is coded 0 (real) and 1 (hypothetical) for the respective group.

As shown in Figure 2, employees in Germany experience corruption and fraud in their companies the least, while Russian and Chinese employees are approximately on the same level. On average, almost every fifth employee has experienced a case of corruption or fraud in their work environment. This is in line with other dark figure studies on fraud and corruption (Association of Certified Fraud Examiners, 2018). It is also similar to the findings of Mayer et al. (2013) in their study of US employees (second study in their paper). They report that 19% observed wrongdoing in their current workplace.

# 3.3.2 | Whistleblowing intention and whistleblowing behavior

The "real" situation group was then asked about that specific incident and whether they did or did not report their suspicion. The answer for the variable whistleblowing is a binary choice with "yes" and "no." If no answer was given, respondents are dropped from the analysis. Using a single, dichotomous item to elicit whistleblowing behavior is common in this area of research (e.g., Cassematis & Wortley, 2013; Mayer et al., 2013; Mesmer-Magnus & Viswesvaran, 2005; Miceli & Near, 1985).

The "hypothetical" situation group was given a hypothetical scenario and asked to imagine that they observed a significant case of economic crime or fraud in their current workplace—similar to the real situation to increase comparability—as is typical in whistleblowing intention research (Ahmad et al., 2014). Their whistleblowing intention, "Would you report your suspicion?," was recorded with a 1 (very unlikely) to 5 (very likely) response format. Since the whistleblowing answer for the "real" situation group is dichotomous, their answers were placed at the respective end of the "hypothetical" whistleblowing scale, 1 (no) and 5 (yes). This is also illustrated in the diagram in Figure 2. As some respondents chose not to answer these questions, the sample is reduced to 1,168 responses.

### 3.3.3 | Fear of retaliation

Each respondent was asked three questions concerning possible retaliatory measures that were elicited through a response format from 1 (not at all) to 5 (absolutely true): "Did/Would you fear negative consequences on the job?," "Did/Would you fear that the case would not be thoroughly investigated?," and "Did/Would you have doubts about the confidential handling of your identity?" Recall that the question had to be restated between real cases and hypothetical situations. *Fear of retaliation* shows very good internal reliability on all commonly used indicators with  $\alpha = 0.82$ , *compositereliability* = 0.98, and AVE = 0.73 (Hair et al., 2017).

### 3.3.4 | Compliance measures

*Compliance measures* are defined with respect to prevention and sanction aspects (Bussmann, 2015). Prevention aspects are assessed



**FIGURE 2** Descriptive results of observed incidents and whistleblowing behavior or intention, respectively. The pie charts show respondents' prior experience observing fraud or corruption in their company. The bar chart compares their reaction either in the real situation (black chart) or their hypothetical decision whether to blow the whistle or not (grey chart)

as the presence or absence of a compliance officer, a code of conduct, and training. Respondents were asked whether they knew if any of these existed in their companies with binary response options (yes, no/I don't know). Respondents were given a fictional scenario about a colleague who accepted a bonus from a client (bribe). They were asked about the consequences should that colleague be caught. Sanction aspects are "likelihood of formal notice or written warning" and "review with management," with response options ranging from 1 (very unlikely) to 5 (very likely). Compliance measures classify as higher-order formative construct and do not have any reliability or goodness of fit indicators by design (Hair et al., 2018). In structural equation modeling, this can easily be modeled. In linear and logit regressions, it is an ordinal construct with values of 1 (at least one measure) to 5 (all five aspects present). A sanction aspect was recoded as 1 if employees believed this sanction to be "likely" or "very likely" to happen, and 0 otherwise. On average, companies in Germany seem to have more thoroughly implemented compliance measures compared to China and Russia, which is in line with higher standards and awareness of compliance aspects, although this is now subject to change especially in China (Behr, 2015). For example, approximately half of respondents from Germany reported

a compliance officer and code of conduct in their companies, while only every fourth employee in China and Russia reported similar compliance aspects. In regard to consequences of misconduct, a review with management was indicated far more often by German employees (77.2%) than Russian (40.1%) or Chinese (32.7%) employees, which highlights differences across countries.

# 3.3.5 | Company aspects and socio-demographic variables

Country of workplace and nationality,<sup>3</sup> company size, tenure, and hierarchy at organization, as well as age and gender (0 = male and 1 = female) were retrieved at the end of the survey.

# 3.3.6 | Comparability, cross country validity, and construct equivalence

Cross-country research might limit the assessment of causality. To address this concern, the validity of measured constructs was

453

-WILEY-Business Ethics

FABLE 1     Correlation matrix										
		М	SD	1	2	3	4	5	6	7
1	Whistleblowing (intention/behavior)	3.22	1.37	-	-	-	-	-	-	-
2	Fear of retaliation	3.30	1.19	-0.09**	-	-	-	-	-	-
3	Compliance measures	1.62	1.29	0.32***	0.05 <sup>n.s.</sup>	-	-	-	-	-
4	Situation	0.83	0.38	0.18***	0.01 <sup>n.s.</sup>	-0.07*	-	-	-	-
5	Gender	0.46	0.50	-0.003	0.05*	-0.07*	0.11***	-	-	-
6	Age	4.41	1.17	0.10****	-0.08**	0.12***	0.02 <sup>n.s.</sup>	-0.10***	-	-
7	Tenure	3.61	1.79	0.05*	-0.08**	0.19***	-0.01 <sup>n.s.</sup>	-0.05+	0.46***	-
8	Hierarchy	3.18	1.13	0.05+	-0.02 <sup>n.s.</sup>	0.10***	-0.05 <sup>n.s.</sup>	-0.13***	0.17***	0.19***

*Note:* M = mean; SD = standard deviation.

 $p^{+} < .1; p < .05; p < .01; p < .001$ 

<sup>n.s.</sup>not significant with  $p \ge .1$ .

ensured first in the concept stage, as all questions were framed in a way that would not be ambiguous in any of the surveyed countries and tested in a pre-test round. Second, established constructs were compared in regard to their internal reliability measures. In addition, country dummies are introduced into the regressions as robustness checks later. At all times, regressions also control for different socioeconomic units, as these might be just as relevant as national differences (sub-group cultures). These steps are in line with suggestions by Buil et al. (2012).

Another concern may be that both groups—the hypothetical and actual behavior groups—are not comparable. T-tests for all independent variables indicate no significant differences between group characteristics (e.g., gender, age, position) with p > .05. It indicates that both groups do not differ a priori, which otherwise might affect results. In addition, employees were asked whether they observed a "significant" economic crime or fraud incident and the hypothetical version was stated similar in a way that employees should imagine observing a "significant" economic crime or fraud. This was done in order to reduce differences in actual cases and hypothetical ones and to increase comparability.<sup>4</sup>

### 3.4 | Methodology and models

The aim of this research is to investigate whether there are differences between what people say they would do and what they actually do in a whistleblowing scenario. Recall Figure 1, which distinguishes between two scenarios ("hypothetical" and "real" *situation*) with two possible outcomes each ("actual whistleblower" and "no whistleblower," "intention to blow the whistle" and "no intention to blow the whistle"). I use ordinary least squares regression analyses to compare the "hypothetical" and "real" situation group, where the dependent variable is *whistleblowing* (intention or behavior, respectively). *Whistleblowing* in the real *situation* is a dichotomous variable (no and yes). I use a logit model for each *situation* to corroborate my results.

I compare regression coefficients using z-tests (Paternoster et al., 1998) to assess differences in the (perceived) impact of independent variables on the dependent one (hypotheses 7 and 8). I then use partial least squares structural equation modeling to take a closer look at the differences between the two situations (hypothetical and real) in a single model. Using a structural equation model has the additional advantage of being able to control for mediation effects (Hair et al., 2017). This moderation-mediation model is used to test for specific moderation effects on the structural paths (Becker et al., 2018). In other words, I test whether a relationship is moderated when people think about a behavior (hypothetical) versus being actually faced with the decision (real) to report the observed misconduct. Using partial least squares alleviates issues of normality assumptions, as it is a parameter-free method (Hair et al., 2011). As further robustness analysis, I test whether coefficient differences are also present in the structural equation model and include country-level controls into the regressions to assess the robustness of my findings.

### 4 | RESULTS

### 4.1 | Linear and logit regression results

Descriptive statistics are provided in Table 1 and regression results in Table 2. I conduct regression analyses to compare effects on whistleblowing intention (*situation*: hypothetical) and whistleblowing behavior (*situation*: real), respectively.

Since the dependent variable for the real *situation* is indeed a binary choice (yes/no), I corroborate my OLS regression findings with logit regressions, similar in approach to the linear regressions. In order to dichotomize *whistleblowing* intention, which was measured with a 5-point scale, the answers to the dependent variable *whistleblowing* are recoded to 0 for "very unlikely" and "rather unlikely," and 1 for "rather likely" and "very likely," while "undecided" was dropped (model 4). An alternative approach (*intention\_alt*) is given in

Business Ethics

TABLE 2 Linear and logit regressions on whistleblowing behavior (real situation) and intention (hypothetical situation)

	Linear regressions				Logistic regressions						
	(1) Behavior		(2) Intention		(3) Behavior		(4) Intention		(5) Intention_alt		
	В	SE									
Constant	2.22**	0.65	2.68***	0.21	-1.04 <sup>n.s.</sup>	0.85	-1.18 <sup>*</sup>	0.58	-1.68+	0.90	
Fear of retaliation	-0.32**	0.09	-0.08*	0.03	-0.40***	0.12	-0.10 <sup>n.s.</sup>	0.07	-0.35**	0.13	
Compliance measures	0.59***	0.10	0.30***	0.03	0.72***	0.13	0.77***	0.09	0.90***	0.14	
Age	0.07 <sup>n.s.</sup>	0.12	0.10**	0.03	0.10 <sup>n.s.</sup>	0.16	0.27**	0.10	0.37**	0.15	
Gender	-0.09 <sup>n.s.</sup>	0.26	0.10 <sup>n.s.</sup>	0.07	-0.06 <sup>n.s.</sup>	0.34	0.31 <sup>n.s.</sup>	0.21	0.63+	0.34	
Hierarchy	0.12 <sup>n.s.</sup>	0.11	0.01 <sup>n.s.</sup>	0.03	0.17 <sup>n.s.</sup>	0.14	0.05 <sup>n.s.</sup>	0.09	0.14 <sup>n.s.</sup>	0.15	
Tenure	-0.09 <sup>n.s.</sup>	0.08	-0.04 <sup>n.s.</sup>	0.02	-0.11 <sup>n.s.</sup>	0.10	-0.09 <sup>n.s.</sup>	0.07	-0.12 <sup>n.s.</sup>	0.10	
df	6		6		6		6		6		
$F/\chi^2$	8.99***		24.31***		47.98***		101.99***		68.19***		
$R^2$ /Nagelkerkes $R^2$	.21		.14		.27		.23		.35		
Adj. R <sup>2</sup> /Cox & Snell R <sup>2</sup>	.18		.13		.20		.16		.26		
Ν	215		906		215		581		229		

Note: Models (1) and (3) are the real situation (behavior) with dependent variable whistleblowing0 = no and 1 = yes. Models (2), (4), (5) are hypothetical situations with model (2) dependent variable whistleblowing intention 1 = very unlikely, 2 = rather unlikely, 3 = undecided, 4 = rather likely, 5 = very likely; model (4) with dependent variable whistleblowing intention 0 = very/rather unlikely, 1 = rather/very likely; model (5) with dependent variable whistleblowing intention 0 = very/rather unlikely, 1 = rather/very likely; model (5) with dependent variable whistleblowing intention 0 = very/rather unlikely, 1 = rather/very likely; model (5) with dependent variable whistleblowing intention 0 = very likely only. SE = standard error.

 $^{+}p < .1; \ ^{*}p < .05; \ ^{**}p < .01; \ ^{***}p < .001;$ 

<sup>n.s.</sup>not significant with  $p \ge .1$ .

model 5, where 0 (very unlikely) and 1 (very likely) only represent the end of the *whistleblowing* intention scale.

Models 1 and 3 depict people who witnessed a case of fraud with the dependent variable *whistleblowing* behavior. Models 2, 4, and 5 reflect responses to the hypothetical scenario, and thus represent *whistleblowing* intention. All variables are entered into the respective regressions at once, as no hierarchy or effect sizes are hypothesized.  $R^2$  and Nagelkerkes  $R^2$  values are appropriately high. The correct prediction of the logit models was also high, with model (3) 71.6% correct predictions on average, model (4) 73.5%, and model (5) 75.5%.

Looking at the results from the linear regressions, I find that *gender*, *hierarchy*, and *tenure* have no significant effect in either the real *situation* (model 1) or the hypothetical *situation* (model 2). *Age* seems to be a predictor for whistleblowing intention, but not for actual whistleblowing. Results are similar in the logit regressions (models 3 to 5), as none of the sociodemographic variables have a significant influence in the hypothetical and real situation, except for *age*, which is significant for whistleblowing intention. My hypotheses 1, 2, and 4 are not supported. Hypothesis 3 is partially supported, since *age* (model 2: B = 0.10, p = .003; model 4: B = 0.27, p = .005; model 5: B = 0.37, p = .015) seems to be a predictor for whistleblowing intention. Older employees are more likely to have the intention to report misconduct, although this does not translate to behavior (p > .1 in models 1 and 3).

Fear of retaliation has a significant negative effect on whistleblowing in both situations, hypothetical (B = -0.08, p = .016) and real (B = -0.32, p = .001), in the linear regression models. This is also true in the logit regressions, except for model 4 with whistleblowing intention as the dependent variable, where the effect is not significant. *Compliance measures* are significant positive influences on whistleblowing throughout all five models (p < .001). Both findings are in line with Hypotheses 5 and 6 in terms of significance and direction of effects.

### 4.2 | Effect sizes

Based on the theory of planned behavior I hypothesized that people may miscalibrate *how much* behavioral control factors impact their actual decision compared to a hypothetical one. These factors are *fear of retaliation* (Hypothesis 7) and *compliance measures* (Hypothesis 8), as they are obstacles or aids in performing a behavior. I, therefore, compare the effect sizes between hypothetical and real decisions for these variables.

Fear of retaliation weighs more heavily (Z = -2.46, p < .01) in the real situation (model 1, B = -0.32) than in the hypothetical situation (model 2, B = -0.08). Comparing the logit regression models, my findings are similar. Here too, *fear of retaliation* weighs more heavily in the real situation (model 3, B = -0.40) then in the hypothetical one (model 5, B = -0.35) with strict assumptions on the dependent variable (answers "rather unlikely," "undecided," and "rather likely" are excluded). Using a *z*-test shows that coefficient differences are not significant (Z = -0.27, p > .1). In model 4, where whistleblowing intention is not measured as strictly (only **ILFY**–Business Ethics

"undecided" is excluded), *fear of retaliation* has no significant influence (B = -0.10, p = 0.29), although the coefficient sign is negative and the difference between the coefficients significant (Z = -2.21, p < .05). These findings rather indicate a support for Hypothesis 7, which assumed different effects or impacts for hypothetical and real decisions.

Effects are inconclusive in regard to *compliance measures*. In linear regression, the effect is more pronounced in the real situation (model 1, B = 0.59) than in the hypothetical decision (model 2, B = 0.30) and the coefficient difference is significant (Z = 2.90, p < .01). This effect is reversed in the logit regressions, where compared to the real situation (model 3, B = 0.72) and the coefficient is larger in hypothetical decisions (model 4, B = 0.77; model 5, B = 0.90). However, this difference is not significant in either comparison (model 3 to 4: Z = -0.28, p > .1; model 3 to 5: Z = -0.89, p > .1). Thus, the results are somewhat inconclusive. As such, Hypothesis 8 is only partially supported as of now.

### 4.3 | Moderated mediation model results

As a further test and control, I use moderation analysis to test if some specific variables are affected by the distinction between *situations*, hypothetical and real (Hair et al., 2018). In the structural equation model, I use the same basic model as before, but include possible mediation effects, which is not possible in a simple linear or logit regression. Age may have an influence on *tenure* and *hierarchy* and *tenure* may influence *hierarchy*. In my hypothesis development for these variables, I already showed that other studies use composite indicators, as these variables are highly correlated and partially dependent. I also include a mediation effect of *compliance measures* on *fear of retaliation* as control. A compliance program may reduce fears of retaliatory actions, as it lays down rules on how to act according to company codes of ethics. It may also reasonably assure employees that retaliatory actions are not tolerated.

I use the distinction between the hypothetical and real situation as binary moderation variable *situation* on every independent variable, with 0 (real situation) and 1 (hypothetical situation). The dependent variable is *whistleblowing*—both intention and behavior, jointly. This makes a single model possible, as the distinction between hypothetical and actual whistleblowing decisions is now captured in the moderation variable *situation*. The results are given in Table 2 and separated in direct, mediation, and moderation effects, attained by using a bootstrap procedure (n = 5,000).

Direct effects (Table 3A) are similar to the regression results in Table 2, as neither *gender*, *hierarchy*, nor *tenure* have a significant influence on whistleblowing. The positive effect of *compliance measures* and the negative influence of *fear of retaliation* are also in line with my prior findings. In this overall model, *age* does not seem to have an influence either, in line with the real situation regressions in Table 2 (model 1 and 3). The new binary variable *situation* differentiates between the hypothetical (1) and real situation (0) and its direct effect on whistleblowing is also not significant. In structural 
 TABLE 3
 Partial least squares structural equation model results

 of moderated mediation analysis
 Partial least squares structural equation model results

Structural path	Coeff. B	SD
A. Direct effects		
Compliance measures $\rightarrow$ whistleblowing	.50****	0.07
Age $\rightarrow$ whistleblowing	.07 <sup>n.s.</sup>	0.10
Situation $\rightarrow$ whistleblowing	.18 <sup>n.s.</sup>	0.19
Gender $\rightarrow$ whistleblowing	07 <sup>n.s.</sup>	0.10
Hierarchy $\rightarrow$ whistleblowing	.02 <sup>n.s.</sup>	0.03
Fear of retaliation $\rightarrow$ whistleblowing	26**	0.08
Tenure $\rightarrow$ whistleblowing	07 <sup>n.s.</sup>	0.11
B. Mediation effects		
Compliance measures $\rightarrow$ fear of retaliation	.05 <sup>n.s.</sup>	0.04
Age $\rightarrow$ hierarchy	.09**	0.03
Age $\rightarrow$ tenure	.46***	0.02
Tenure $\rightarrow$ hierarchy	.15***	0.03
C. Moderation effects		
Situation $\times$ compliance measures $\rightarrow$ whistleblowing	28**	0.09
Situation $\times$ age $\rightarrow$ whistleblowing	.00 <sup>n.s.</sup>	0.09
Situation $\times$ gender $\rightarrow$ whistleblowing	.20 <sup>n.s.</sup>	0.20
Situation $\times$ hierarchy $\rightarrow$ whistleblowing	03 <sup>n.s.</sup>	0.04
Situation $\times$ fear of retaliation $\rightarrow$ whistleblowing	.17*	0.07
Situation $\times$ tenure $\rightarrow$ whistleblowing	.01 <sup>n.s.</sup>	0.06

Note: Partial least squares structural equation model results with bootstrap n = 5,000 and path weighting scheme. Overall model is significant with p < .000. Dependent variable whistleblowing goodness of fit:  $R^2 = .18$  and adj.  $R^2 = .17$ . Variable *situation* is coded as 0 = real situation (behavior) and 1 = hypothethical situation (intention). SD = standard deviation.

\**p* < .05; \*\**p* < .01; \*\*\**p* < .001;

<sup>n.s.</sup>not significant with  $p \ge .1$ .

equation models, it is also possible to control for mediation effects (Table 3B). The assumed inter-dependencies, *age-hierarchy, age-tenure, tenure-hierarchy,* are all significant and positive, except for *compliance measures-fear of retaliation*. It seems that compliance measures have no significant effect on an employees' fear of possible retaliatory actions.

At the core of this structural equation model are the moderation effects (Table 3C), as I am interested in whether the effect sizes of the independent variables differ across the two *situations*. Only the effects of *compliance measures* and *fear of retaliation* are significantly moderated by the *situation* variable. Compliance measures are moderated negatively, whereas fear of retaliation is moderated positively in regard to the hypothetical situation, as this was coded with 1. This effect is in line with comparisons of the coefficient differences in Table 2. It is best understood graphically, which I plotted<sup>5</sup> in Figure 3 for *situationx compliance measures* and *situationx fear of retaliation* on whistleblowing, respectively. The two graphs in each diagram show the two *situations*: Hypothetical (dotted line, coded 1) and



**FIGURE 3** Interaction between compliance measures/fear of retaliation and whistleblowing. Left diagram represents interaction between fear of retaliation and whether employee made a hypothetical or real decision and whistleblowing. Right diagram shows interaction between compliance measures and whether employee made a hypothetical or real decision and whistleblowing. Lines are for graphical interpretation of effects, only. They are plotted using SPSS and PROCESS extension (Hayes, 2018)

real (straight line, coded 0). Whistleblowing intention and behavior are shown on the y-axis and the independent variable on the x-axis. The negative moderation effect *situationx compliance measures* indicates that the slope is less steep for the hypothetical situation than for the real decision situation. Since the initial effect of compliance measures was positive, and the effect of fear of retaliation on whistleblowing is negative, the same result is given by the positive moderation effect *situationx fear of retaliation*: The slope is less steep for the hypothetical situation compared to the real decision situation. Thus, the same increase in the independent variable–ceteris paribus—has a stronger effect on the dependent variable in the real situation compared to the hypothetical one.

fear of retaliation

### 4.4 | A comparison of the dependent variable

Figure 3 shows another interesting difference between whistleblowing intention and actual whistleblowing: The hypothetical decision to whistleblow seems to occur more frequently than when people are forced to make that decision in real life, in line with Hypothesis 9. I test whether the dependent variables actual whistleblowing and whistleblowing intention are equal across the groups. Recall that since actual whistleblowing decision is a dichotomous variable, and whistleblowing intention is measured on a 5-point scale, I sort actual whistleblowing "yes" (5) and "no" (1) at the extremes of the intention scale.

A simple independent *t*-test for equal means (t(1168) = -6.57, p < .000) with unequal variances (Levene-test: F = 546.04, p < .000) shows that the group who was faced with an actual decision (M = 2.70, SD = 1.98, n = 233) was less inclined to blow the whistle than those who were faced with a hypothetical decision (M = 3.35, SD = 1.14, n = 935). Results are similar when using dichotomous variables with a non-parametric Mann-Whitney test (Z(1166) = -4.07, p < .000, r = .12). Unreported robustness checks

with only extreme values considered in the hypothetical situation (similar to variable *intention\_alt* in Table 2, model 5) yield similar results with larger effect sizes.

compliance measures

### 4.5 | Robustness checks and additional controls

I conduct additional robustness analyses. First, I include country controls in the regressions from Table 2, models 1 and 2. With Germany as reference country, dummy variables for Russia and China are added. Untabulated results are similar for both models from Table 2. Only *tenure* shows a negative significant influence on whistleblowing intention (B = -0.05, p < .05), an effect that was previously not significant. In the real situation with whistleblowing behavior as the dependent variable, none of the country variables has a significant influence. In the hypothetical situation, the "Russian group" shows significantly lower whistleblowing intention compared to the reference country (B = -0.33, p < .001).

Hierarchy in a company was thought to positively influence the decision process due to more power and authority, and thus a belief that concerns are more likely to be acknowledged. However, I found no support in the analyses for Hypothesis 2. This may be due to the way the variable was set up. I use an alternative binary measure for *hierarchy* where 1 equals upper and top management and 0 secretary, assistant and lower management and enter it in models 1 and 2 in Table 2 as *hierarchy\_dummy*. Untabulated results corroborate previous findings that hierarchy does not seem to influence the process significantly (p > 0.1). I also use *hierarchy\_dummy* as alternative measure for *hierarchy* in the structural model from Table 3. Results remain unchanged, as the direct effect of *hierarchy\_dummy* on *whistleblowing* ( $\beta = 0.161$ , p = .09) as well as the interaction effect of *situationx hierarchy\_dummy* are not significant( $\beta = -0.30$ , p = .75).

Instead of using z-tests (Paternoster et al., 1998) or moderation analysis to determine whether coefficients differ across the

457

ILEY-Business Ethics

OELRICH

situations, a third option is available in partial least squares structural equation modeling. It provides a non-parametric multigroup analysis approach to determine whether the coefficients significantly differ across two groups (Hair et al., 2018; Sarstedt et al., 2011). The model is similar to the previous structural equation model in Table 3, less the moderation effects. Here, the *situation* variable serves as the distinction between the groups, similar to the linear and logit regressions. The absolute differences between coefficients are given in Table 4.

Significant differences in the coefficients are found between the groups for *fear of retaliation*, only. The difference between coefficients for both groups in terms of *compliance measures* would only be significant on a rather lenient cut-off criteria (p < 0.1). In addition, respective p-values are added to the right for each situation group (hypothetical and real). Significances are similar to the original linear regression models from Table 2 and thus corroborate prior findings. The results here are attained with moderation effect controls and using a non-parametric bootstrap procedure (n = 5,000).

### 5 | DISCUSSION

### 5.1 | Contributions and implications

This research makes several important contributions to theory and practice. Methodologically, it was designed to answer an old question in whistleblowing research: Can we use intention data to draw conclusions about actual whistleblowing or do policy measures based on intention research leave organizations with employees who intend but do not act (intention without action)? Practically, I also contribute to important questions about the effectiveness of compliance measures as value conveyors, limitations of compliance programs, the role of power within the organization, as well as crosscultural validity of findings. While these latter questions are also of interest to researchers, they are particularly relevant for practitioners and policymakers in designing effective whistleblowing systems and legislation.

The results of this study suggest that the main difference between whistleblowing intention and actual behavior cannot be found in the influential factors per se, but rather in the effect sizes of the variables. Employees underestimate the effect of situational and organizational variables in hypothetical compared to actual whistleblowing. This is in line with the theory of planned behavior, in which behavioral control aspects may differ in how they translate from intention to actual behavior. The difference in effect sizes is more pronounced for negative (i.e., fear of retaliation) than positive factors (i.e., compliance measures), as the latter did not materialize in all tests. However, behavioral economic theories such as prospect theory have shown that people weigh negative factors more heavily than positive ones (Tversky & Kahneman, 1992; for whistleblowing in particular cf. Oelrich, 2019). This may explain the difference between negative and positive variable effect sizes.

An important implication of this finding is that intention research may be an adequate substitute for behavior research in whistleblowing, where such data is hard to acquire. However, researchers should be cautious to interpret effect sizes, as they may not reflect the true impact of that particular behavioral control variable. In fact, all influential factors seem to be similar, except for age. However, this variable was no longer an influence, nor moderated by the situation distinction, in the more complex structural model. These findings can also explain the significant difference between intention to whistleblow and actually blowing

**TABLE 4**Multigroup analysis ofstructural equation model with mediationeffects

Multigroup analysis: Structural path		p values for each situation			
	Coeff-diff ( Intention – Behavior )	p value (behavior)	p value (intention)		
A. Direct effects					
Compliance measures $\rightarrow$ whistleblowing	.10+	<.000	<.000		
Age $\rightarrow$ whistleblowing	.05 <sup>n.s.</sup>	.561	.007		
Gender $\rightarrow$ whistleblowing	.06 <sup>n.s.</sup>	.760	.168		
Hierarchy $\rightarrow$ whistleblowing	.05 <sup>n.s.</sup>	.400	.847		
Fear of retaliation $\rightarrow$ whistleblowing	.11*	.001	.004		
Tenure $\rightarrow$ whistleblowing	.00 <sup>n.s.</sup>	.399	.106		
B. Mediation effects					
Age $\rightarrow$ tenure	.09+	<.000	<.000		
Age $\rightarrow$ hierarchy	.15*	.001	.054		
Compliance measures $\rightarrow$ fear of retaliation	.09 <sup>n.s.</sup>	.239	.563		
Tenure $\rightarrow$ hierarchy	.18 <sup>*</sup>	.929	<.000		

Note: Coeff-diff = coefficient difference.

 $p^{+}p < .1; p^{+} < .05;$ 

<sup>n.s.</sup>not significant with  $p \ge .1$ .

the whistle. When effects of hindrances are underestimated, employees more often believe that they would come forward with information. In a real scenario, however, given the same fear of retaliation, they are less likely to whistleblow as the true impact of fears is stronger.

My additional findings in particular have broader implications for research and practitioners as well as policymakers. Sociodemographic factors seem to have little influence on the decision processes. Far more important are organizational and situational factors, such as fears associated with different forms of retaliation and compliance measures. This finding adds to the growing literature on the irrelevance of individual factors in the whistleblowing process (for a discussion see Culiberg & Mihelič, 2017). Especially gender, tenure, and hierarchy are all associated with different positions of power. Their irrelevance in the process indicates that power dynamics and relationships within the organization may not be decisive factors in such decision-making overall. This is in line with arguments by Kenny and Bushnell (2020), who suggest that whistleblowers "speak out about injustice from a relatively weak position of power," regardless of whether they inherit higher or lower positions. Contrast for example whistleblowers Cynthia Cooper, Vice President of Internal Audit at WorldCom or Sherron Watkins, Vice President of Corporate Development at Enron against Edward Snowden, an average employee: position or hierarchy may not play a decisive role. Near and Miceli (1995, p. 686) argued that whistleblowing is an influence process, in which the whistleblower believes to change managements' attitudes. However, this may also be applied the other way: if management wants employees to report misconduct, they would have to set up appropriate influential measures. One way would be through appropriate compliance measures, that influence the employee in their decision-making process-which is shown here to be an effective process in fostering whistleblowing.

On the other hand, situational and organizational factors seem to be relevant, with either prohibiting (fear of retaliation) or supporting (compliance measures) character. Fear of retaliation was found to be a major hindrance in the process across many studies. It remains one of the most challenging aspects for companies and policymakers to control. While many countries have already introduced laws that protect from retaliation, they remain flawed. Finding effective protective measures should be the major goal for organizations and policymakers alike.

The mediation analysis suggests that compliance measures have no reductive effect on fears of retaliation. This is an important finding for practitioners to consider, as companies need to acknowledge that it is not actual retaliation, but the perception of future retaliation that influences the decision. Thus, there may be a detachment between measures that actually reduce retaliation and those that are perceived to reduce retaliation. Even if laws are effective in reducing actual retaliation, this does not necessarily translate into a reduced fear of retaliation by colleagues and superiors. Other measures should be employed that are specifically tailored to reduce the perception of retaliation likelihood. For example, a focus on integrity-promoting corporate culture seems to have positive effects in this regard (Bussmann & Niemeczek, 2019).

Prior studies have not examined compliance measures explicitly. Guidelines, a code of conduct, or training programs, foster whistleblowing directly. They give guidance as to what is perceived as correct behavior in any organization. When employees are educated about these corporate values and (un)wanted behavior, they may be more confident in reporting situations that are not in line with these guidelines. This has practical implications for organizations. A culture of openness and trust or company virtues, as Kaptein (2011) calls them, may be effectively communicated through compliance measures. Teaching employees about company values directly influences their likelihood to come forward with information about misconduct. As many companies already have mandatory compliance programs in place, they are a costefficient way to educate employees about corporate values or virtues.

The sample used here is comprised of responses from three countries, which is of particular interest for two reasons: First, I provide insight outside American samples, which dominate research on whistleblowing (Culiberg & Mihelič, 2017; Park et al., 2008; Patel, 2003) and second, they differ vastly in their cultural (House et al., 2004) and economic conditions, especially in regard to fraud (Graf Lambsdorff, 2007; Transparency International, 2019) as well as in their established compliance systems. Yet, the underlying process is similar and robust across organizations in different countries and cultures. This has direct managerial implications, as it enables companies to employ similar strategies in different countries and subsidiaries. Transporting values through established compliance channels may be an effective way to uncover misconduct in affiliated companies despite different cultural and economic backgrounds. Especially for China, in which such compliance measures seem least established, there is untapped potential to foster whistleblowing. The impetus may come from organizations themselves or policymakers if they are willing to add legal provisions.

### 5.2 | Strengths and limitations

Whistleblowing is broadly defined in regard to actions that may be disclosed: Unethical, illegal, immoral (Near & Miceli, 1985). I looked at a very specific incident, namely fraudulent and corrupt actions. This topic has practical and theoretical value and is of major concern to organizations, given the enormous (non)financial impact of fraud and corruption in business and society at large. Generalizing from these findings to other types of whistleblowing may be problematic, as it is possible that different types of misconduct are associated with other factors that influence the potential whistleblower.

Comparing groups of data sets is often difficult. Different studies use different instruments, research designs, and demographic groups. An issue that is especially prevalent in meta-studies WILEY-Business Ethics

(Mesmer-Magnus & Viswesvaran, 2005). In addition, most studies on whistleblowing rely on intention and student samples, which may not be representative of real whistleblowing in organizations. My research eliminates these issues by surveying real employees in real organizations on their whistleblowing behavior and intention, respectively. The research design used here allows me to capture intention and real behavior data through a single survey and data gathering process. However, this does not necessarily eliminate concerns of non-response and common-method bias. After all, I have to rely on the respondents' answers on attitudes and beliefs. Ex-ante, these concerns were mitigated by assuring respondents of their anonymity and confidentiality and they were not asked for personal identifiers (e.g., only age range was asked, not exact age, nor company name or industry sector). Given a large number of questions they were asked in wake of the research project, they should not have been able to guess the purpose of this project. Common-method bias does not extend to factual questions, such as implemented compliance measures. Ex-post methods to control for common-method bias (Richardson et al., 2009) were shown to have limited value and were not used here. Non-response or social desirability biases may have also affected the results, although suggestions to minimize these effects were considered (Ahmad et al., 2014). In fact, sample characteristics are broadly in line with gender, age, and education combinations in their respective country populations and the nonresponse of participants regarding the survey questions was generally low.

Methodologically, I corroborate my initial results with several different approaches and variable variations, which yield similar results. This helps to limit inherent methodological issues in this comparison approach, in particular, the binary nature of behavior variables and ordinal data in intention answers.

### 5.3 | Future research directions

The study gives confidence that intention research may be a valuable option when actual behavior in organizations is costly to observe. This introduces new options and avenues to study: Whistleblowing as protracted process (Vandekerckhove & Phillips, 2019) for example may be easier to study in controlled environments and repeated experimental setups, as does research on other organizational misconduct, that might be even harder to observe and investigate than fraud, such as sexual harassment and racial discrimination.

While I looked at individual factors such as gender, age, or job position, there are many other factors that might influence the process, for example, previous experiences with whistleblowing (Park & Lewis, 2019) or personal attitude toward the specific type of misconduct, as there are already many different forms of fraud. Much recent work on whistleblowing explores moral reasoning and values that influence the whistleblowing process from the perspective of the whistleblower (Park & Lewis, 2019; Park et al., 2018). In this line of research, it would be interesting to understand how such moral values can be taught (Oelrich et al., 2020) and how organizations can best communicate their own sets of values and an ethical climate, which have been shown to influence the process (Bussmann & Niemeczek, 2019; Latan et al., 2018). That is, which types of compliance measures and company values are effective and how can these measures best be implemented? An attempt to consolidate both of these research directions was undertaken by Cheng et al. (2019) who look at the moderating influence of moral courage on ethical leadership and organizational politics, which is similar to the approach taken here, where the mediating role of compliance measures on fear of retaliation was incorporated. All of these questions should be ideally embedded in cultural contexts and comparisons, in order to find best practice approaches tailored to specific needs, especially given that my results suggest that influence processes may not differ significantly across cultures.

### 6 | CONCLUSION

Whistleblowing is an effective tool against fraud and corruption. However, researchers have struggled to acquire data on actual whistleblowers and as a consequence relied mostly on intention research. In this study, I survey employees in China, Germany, and Russia on fraud and corruption at their workplace and subsequent reports of such cases (whistleblowing), with the purpose of answering a significant methodological question: Can we use intention data to draw conclusions about actual whistleblowing or do measures based on intention research leave organizations with employees who intend but do not act? The results of the present study suggest that the influencing factors are similar across both actual behavior and hypothetical intention groups. The key difference between whistleblowing intention and behavior is that employees underestimate the influence (effect sizes) of behavioral control aspects, such as fear of retaliation and compliance measures in intention scenarios compared to actual situations. Thus, intention research may be an adequate substitute for behavior research in whistleblowing, where such data is hard to acquire. For intention samples, however, effect sizes need to be interpreted with caution, as they may not reflect the true impact of a behavioral control variable.

In addition, important questions for practitioners and policymakers about the effectiveness of compliance measures as value conveyors, the role of power within the organization and cross-cultural validity of findings were tackled. I find that individual factors are not major influences, whereas fear of retaliation and compliance measures have a significant negative and positive effect on whistleblowing, respectively. Power dynamics do not seem to be a decisive factor for the potential whistleblower, whereas adequate compliance systems as conveyor of values and virtues provide assurance that fosters whistleblowing behavior, as does a reduction in the perception of fears.

My findings help researchers to interpret their whistleblowing intention results more meaningfully, while practitioners should pay a closer look at compliance measures and retaliation—regardless of culture and country.

### ACKNOWLEDGMENTS

I thank Anne Chwolka, Kai Bussmann, Matthias Raith, Dawn Elm, and Dirk Simons, as well as participants of the analytical research in accounting workshop for their helpful comments on previous versions of this manuscript. I would also like to extend my thanks to Dima Jamali (editor in chief), Breeda Comyns (editor), as well as two anonymous reviewers for their constructive feedback and suggestions that significantly helped to enhance my paper.

### CONFLICT OF INTEREST

The author declares that he has no conflict of interest.

### ETHICAL APPROVAL

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

### INFORMED CONSENT

Informed consent was obtained from all individual participants included in the study.

### PEER REVIEW

The peer review history for this article is available at https://publo ns.com/publon/10.1111/beer.12337.

### DATA AVAILABILITY STATEMENT

Data available on request from the authors.

#### ORCID

Sebastian Oelrich D https://orcid.org/0000-0002-0958-5514

#### ENDNOTES

- <sup>1</sup> Immanuel Kant distinguished between a mere "want" (*das Möchten*) to do something and the "will" (*der Willen*) to actually act (Kant, 1785, p. G394).
- <sup>2</sup> Google Scholar lists over 590 citations as of January 2020.
- <sup>3</sup> As they always matched in this sample, I simply use the variable *country*. Questionnaires were distributed in the respective language and with a number-stem from that country.
- <sup>4</sup> I thank an anonymous reviewer for pointing out that such comparability between groups should be established first.
- <sup>5</sup> I use the PROCESS extension for SPSS by Hayes (2018) to show this effect graphically.

### REFERENCES

- Ahmad, S. A., Ismail, I. S., Azmi, N. A., & Zakaria, N. B. (2014). Methodological issues in whistle-blowing intentions research: Addressing the social desirability bias and order effect bias. *Procedia - Social and Behavioral Sciences*, 145, 204–210. https://doi. org/10.1016/j.sbspro.2014.06.028
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179–211. https://doi. org/10.1016/0749-5978(91)90020-T

Alford, C. F. (2001). Whistleblowers: Broken lives and organizational power. Cornell University Press.

- Andon, P., Free, C., Jidin, R., Monroe, G. S., & Turner, M. J. (2018). The impact of financial incentives and perceptions of seriousness on whistleblowing intention. *Journal of Business Ethics*, 151, 165–178. https://doi.org/10.1007/s10551-016-3215-6
- Association of Certified Fraud Examiners. (2018). Report to the nations on occupational fraud and abuse. Austin.
- Becker, J.-M., Ringle, C. M., & Sarstedt, M. (2018). Estimating moderating effects in PLS-SEM and PLSc-SEM: Interaction term generation x data treatment. *Journal of Applied Structural Equation Modeling*, 2(2), 1–21.
- Behr, N. (2015). Compliance trends around the world–10 Questions for the compliance heads of Baker & McKenzie–And the answers every compliance professional should know. *Global Compliance News*. https://globalcompliancenews.com/compliance-trends-around-theworld-10-questions-for-the-compliance-heads-of-baker-mckenzieand-the-answers-every-compliance-professional-should-know/
- Bowen, R. M., Call, A. C., & Rajgopal, S. (2010). Whistle-blowing: Target firm characteristics and economic consequences. *The Accounting Review*, 85(4), 1239–1271. https://doi.org/10.2308/ accr.2010.85.4.1239
- Brabeck, M. M. (1984). Ethical characteristics of whistle blowers. Journal of Research in Personality, 18(1), 41–53. https://doi. org/10.1016/0092-6566(84)90037-0
- Brennan, N., & Kelly, J. (2007). A study of whistleblowing among trainee auditors. The British Accounting Review, 39(1), 61–87. https://doi. org/10.1016/j.bar.2006.12.002
- Brown, J. O., Hays, J., & Stuebs, M. T. (2016). Modeling accountant whistleblowing intentions: Applying the theory of planned behavior and the fraud triangle. Accounting and the Public Interest, 16(1), 28–56. https://doi.org/10.2308/apin-51675
- Buil, I., de Chernatony, L., & Martínez, E. (2012). Methodological issues in cross-cultural research: An overview and recommendations. *Journal* for Targeting, Measurement and Analysis in Marketing, 20(3/4), 223– 234. https://doi.org/10.1057/jt.2012.18
- Bussmann, K.-D. (2015). The impact of personality and company culture on company anti-corruption-programmes. In J. van Erp, W. Huisman, & G. Vande Walle (Eds.), *The Routledge handbook of white-collar and corporate crime in Europe* (pp. 435–452). Routledge.
- Bussmann, K.-D., & Niemeczek, A. (2019). Compliance through company culture and values: An international study based on the example of corruption prevention. *Journal of Business Ethics*, 157(3), 797–811. https://doi.org/10.1007/s10551-017-3681-5
- Call, A. C., Martin, G. S., Sharp, N. Y., & Wilde, J. H. (2018). Whistleblowers and outcomes of financial misrepresentation enforcement actions. *Journal of Accounting Research*, 56(1), 123–171. https://doi. org/10.1111/1475-679X.12177
- Cassematis, P. G., & Wortley, R. (2013). Prediction of whistleblowing or non-reporting observation: The role of personal and situational factors. *Journal of Business Ethics*, 117(3), 615–634. https://doi. org/10.1007/s10551-012-1548-3
- Central Intelligence Agency. (2019). The World Factbook. https://www. cia.gov/library/publications/the-world-factbook/
- Cheng, J., Bai, H., & Yang, X. (2019). Ethical leadership and internal whistleblowing: A mediated moderation model. *Journal of Business Ethics*, 155, 115–130. https://doi.org/10.1007/s10551-017-3517-3
- Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43(1–2), 65–74. https://doi.org/10.1023/A:10229 11215204
- Chwolka, A., & Oelrich, S. (2020). Whistleblowing as a means for the prevention and detection of fraud in Germany–Amidst heroes and informers. *Betriebswirtschaftliche Forschung und Praxis*, 72(4), 445-471.

Business Ethics

WILEY-Business Ethics

- Culiberg, B., & Mihelič, K. K. (2017). The evolution of whistleblowing studies: A critical review and research agenda. *Journal of Business Ethics*, 146(4), 787–803. https://doi.org/10.1007/s10551-016-3237-0
- Curtis, M. B., & Taylor, E. Z. (2009). Whistleblowing in public accounting: influence of identity disclosure, situational context, and personal characteristics. Accounting and the Public Interest, 9(1), 191–220. https://doi.org/10.2308/api.2009.9.1.191
- Erickson, K., Patterson, L. B., & Backhouse, S. H. (2018). "The process isn't a case of report it and stop": Athletes' lived experience of whistleblowing on doping in sport. *Sport Management Review*, 22(5), 724– 735. https://doi.org/10.1016/j.smr.2018.12.001
- Gao, L., & Brink, A. G. (2017). Whistleblowing studies in accounting research: A review of experimental studies on the determinants of whistleblowing. *Journal of Accounting Literature*, 38, 1–13. https://doi. org/10.1016/j.acclit.2017.05.001
- Graf Lambsdorff, J. (2007). The institutional economics of corruption and reform. Cambridge University Press.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.). Sage Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. The Journal of Marketing Theory and Practice, 19(2), 139–151. https://doi.org/10.2753/MTP1069-6679190202
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). Advanced issues in partial least squares structural equation modeling (PLS-SEM). Sage Publications.
- Hayes, A. F. (2018). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (2nd ed.). Guilford Press.
- Hofstede, G. (n.d.) Hofstede insights: The culture compass. https://www. hofstede-insights.com/country-comparison/
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, W. P., & Gupta, V. (2004). Culture, leadership, and organizations: The GLOBE study of 62 societies. Sage.
- Kant, I. (1785). Die Grundlegung zur Metaphysik der Sitten (pp. 385–463). Akademieausgabe Band IV (AA IV).
- Kaptein, M. (2011). From inaction to external whistleblowing: The influence of the ethical culture of organizations on employee responses to observed wrongdoing. *Journal of Business Ethics*, 98, 513–530. https://doi.org/10.1007/s10551-010-0591-1
- Keenan, J. P. (1995). Whistleblowing and the first-level manager: Determinants of feeling obliged to blow the whistle. *Journal of Social Behavior & Personality*, 10(3), 571–584.
- Keenan, J. P. (2000). Blowing the whistle on less serious forms of fraud: A study of executives and managers. *Employee Responsibilities and Rights Journal*, 12(1), 199–217. https://doi.org/10.1023/A:10228 20210577
- Kenny, K., & Bushnell, A. (2020). How to whistle-blow: Dissensus and demand. Journal of Business Ethics, 164(4), 643–656. https://doi. org/10.1007/s10551-019-04401-7
- Kenny, K., Fotaki, M., & Scriver, S. (2019). Mental health as a weapon: Whistleblower retaliation and normative violence. *Journal of Business Ethics*, 160, 801–815. https://doi.org/10.1007/s10551-018-3868-4
- Knoema. (2014). Knoema Country Databases. https://knoema.com/ ATLAS
- Latan, H., Ringle, C. M., & Jabbour, C. J. C. (2018). Whistleblowing intentions among public accountants in Indonesia: Testing for the moderation effects. *Journal of Business Ethics*, 152, 573–588. https://doi. org/10.1007/s10551-016-3318-0
- Lee, G., & Xiao, X. (2018). Whistleblowing on accounting-related misconduct: A synthesis of the literature. *Journal of Accounting Literature*, 41, 22–46. https://doi.org/10.1016/j.acclit.2018.03.003
- Liyanarachchi, G. A., & Adler, R. (2011). Accountants' whistleblowing intentions: The impact of retaliation, age, and gender. *Australian Accounting Review*, 21(2), 167–182. https://doi. org/10.1111/j.1835-2561.2011.00134.x

- Mayer, D. M., Nurmohamed, S., Klebe Treviño, L., Shapiro, D. L., & Schminke, M. (2013). Encouraging employees to report unethical conduct internally: It takes a village. Organizational Behavior and Human Decision Processes, 121, 89-103. https://doi.org/10.1016/j. obhdp.2013.01.002
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of Business Ethics*, 62, 277–297. https://doi.org/10.1007/s10551-005-0849-1
- Miceli, M. P., & Near, J. P. (1984). The relationships among beliefs, organizational position, and whistle-blowing status: A discriminant analysis. The Academy of Management Journal, 27(4), 687–705. https://doi. org/10.2307/255873
- Miceli, M. P., & Near, J. P. (1985). Characteristics of organizational climate and perceived wrongdoing associated with whistleblowing decisions. *Personnel Psychology*, 38(3), 525–544. https://doi.org/10.1111/ j.1744-6570.1985.tb00558.x
- Miceli, M. P., & Near, J. P. (1988). Individual and situational correlates of whistleblowing. *Personnel Psychology*, 41(2), 267–281. https://doi. org/10.1111/j.1744-6570.1988.tb02385.x
- Miceli, M. P., Near, J. P., & Dworkin, T. M. (2009). A word to the wise: How managers and policy-makers can encourage employees to report wrongdoing. *Journal of Business Ethics*, 86(3), 379–396. https:// doi.org/10.1007/s10551-008-9853-6
- Milliken, F. J., & Morrison, E. W. (2003). Shades of silence: Emerging themes and future directions for research on silence. *Journal of Management Studies*, 40(6), 1563–1568. https://doi. org/10.1111/1467-6486.00391
- Moore, L., & McAuliffe, E. (2012). To report or not to report? Why some nurses are reluctant to whistleblow. *Clinical Governance: An International Journal*, 17(4), 332–342. https://doi.org/10.1108/14777 271211273215
- Near, J. P., & Miceli, M. P. (1985). Organizational dissidence: The case of whistle-blowing. *Journal of Business Ethics*, 4(1), 1–16. https://doi. org/10.1007/BF00382668
- Near, J. P., & Miceli, M. P. (1995). Effective whistle-blowing. Academy of Management Review, 20(3), 679–708. https://doi.org/10.5465/ amr.1995.9508080334
- Near, J. P., & Miceli, M. P. (2016). After the wrongdoing: What managers should know about whistleblowing. *Business Horizons*, 59(1), 105– 114. https://doi.org/10.1016/j.bushor.2015.09.007
- Oelrich, S. (2019). Making regulation fit by taking irrationality into account: The case of the whistleblower. *Business Research*, 12(1), 175-207. https://doi.org/10.1007/s40685-019-0094-6
- Oelrich, S., Chwolka, A., & Raith, M.. (2020). Betriebswirtschaftslehre als Gestaltungswissenschaft? Neue Ansätze und empirische Erkenntnisse. In H. Pechlaner & S. Speer (Eds.), Responsible Entrepreneurship. Verantwortlich handeln in einer globalisierten Welt (pp. 69-91). Springer. https://doi.org/10.1007/978-3-658-31616-7
- Ohnishi, K., Hayama, Y., Asai, A., & Kosugi, S. (2008). The process of whistleblowing in a Japanese psychiatric hospital. *Nursing Ethics*, 15(5), 631–642. https://doi.org/10.1177/0969733008092871
- Park, H., Bjørkelo, B., & Blenkinsopp, J. (2020). External whistleblowers' experiences of workplace bullying by superiors and colleagues. *Journal of Business Ethics*, 161, 591–601. https://doi.org/10.1007/ s10551-018-3936-9
- Park, H., & Blenkinsopp, J. (2009). Whistleblowing as planned behavior—A survey of South Korean Police Officers. Journal of Business Ethics, 85, 545–556. https://doi.org/10.1007/s10551-008-9788-y
- Park, H., Blenkinsopp, J., Oktem, M. K., & Omurgonulsen, U. (2008). Cultural orientation and attitudes toward different forms of whistleblowing: A comparison of South Korea, Turkey, and the U.K. *Journal of Business Ethics*, 82, 929–939. https://doi.org/10.1007/ s10551-007-9603-1

## **Business Ethics**

- Park, H., Vandekerckhove, W., Lee, J., & Jeong, J. (2018). Laddered motivations of external whistleblowers: The truth about attributes, consequences, and values. *Journal of Business Ethics*, 165(4), 565–578. https://doi.org/10.1007/s10551-018-4082-0
- Patel, C. (2003). Some cross-cultural evidence on whistle-blowing as an internal control mechanism. *Journal of International Accounting Research*, 2(1), 69–96. https://doi.org/10.2308/jiar.2003.2.1.69
- Paternoster, R., Brame, R., Mazerolle, P., & Piquero, A. (1998). Using the correct statistical test for the equality of regression coefficients. *Criminology*, 36(4), 859–866. https://doi.org/10.1111/ j.1745-9125.1998.tb01268.x
- Rehg, M. T., Miceli, M. P., Near, J. P., & Van Scotter, J. R. (2008). Antecedents and outcomes of retaliation against whistleblowers: Gender differences and power relationships. *Organization Science*, 19(2), 221–240. https://doi.org/10.1287/orsc.1070.0310
- Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. Organizational Research Methods, 12(4), 762–800. https://doi.org/10.1177/10944 28109332834
- Rothschild, J., & Miethe, T. D. (1999). Whistle-blower disclosures and management retaliation: The battle to control information about organization corruption. Work and Occupations, 26(1), 107–128. https:// doi.org/10.1177/0730888499026001006
- Sarstedt, M., Henseler, J., & Ringle, C. M. (2011). Multi-group analysis in partial least squares (PLS) path modeling: alternative methods and empirical results. Advances in International Marketing, 22, 195–218. https://doi.org/10.1108/S1474-7979(2011)0000022012
- Stansbury, J. M., & Victor, B. (2009). Whistleblowing among young employees: A life course perspective. *Journal of Business Ethics*, 85(3), 281–299. https://doi.org/10.1007/s10551-008-9770-8
- Taylor, E. Z., & Curtis, M. B. (2010). An examination of the layers of workplace influences in ethical judgments: Whistleblowing likelihood and

perseverance in public accounting. *Journal of Business Ethics*, 93, 21-37. https://doi.org/10.1007/s10551-009-0179-9

- Transparency International. (2019). Corruption perceptions index 2019. https://www.transparency.org/en/cpi/2019/results
- Tversky, A., & Kahneman, D. (1992). Advances in prospect theory: Cumulative representation of uncertainty. Journal of Risk and Uncertainty, 5(4), 297–323. https://doi.org/10.1007/BF00122574
- Vadera, A. K., Aguilera, R. V., & Caza, B. B. (2009). Making sense of whistle-blowing's antecedents: Learning from research on identity and ethics programs. *Business Ethics Quarterly*, 19(4), 553–586. https://doi.org/10.5840/beq200919432
- Vandekerckhove, W., & Phillips, A. (2019). Whistleblowing as a protracted process: A study of UK whistleblower journeys. *Journal of Business Ethics*, 159, 201–2019. https://doi.org/10.1007/s1055 1-017-3727-8
- Wilde, J. H. (2017). The deterrent effect of employee whistleblowing on firms' financial misreporting and tax aggressiveness. *The Accounting Review*, 92(5), 247–280. https://doi.org/10.2308/accr-51661
- World Economic Forum. (2018). Global gender gap report 2018. Author.

# AUTHOR BIOGRAPHY

**Sebastian Oelrich** is a research associate of Accounting, Ottovon-Guericke University Magdeburg, Germany. His interests are in business ethics and fraud research.

How to cite this article: Oelrich S. Intention without action? Differences between whistleblowing intention and behavior on corruption and fraud. *Business Ethics, Env & Resp.* 2021;30:447–463. <u>https://doi.org/10.1111/beer.12337</u>