

# Personal attributes, organizational conditions, and ethical attitudes: a social cognitive approach

Dirk Holtbrügge, Anastasia Baron and Carina B. Friedmann

Department of International Management, School of Business & Economics, University of Erlangen-Nürnberg, Nürnberg, Germany

*This paper investigates the impact of personal attributes and organizational conditions on attitudes toward corporate misdeeds. On the basis of social cognitive theory, we develop hypotheses that are tested against data collected from 215 German employees using an online survey. Our findings suggest that personal attributes (i.e. gender, age, Big five personality traits) have a much greater impact on ethical attitudes than organizational conditions (i.e. organizational culture). Further, a moderating effect of control-oriented culture on the relationship between personality traits (i.e. conscientiousness, extraversion) and attitudes toward corporate misdeeds is found. We derive implications for human resource management and further theory development.*

## Introduction

Unethical behavior is a major challenge for organizations, their stakeholders, and society. While its effects have been widely discussed in academic literature, there are only few studies that investigate the determinants of attitudes toward corporate misdeeds (e.g. Sackett & DeVore 2001; Andreoli & Lefkowitz 2009; Claybourn 2011). Although most researchers acknowledge the relevance of personal attributes and organizational conditions in predicting ethical and unethical attitudes in the workplace, only few studies have addressed both factors simultaneously. However, as emphasized by Hershcovis *et al.* (2007), it is necessary to determine the relative contribution of personal attributes and organizational conditions in this context and to implement adequate management instruments.

Existing research in this context is also characterized by several shortcomings. One weakness is the inconsistent labeling of phenomena that relate to unethical employee behavior in the workplace, such as general misbehavior (Vardi & Weitz 2004), workplace deviance (Peterson 2002), sabotage (Analoui 1995), corruption (Aguilera & Vadera 2008), or counterproductivity (Bolton *et al.* 2010). However, as organizational rules or norms coincide in many cases with societal and legal norms (e.g. prohibitions against employee theft), it is difficult to draw a distinct line between unethical behavior and other forms of misbehavior. A comprehensive scale of unethical behavior at the workplace, including intra- and extraorganizational behavior, has only been applied by Kaptein (2011), investigating the impact of ethical codes from a stakeholder perspective.

Another important limitation of previous research is the use of student samples (e.g. Terpstra *et al.* 1993; Eweje & Brunton 2010). Students were asked to hypothetically predict their attitudes and behavior in workplace settings irrespective of their lack of working experience, which raises serious concerns about the reliability and generalizability of these studies. Moreover, student samples are rather homogeneous in terms of respondent age and educational background and do not allow to test for these influences. Finally, the impact of organizational conditions cannot be adequately conceptualized in these studies.

Based on these considerations, the objective of this study is to analyze the relative contribution of personal attributes and organizational conditions in predicting ethical attitudes at the workplace. According to Kaptein (2008), ethical attitudes are defined as the extent to which individuals disagree with practices that are regarded as morally unacceptable to the stakeholders of an organization. As theoretical framework, we apply social cognitive theory (SCT; Bandura 1986) as it stresses the influence of personal attributes and organizational conditions on individual belief structures. In particular, it does not assume that personal attributes and organizational conditions necessarily affect attitudes in equal strength, thus providing a valuable approach in addressing the research question.

The remainder of this paper is organized as follows. In the next section, the theoretical framework will be developed and hypotheses will be derived, referring to the results of previous studies on personal and organizational antecedents of ethical attitudes and behavior at the workplace. Afterwards, the methodology of the study will be explained. Taking into consideration the critique of student samples, our sample consists of 215 German employees with at least 1 year of work experience. This is followed by the presentation and discussion of our main results. In the final section, the contributions of the study are summarized, limitations are outlined, and implications for future research are provided.

## Theory and hypotheses

### SCT

In the last decades, SCT has been broadly applied in the area of business ethics research (e.g. Stajkovic &

Luthans 1997; Aquino *et al.* 2009; Claybourn 2011; Galperin *et al.* 2011). Generally, SCT has a social and a cognitive aspect (Bandura 1986). The social aspect of SCT refers to the idea that the way individuals think, and act is influenced by environmental conditions. The cognitive aspect of SCT indicates that personal attributes and thought processes influence how individuals perceive and behave in their environment. The mechanisms through which environmental and personal attributes affect human attitudes and behavior are cognitive processes. Among the most relevant of these capabilities are (1) self-reflective and self-regulatory, (2) vicarious, and (3) symbolic processes. The former refers to the capacity to evaluate one's own behavior using a set of personal standards and the ability to guide future behavior by comparing past outcomes of behavior and personal standards. Vicarious learning capability describes the ability to acquire beliefs and attitudes by observing others through social modeling rather than by personal trial and error. In particular, social modeling occurs either deliberately or unintentionally when observers perform in a way that they had not learned prior to exposure to the model. Symbolic processes refer to capabilities such as language and scientific notations that allow individuals to comprehend, create, and adapt to environmental conditions. By the use of symbolic capabilities, individuals are able to react to events, solve problems, and generate new courses of action. Consequently, human attitudes are a result of cognitive mechanisms (i.e. self-reflective and self-regulatory, vicarious, and symbolic processes) that in turn are subject to personal (e.g. age, gender, personal traits) and environmental conditions (e.g. society, institutions, resource constraints).

To sum up, from the perspective of SCT, an individual's attitudes are an interplay of personal attributes and environmental conditions that in turn influence his/her cognitive processes (Bandura 1991). Through self-reflective and self-regulatory, vicarious, and symbolic capabilities, individuals determine which part of the environment is observed, what meaning is attached to it, and how this information leads to certain attitudes. Hence, individuals are neither solely influenced by personal attributes nor by environmental conditions. Both exert influence on an individual's attitudes, although not necessarily in equal strengths (Bandura 1991).

SCT is useful to analyze the determinants of ethical attitudes toward corporate misdeeds as it considers both individual and social factors as well as how they interact. Generally, SCT argues that positive and negative attitudes toward corporate misdeeds are contingent to personal attributes, such as gender and age. Moreover, more latent personal traits, such as openness to new experience or emotional stability, may affect these attitudes. The way these personal attributes influence cognitive processes depends in turn on the social conditions (Treviño *et al.* 1998). In the corporate sector, organizational culture may have a strong influence, that is, whether this encourages self-reflective and self-regulatory processes of employees or whether strict ethical rules and guidelines are applied.

Based on these considerations, we focus on personal attributes (i.e. gender, age, Big five personality traits) and environmental conditions (i.e. organizational culture) in order to analyze which factors influence ethical attitudes in the workplace. Although other factors, such as family background, external environment, and national culture could also play an important role in explaining ethical attitudes, we aim to derive managerial implications for reducing unethical behavior, hence, only identifying those factors that can be directly affected by the organization. Additionally, we do not include cognitive processes in the research model (Haidt 2001; Reynolds 2006) but rather focus on the determinants of unethical attitudes.

## Personal attributes and ethical attitudes

### *Gender*

Gender plays an important role in explaining an individual's cognitive perception of the environment. According to SCT, gender-typed attitudes develop through the individual's selection and creation of its own environment and through vicarious processes (i.e. social modeling) (Martin *et al.* 2002).

Prior empirical research has produced mixed results with regard to the effect of gender on ethical attitudes. While some authors found no differences between males and females (e.g. Roozen *et al.* 2001), other studies indicated that women report stronger ethical intentions and judgments than men. For instance, Mason & Mudrack (1996) concluded that

women are socialized in a more communal perspective (i.e. concerned with others, unselfish, polite) and hence are more caring than men. Smith & Oakley (1997) emphasized the importance of relationships for women by revealing that they have stronger ethical attitudes in dilemmas relating to interpersonal and social concerns, such as employee treatment and sexual exploitation. Also, females consider societal, environmental, and corporate ethical responsibilities as more important than men (Lämsä *et al.* 2008). Men, on the contrary, possess rather instrumental traits such as a strong sense of independence, personal growth, competitiveness, and justice orientation. It is therefore easier for them to disengage from moral self-sanctions that are caused by injurious behavior than for women (Jaffee & Hyde 2000). Consequently, the following hypothesis is derived:

**Hypothesis 1:** *Women have more negative ethical attitudes toward corporate misdeeds than men.*

### *Age*

From the perspective of SCT, attitudes are not locked in temporally but change over an individual's lifetime. With increasing age, individuals develop personal standards that guide and motivate their demands and sanctions (Bandura 1999). Hence, the ability to apply ethical standards increases with age (Pan & Sparks 2012). Self-reflective and self-regulatory capabilities enhance with age as individuals gain knowledge and life experience that facilitate reflection. Moreover, with age, individuals learn which attitudes are considered as valued or condemned by the society (Mudrack 1989) and hence are more aware of the negative consequences of unethical behavior (Wood *et al.* 1988).

Empirical research has found mixed results regarding the effect of age on ethical attitudes (O'Fallon & Butterfield 2005). For instance, Conroy *et al.* (2010) surveyed 195 accounting professionals, asserting age to be the most robust predictor of ethical attitudes. In 16 of the 30 vignettes, older accounting professionals were less likely to judge ethically questionable practices as acceptable. Accordingly, Peterson *et al.* (2001) found among 280

business professionals that those over 30 years old exhibited a higher degree of ethical standards than younger age groups. Lau *et al.* (2003) indicated that older individuals generally tend to engage less in counterproductive working behavior than younger individuals. Therefore, the following hypothesis is derived:

**Hypothesis 2:** *Older individuals have more negative ethical attitudes toward corporate misdeeds than younger individuals.*

#### *Personality traits*

In addition to demographic characteristics, personality traits play an important role in predicting ethical attitudes. Through self-regulation processes, individuals coordinate cognitive, affective, and behavioral processes differently (Galperin *et al.* 2011). Thus, what individuals think and feel because of their innate disposition affects also which ethical attitudes they adopt. Also, self-regulation competence and the ability to resist unethical practices are influenced by personality traits (Bandura 1999).

The most accepted model of personal traits is the Big Five taxonomy which distinguishes between conscientiousness, emotional stability, openness to experience, extraversion, and agreeableness (e.g. Goldberg 1990). Conscientiousness is defined using terms such as careful, organized, hard-working, and purposeful (Berry *et al.* 2007). Conscientious individuals abide by ethical principles and consider the consequences of their behavior before acting (Costa & McCrae 1992). Conscientiousness has been investigated in relation to different forms of workplace deviance. For instance, Berry *et al.* (2007) revealed in a meta-analysis that conscientiousness is significantly correlated with workplace deviance. In particular, it has been found to be negatively correlated with both organizational deviance such as organizational rule breaking, theft, drugs, alcohol use (Salgado 2002; Lee *et al.* 2005; Mount *et al.* 2006), and with interpersonal deviance such as withdrawal and sabotage (Liao *et al.* 2004; Bolton *et al.* 2010). Highly conscientious individuals are work-oriented, responsible, and ambitious. These characteristics make it unlikely that they will waste time at work or withhold effort (Colbert *et al.* 2004). With regard to

ethics, they tend to think carefully before they act and comply with their moral standards and perceived responsibilities (Kalshoven *et al.* 2011). Moreover, individuals who score high on conscientiousness tend to care for both themselves and others and adhere to codes of conduct (Moon 2001). Hence, these characteristics make it unlikely that they will harass coworkers. Following this argumentation, we propose

**Hypothesis 3a:** *Individuals with a high level of conscientiousness have more negative ethical attitudes toward corporate misdeeds than less conscientious individuals.*

Emotional stability forms the antonym of neuroticism that refers to being anxious, self-conscious, and insecure (Berry *et al.* 2007). Generally, individuals low on emotional stability may perceive new and uncertain situations as threatening. While some studies revealed either a negative impact of emotional stability on withholding effort (Colbert *et al.* 2004) or no significant influence in this context (Sulea *et al.* 2010), others found positive correlations between neuroticism and aggressive practices, such as provocation and retaliatory behavior (Skarlicki *et al.* 1999). According to Hastings & O'Neill (2009), narrow personality traits of neuroticism such as anger and immoderation impact workplace deviance positively. Hence, the following hypothesis is derived:

**Hypothesis 3b:** *Individuals with a high level of emotional stability have more negative ethical attitudes toward corporate misdeeds than less emotionally stable individuals.*

Openness to experience characterizes individuals who are open-minded, intellectual, and curious toward new ideas (Berry *et al.* 2007). Open-minded individuals may appreciate new and uncertain situations and perceive them as less threatening (Galperin *et al.* 2011). Prior studies in the context of ethical attitudes, such as the meta-analyses of Berry *et al.* (2007) and of Sulea *et al.* (2010), revealed no significant results. However, a recent study of Bolton *et al.*

(2010) showed that increased openness to experience affects both production deviance (e.g. doing work incorrectly on purpose) and sabotage. Also, Liao *et al.* (2004) found a negative correlation between openness to experience and organizational destructive behavior. Specifically considering the facets of openness to experience (i.e. imagination, artistic interests, emotionality, adventurousness, intellect, liberalism), individuals who score high on emotionality and intellect tend to be less likely to engage in unethical behavior (Hastings & O'Neill 2009). Against this background, the following hypothesis is derived:

**Hypothesis 3c:** *Individuals with a high level of openness to experience have more negative ethical attitudes toward corporate misdeeds than less open individuals.*

Extraversion reflects the degree to which a person is sociable, optimistic, talkative, and assertive (Berry *et al.* 2007). Some studies found a negative, albeit weak, relationship with theft (Bolton *et al.* 2010) and cheating among students (Jackson *et al.* 2002). In contrast, a meta-analysis of Miller & Lynam (2001) showed a positive weighted mean effect size for anti-social behavior and extraversion. Accordingly, Lee *et al.* (2005) found extraversion to be positively related to destructive deviance at the organizational and individual level. One explanation for this finding might be that individuals who intend to harm the organization or a coworker need a certain level of activity and boldness, assuming that extremely passive and timid individuals would not be capable of conducting unethical practices. This argument is supported by the findings of Hastings & O'Neill (2009) who showed that excitement seeking, a facet of extraversion, is positively related to workplace deviance. Hence, the following hypothesis is derived:

**Hypothesis 3d:** *Individuals with a high level of extraversion have more positive ethical attitudes toward corporate misdeeds than less extraverted individuals.*

Agreeableness reflects the tendencies to be kind, trusting, honest, altruistic, and gentle (Goldberg 1990). Previous meta-analyses found agreeableness

to be one of the strongest predictors of counterproductive working behavior (Salgado 2002; Dalal 2005; Berry *et al.* 2007). For instance, Mount *et al.* (2006) and Bolton *et al.* (2010) showed a negative relationship between agreeableness and counterproductive behavior directed at individuals. According to previous research, employees who score high on agreeableness display less hostility and aggression toward others during their work time. Moreover, they tend to be overly compliant and thus may adapt their attitudes in trying to oblige others (Graziano & Eisenberg 1997). Hence, the following hypothesis is derived:

**Hypothesis 3e:** *Individuals with a high level of agreeableness have more negative ethical attitudes toward corporate misdeeds than less agreeable individuals.*

### Organizational culture and ethical attitudes

From the perspective of SCT, an individual's ethical attitudes are not only affected by her/his personal attributes but also by the environmental conditions under which she/he lives (Bandura 1999). In the work context, the organizational culture particularly serves as a cue to help individuals to know which practices are ethically acceptable.

The widely used taxonomy of organizational culture of Quinn & Spreitzer (1991) distinguishes between control-oriented and flexibility-oriented cultures. Control-oriented cultures stress stability and continuity. In order to achieve control, order and stability mechanisms such as execution of laws and rules, information management, and communication are applied. With regard to ethical attitudes, the existence of laws, professional codes, or any other external systems within the organization is likely to have a positive impact (Peterson 2002). The meta-analysis of Martin & Cullen (2006) revealed that laws and rules reduce property deviance, such as lying about hours worked, stealing from the company, accepting kickbacks, sabotaging equipment. This implies that rules, codes, and regulations within a firm keep employees from breaching established norms. Moreover, organizations posit by their rules and procedures which behavior is considered as right or wrong, taking the responsibility from employees.

Vardi (2001) found laws and rules climate to be the most important factor influencing the control of organizational misbehavior. Thus, it is hypothesized that individuals who work in a control-oriented culture have stronger ethical attitudes:

**Hypothesis 4a:** *A control-oriented organizational culture has a positive effect on an individual's ethical attitudes toward corporate misdeeds.*

A flexibility-oriented culture stresses spontaneity and development. In particular, trust, participation, and group maintenance are important values in a flexibility-oriented culture. It emphasizes cohesion and morality among employees that in turn fosters teamwork and employee development. Empirically, Wimbush *et al.* (1997) indicated that caring cultures reduce levels of stealing, dishonesty, and disobedience. One explanation might be that social support deters employees from unethical behavior. This assumption is supported by Peterson (2002) who revealed a significantly negative relationship between political deviance (i.e. favoritism, competing non-beneficially, blaming, and gossiping coworkers) and caring cultures. The authors implied that organizations that are concerned about the welfare of their members are less likely to face problems with favoritism, along with blaming, and gossiping coworkers (Peterson 2002). In general, open discussions, warmth, participation, care for human relations, and flexible job tasks have emerged as reliable predictors of positive work attitudes (Vardi 2001; Kuenzi & Schminke 2009). Hence, we propose the following:

**Hypothesis 4b:** *A flexibility-oriented organizational culture has a positive effect on an individual's ethical attitudes toward corporate misdeeds.*

### Moderating effects of organizational culture

As outlined above, personal attributes and organizational conditions are expected to affect an individual's ethical attitudes directly (Bandura 1999). However, besides this direct effect, the social environment may also moderate the relationship between

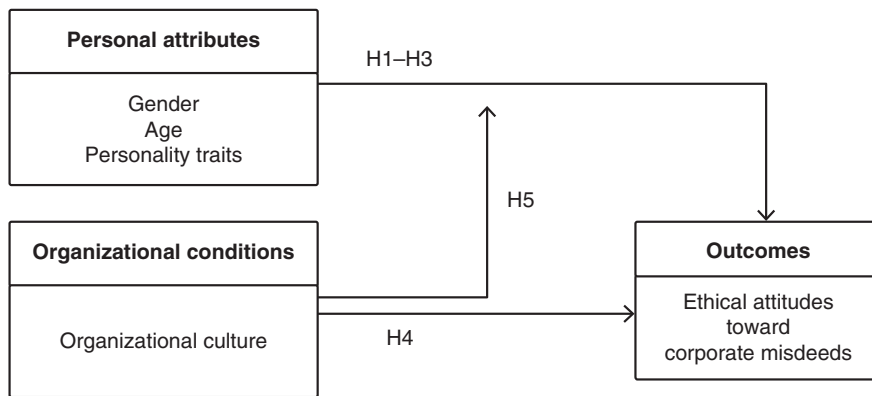
personal attributes and ethical attitudes in an indirect way. According to SCT, personal attributes may not lead to certain attitudes automatically but become relevant only if they are activated by social contexts. This core assumption indicates that individuals with similar personal attributes differ considerably in the social circumstances in which they come into play.

According to Tett & Burnett (2003), the organizational culture provides unique opportunities for the expression of personal attributes. Also Cable & Judge (1997) echo this notion with their finding that people prefer to work in organizational cultures similar to their own personalities. Given the fact that women are often more concerned with others, it is likely that a flexibility-oriented culture will enforce their ethical attitudes as it strengthens the need for trust, development, and caring. On the other hand, men often have a strong sense of justice, independence, and rationalism (Franke *et al.* 1997). Hence, it can be assumed that a control-oriented culture supports their ethical attitudes as it emphasizes efficiency, task focus, and control.

A control-oriented culture is also likely to strengthen the ethical attitudes of older individuals. With increasing age, individuals reach a higher stage of cognitive moral development and become more sensitive to social norms. In a control-oriented culture where organizational rules and laws are emphasized, older individuals will be inclined to adhere to them more strongly than younger individuals. Consequently, older individuals will behave ethically in control-oriented cultures as rules and laws also cover ethical claims toward stakeholders. For example, Greenberg (2002) found that older employees stole significantly less than younger employees if ethics programs existed.

Likewise, the relationship between personality traits and ethical attitudes may be moderated by the organizational culture. For instance, it can be assumed that individuals with high conscientiousness may prefer working in a control-oriented culture. In such a culture where control, stability, and task accomplishment are stressed by structural and moral rules (e.g. codes of conduct), conscientious individuals are likely to be guided more strongly than in flexibility-oriented cultures. Likewise, individuals who score high on agreeableness may prefer working

Figure 1: Research model and hypotheses



in a flexibility-oriented culture as it provides support, encouragement, and feedback. Agreeable individuals may behave ethically in such a culture in order to maintain the caring and developmental atmosphere. These assumptions are echoed by Colbert *et al.* (2004) who identified a moderating relationship between conscientiousness, developmental environment, and workplace deviance. The same effect has been shown for agreeableness and emotional stability (Colbert *et al.* 2004). These considerations lead to the following hypothesis:

**Hypothesis 5:** *Organizational culture moderates the relationship between personal attributes and ethical attitudes toward corporate misdeeds.*

Figure 1 summarizes the research hypotheses and includes them in our research model.

## Methodology

### Sample

To test the research hypotheses developed in the previous sections, an online study among German employees was conducted. Participants were addressed through a snowball sampling technique. We sent an email with the link to the web-based questionnaire to employees via social networks such as Xing, LinkedIn, and Facebook and asked them to fill out the questionnaire and to forward the link to their contacts.

A total of 215 respondents with German nationality participated in the survey; 36.7% of respondents were females and 63.3% males. The mean age of the respondents was 35 years with a median of 31 years. Most respondents were employed in non-managerial positions (50.5%), followed by the level of junior management (12.7%), 24.1% held a middle management position, and 12.7% a top management position. The majority of the respondents were employed in privately owned companies (61.2%), followed by family-owned businesses (25.4%) and state-owned firms (13.4%). The median size of firms was 1,000 employees. On average, employees had worked 9 years for their current employer.

We tested for nonresponse bias by comparing the answers of early and late respondents. Nonresponse bias exists if the 'persons who respond differ significantly from those who do not' (Armstrong & Overton 1977: 396). Analysis of variance (ANOVA) revealed no significant differences for any independent variable. Therefore, nonresponse bias was not considered a problem.

We deem the respondents as qualified to answer the research questions as all of them had worked for at least 1 year in a business firm (Kumar *et al.* 1993). Hence, it is highly probable that respondents encountered some situations during this period that were related to some extent to ethical issues in the workplace. Consequently, due to their working experience, we expect the respondents to give reliable answers on their own ethical attitudes in the workplace.

## Measures

*Personal attributes* consisted of the individual's age, gender, and Big Five personality traits. For age, we asked the respondents for the year in which they were born and subtracted it from 2011, the year of the study. Female respondents were coded with '0' and male respondents with '1'.

Personality traits were measured using the Big Five inventory (Goldberg 1990). It has received strong evidence of validity across cultures, occupations, and measures (e.g. Barrick & Mount 1991). Out of the various measures, we decided to use the German Ten-Item Personality Inventory (TIPI-G) (Muck *et al.* 2007). First, we attempted to keep the questionnaire short to avoid transient mood states such as boredom or fatigue, thus preventing respondents from reducing their cognitive effort in answering our questions in an accurate way (Lindell & Whitney 2001; Robins *et al.* 2001). Second, in comparison with other short measures of personality (e.g. Woods & Hampson 2005; Rammstedt & John 2007), TIPI-G revealed a higher validity than the other measures (Furnham 2008), and it demonstrated substantial convergence with the Big Five inventory and acceptable test-retest reliability (Gosling *et al.* 2003). As a consequence, we opted for an abbreviated inventory instead of using the original NEO-Five Factor Inventory with 60 items (Costa & McCrae 1992). Each trait was measured by two items, one being reverse-coded. Sample items of conscientiousness are 'dependable, self-disciplined' and 'disorganized, careless'. For each item, participants were asked to indicate their level of agreement regarding how much each item represented them on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

The item reliability of the scales was  $\alpha = 0.518$  for emotional stability,  $\alpha = 0.515$  for extraversion,  $\alpha = 0.539$  for conscientiousness,  $\alpha = 0.505$  for openness to experience, and  $\alpha = 0.212$  for agreeableness. According to Nunnally (1978), coefficients of  $\geq 0.5$  can be considered sufficient to compile the items. Referring to this recommendation, agreeableness ( $\alpha = 0.212$ ) was excluded from further analysis due to its very low reliability. The other four constructs were regarded as having a relatively low, but acceptable, internal reliability. Comparable low

internal consistency in this context has also been observed by Muck *et al.* (2007) and Woods & Hampson (2005). Moreover, it should be kept in mind that the original TIPI-G (Gosling *et al.* 2003) was designed to optimize content validity, leading inevitably to a decrease in internal consistency (John & Benet-Martínez 2000). However, the relatively low internal reliability of our measurement of the Big Five personality traits represents a potential limitation of our study that will be further discussed in the final section.

*Organizational culture* was measured using Quinn & Spreitzer's (1991) well-established competing values framework that distinguishes between four subcultures, that is, group culture ( $\alpha = 0.818$ ), developmental culture ( $\alpha = 0.796$ ), rational culture ( $\alpha = 0.866$ ), and hierarchical culture ( $\alpha = 0.731$ ). The former three culture types were each measured by four items and the latter one by three items. A five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used to indicate the extent to which the respective attribute characterizes the respondent's organization. Following Hartnell *et al.* (2011) who state that 'the culture types in opposite quadrants are not competing or paradoxical. Instead they coexist and work together' (p. 687), we compiled two aggregated variables [i.e. flexibility-oriented culture ( $\alpha = 0.690$ ) and control-oriented culture ( $\alpha = 0.760$ )]. The former consists of group culture and developmental culture, and the latter of rational culture and hierarchical culture.

### *Ethical attitudes toward corporate misdeeds*

The measurement of the dependent variable was adapted from Kaptein (2008) using 37 items of unethical behavior in the workplace. The scales structure unethical behavior according to five stakeholder groups, namely, investors, customers, employees, suppliers, and society. For each of these stakeholder groups, a single variable was computed, including 10 items for investors ( $\alpha = 0.661$ ), eight items for customers ( $\alpha = 0.695$ ), five items for employees ( $\alpha = 0.707$ ), seven items for suppliers ( $\alpha = 0.822$ ), and seven items for society ( $\alpha = 0.854$ ). We expected to find differences among each stakeholder group; however, our data revealed high correlations between them. Therefore, the five scores



were averaged in order to compute an aggregate variable for all stakeholders ( $\alpha = 0.885$ ).

Due to the sensitivity of the topic and our target to investigate employees' ethical attitudes, two changes were made to the original measure of Kaptein (2008). First, the single items were recoded into positive ones due to the fact that some items referred to illegal behavior (e.g. change from 'falsifying or manipulating financial reporting information' to 'providing correct financial reporting information'). A pretest with 50 students of business administration showed that items referring to illegal behavior were generally evaluated as unethical, raising doubts about the accurateness of responses. Second, the opening question was modified. Instead of asking the respondents if they had witnessed a specific coworker behavior in the last 12 months (Kaptein 2008), they were asked to evaluate the importance of behaving in a specific way (e.g. 'providing correct financial reporting information') on a Likert scale ranging from 1 (very unimportant) to 5 (very important) (e.g. Robin & Reidenbach 1996; Treviño *et al.* 1998; Al-Rafee & Cronan 2006). Thus, participants provided self-reports. Prior research has found self-reports to provide accurate assessment of unethical behavior (Lee 1993; Ones *et al.* 1993). Although this methodology has been criticized for causing bias in results due to socially desirable responses, Berry *et al.* (2007) provided evidence on the convergence of self- and nonself-reports of misconduct. In particular, it has been found that the disattenuated correlation between self-reported unethical behavior and observed unethical behavior by others was 0.75, indicating both constructs to be acceptable approaches (Andreoli & Lefkowitz 2009).

#### *Control variables*

Given the sensitive nature of ethics research, individuals may tend to deny socially undesirable practices and to admit to socially desirable ones (Randall & Fernandes 1991). Paulhus (1991) stated that the validity of self-reported values is reduced by social desirability bias, hence affecting the measurement of ethical attitudes. As we applied self-reported measures in our study, we tested for social desirability bias. The measurement of social desirability was adapted from Reynolds (1982) using the Marlow-

Crowne Scale Form C with 13 items. A sample item is 'I sometimes feel resentful when I don't get my way'. For each item, participants were asked to rate to what extent it applies to them on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal reliability of the scale was  $\alpha = 0.581$ .

To control for possible industry effects, we employed two dummy variables to represent manufacturing and service, with all other industries as reference. Given the fact that 17.7% of the respondents pertained to none of the listed industries but to 'others', we were not able to assign those to either manufacturing or service. Hence, we coded for the first dummy variable manufacturing with '1' and all 'other industries' with '0'. For the second dummy variable, service was coded with '1' and all 'other industries' with '0'.

#### *Check for common method bias*

Our dependent and independent variables were evaluated in the same questionnaire, using perceptual measures from the same respondent. To reduce potential common method bias, we followed several recommendations of Podsakoff *et al.* (2003). *Ex ante*, we ensured the anonymity of the survey, separated the dependent and independent variables in the questionnaire, and reduced the danger of evaluation apprehension by explaining in the cover letter that there are neither 'right' nor 'wrong' answers. *Ex post*, we applied statistical measures to address the common method variance problem and conducted a Harman's (1967) one-factor test on all self-reported scales. The basic assumption of this technique is that if a substantial amount of common method variance exists, either a single factor will emerge from the factor analysis or one general factor will account for the majority of the covariance in the independent and dependent variables (Walumbwa *et al.* 2004). An unrotated principal components factor analysis revealed three factors with eigenvalues greater than 1.0, which together accounted for 57.1% of the total variance. As several factors, as opposed to one single factor, were identified, and as the first factor did not account for the majority of the variance (only 26.0%), a substantial amount of common method variance does not appear to be present.

## Results

Table 1 depicts the means, standard deviations, and correlations among all variables. Consistent with our assumptions, age ( $r = 0.258, p \leq 0.01$ ), conscientiousness ( $r = 0.211, p \leq 0.01$ ), openness to experience ( $r = 0.314; p \leq 0.01$ ), control-oriented culture ( $r = 0.190, p \leq 0.01$ ), and flexibility-oriented culture ( $r = 0.145, p \leq 0.05$ ) are significantly related to ethical attitudes. On the contrary, no significant coefficients for gender, emotional stability, and extraversion were found.

To investigate the influence of personal attributes and organizational conditions on ethical attitudes and to test our research hypotheses, we conducted a linear regression analysis (Table 2). The variance inflation factors are all below the suggested maximum of 10 (Hair *et al.* 1995), so our results do not warrant concerns about multicollinearity. The order of entry of the variables into the regression analysis is presented in Table 2. First, we entered the control variables (model 1) and then the main effects of the fundamental hypotheses in models 2 and 3, respectively, and in model 4 combined. Model 5 also includes the moderating effects.

The overall results indicate that ethical attitudes can be explained by organizational culture ( $F = 2.474^*$ ; adj.  $R^2 = 0.033$ ), albeit only on a low level of significance. Also, model 3, which contains only personal attributes, is significant; however, the explanatory power of the model is much higher ( $F = 5.831^{***}$ ; adj.  $R^2 = 0.167$ ) than in model 2. The explanatory power increased in model 4, which includes organizational culture and personal attributes ( $F = 5.540^{***}$ ; adj.  $R^2 = 0.189$ ). Thus, it can be generally concluded that personal attributes are more crucial in predicting ethical attitudes in the workplace than organizational culture. The highest explanatory power was found in model 5, which also includes the moderating effects ( $F = 3.874^{***}$ ; adj.  $R^2 = 0.236$ ).

As predicted in hypothesis 1, women have significantly more negative ethical attitudes toward corporate misdeeds than men ( $\beta = -0.112; p \leq 0.1$ ). This finding remains significant along models 3–5, demonstrating its robustness.

The data also support hypothesis 2, showing a highly significant positive relationship between age and ethical attitudes ( $\beta = 0.259; p \leq 0.001$ ).

Table 1: Means, standard deviations, and Pearson correlations of all variables

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Ethical attitudes	4.38	0.42											
2 Other industries, service	0.48	0.50	-0.020										
3 Other industries, manufacturing	0.28	0.45	-0.097	-0.597**									
4 Social desirability bias	2.98	0.44	0.049	0.008	0.032								
5 Gender	0.63	0.48	-0.093	-0.042	0.087	-0.072							
6 Age	35.22	12.91	0.258**	0.001	0.046	-0.152*	0.295**						
7 Conscientiousness	6.15	0.70	0.211**	-0.160*	-0.023	-0.171*	-0.021	0.129					
8 Emotional stability	5.80	0.91	0.117	-0.060	-0.029	-0.253**	0.116	0.246**	0.272**				
9 Openness to experience	6.05	0.76	0.314**	-0.136*	0.080	0.003	-0.004	0.169*	0.303**	0.305**			
10 Extraversion	5.49	1.01	0.069	-0.033	0.023	0.000	-0.171*	-0.008	0.024	0.074	0.297**		
11 Control-oriented culture	3.71	0.71	0.190**	-0.008	-0.059	-0.066	0.005	-0.108	0.168*	0.200**	0.246**	0.158*	
12 Flexibility-oriented culture	3.77	0.71	0.145*	-0.047	-0.023	-0.052	0.003	-0.107	0.127	0.231**	0.145*	0.112	0.677**

\*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$  (two-tailed).  $n = 215$ .

Table 2: Regression analysis of personal attributes and organizational conditions on ethical attitudes

	Model 1	Model 2	Model 3	Model 4	Model 5
Control variables					
Other industries, service <sup>a</sup>	-0.123	-0.110	-0.076	-0.075	-0.076
Other industries, manufacturing <sup>b</sup>	-0.172*	-0.154†	-0.162*	-0.152†	-0.160*
Social desirability bias	0.056	0.067	0.097	0.102	0.116†
Organizational conditions					
CC		0.165†		0.124	0.032
FC		0.029		0.068	0.099
Personal attributes					
Gender <sup>c</sup>			-0.156*	-0.168**	-0.112†
Age			0.274***	0.314***	0.259***
Conscientiousness			0.103	0.087	0.067
Emotional stability			-0.021	-0.054	-0.011
Openness to experience			0.253***	0.226**	0.239**
Extraversion			-0.030	-0.048	-0.076
Moderating variables					
FC × gender					-0.007
CC × gender					-0.139
FC × age					0.011
CC × age					-0.067
FC × conscientiousness					-0.046
CC × conscientiousness					0.225**
FC × emotional stability					0.088
CC × emotional stability					-0.056
FC × openness to experience					0.038
CC × openness to experience					0.144
FC × extraversion					0.040
CC × extraversion					-0.233*
<i>F</i>	1.571	2.474*	5.831***	5.540***	3.874***
<i>Adj. R</i> <sup>2</sup>	0.008	0.033	0.167	0.189	0.236
$\Delta$ <i>adj. R</i> <sup>2</sup>		0.025	0.134	0.022	0.047

Standardized regressions coefficients (betas) are shown;  $n = 215$ .

<sup>a</sup> Industry = 0; service = 1.

<sup>b</sup> Industry = 0; manufacturing = 1.

<sup>c</sup> Female = 0; male = 1.

†  $p \leq 0.1$ ; \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$ ; \*\*\*  $p \leq 0.001$ .

CC, control-oriented culture; FC, flexibility-oriented culture.

In hypothesis 3a, it was expected that conscientiousness exhibits a significantly positive effect on an employee's ethical attitudes. Although conscientiousness has a positive effect, it is not significant. Hypothesis 3b was also not confirmed. Contrary to our expectations, emotional stability has a negative, although nonsignificant influence on ethical attitudes. In line with hypothesis 3c, employees with high levels of openness to experience have significantly more negative attitudes than employees with low levels of openness to experience ( $\beta = 239$ ;

$p \leq 0.01$ ). In hypothesis 3d, it was expected that extraversion would impact ethical attitudes negatively. Contrary to our expectations, no significant results are found.

Hypothesis 4a suggested that a control-oriented culture would have a significantly positive effect on an employee's ethical attitudes. As shown in model 2, working in a control-oriented culture has a positive, although weakly, significant effect on ethical attitudes ( $\beta = 165$ ;  $p \leq 0.1$ ). This effect, however, becomes nonsignificant when integrating the

personal attributes as done in model 4. Hypothesis 4b was not confirmed. Contrary to our expectations, a flexibility-oriented culture has a positive, although nonsignificant, effect.

In hypothesis 5, it was expected that organizational culture would moderate the relationship between personal attributes and ethical attitudes. As shown in model 5, a control-oriented culture influences the relationship between conscientiousness and ethical attitudes positively on a significant level ( $\beta = .225$ ;  $p \leq 0.01$ ). Likewise, a control-oriented culture influences the relationship between extraversion and ethical attitudes negatively at a significant level ( $\beta = -0.233$ ;  $p \leq 0.05$ ). On the contrary, we did not find significant moderating effects for the other postulated relationships between personal attributes and organizational conditions and ethical attitudes. Hence, hypothesis 5 is only partially confirmed.

## Discussion

The study confirms that personal attributes have a greater influence on ethical attitudes than organizational culture. Among the personal attributes, we find significant effects for gender, age, and openness to experience. However, we could not support our hypotheses with regard to conscientiousness, emotional stability, and extraversion. One explanation for this finding may be that other factors such as environmental conditions (e.g. external pressure, organizational culture, media, peers) moderate these relationships. According to SCT, personal attributes may not lead automatically to certain attitudes but become relevant only if they are activated by social contexts. For instance, characteristics of highly conscientious individuals such as being responsible and purposeful will be most likely activated in a control-oriented culture where structure and rules are stressed. Similarly, less emotional individuals may most likely shy away from breaching rules or the misuse of organizational resources (Lee *et al.* 2005). However, in challenging environments, emotions such as anxiety and uncertainty come into play, and less emotional individuals may commit unethical practices in order to boost positive feelings. Indeed, model 5 reveals that the relationship between conscientiousness and ethical attitudes is significantly

moderated by control-oriented culture. A similar interaction effect is found for extraversion.

Another explanation for the nonsignificant relationships may be the aggregate measurement of personality traits. Hastings & O'Neill (2009) found in accordance with Sulea *et al.* (2010) no significant relationships between extraversion, neuroticism, and workplace deviance. However, taking facets of extraversion (i.e. friendliness, excitement seeking) and neuroticism (i.e. anger, immoderation) into consideration, significant relationships were revealed. Therefore, the consideration of more fine-tuned concepts of personality traits may help explain more variance in ethical attitudes.

Also, no direct effects of control-oriented cultures and flexibility-oriented cultures on ethical attitudes were found. One explanation may be that the respondents were less affected in their ethical attitudes by the organizational culture than by their strong internal standards. This is typical for highly individualistic cultures such as Germany (i.e. the home country of our respondents). According to SCT, ethical attitudes are especially susceptible to organizational conditions if strong internal standards are absent (Bandura 1991). Individuals who are not committed to their internal standards cognitively perceive the organizational culture and adopt a pragmatic orientation, tailoring their ethical attitudes to fit whatever the situation seems to call for (Bandura 1991). It would be interesting to test this assumption in collectivistic cultures where the influences of group norms are more relevant than individual values.

With regard to the moderating effects, organizational culture was not found to be a significant moderator for the relationships between age and gender and ethical attitudes. Again, our findings may be explained by the impact of national culture, (i.e. the strong internal orientation of our respondents; Ardichvili *et al.* 2012).

## Contributions, limitations, and implications

This study investigated the relative contribution of personal attributes and organizational conditions in predicting ethical attitudes in the workplace. Based on a sample of 215 German employees, we found

that personal attributes have a greater impact in predicting ethical attitudes than organizational conditions. In particular, strong effects of age, gender, and openness to new experience were revealed. Women and older individuals tend to have stronger ethical attitudes in dilemmas relating to interpersonal and social concerns and to consider societal, environmental, and corporate ethical responsibilities as more important than men and younger people. Moreover, individuals with high levels of openness to experience have significantly more negative ethical attitudes toward corporate misdeeds than people with low levels of openness to experience. Also, moderating effects of organizational culture on the relationship between personality traits and ethical attitudes were confirmed.

One important managerial implication of this study is that organizations should prioritize identifying individuals with personal attributes and personality traits that decrease the likelihood of unethical attitudes in the workplace (i.e. employees high on openness to experience) because the organizational culture cannot combat unethical attitudes. In particular, against the background that personal traits are relatively stable and difficult to change (McCrae & Costa 1997), organizations should focus on selection and recruitment processes that take candidate's personal traits into account. Also, for current employees, organizations should focus on personal development rather than on organizational policies, such as codes of conduct or ethics commissions. This is particularly relevant for positions where ethical attitudes are regarded as most important, that is, where practices that are regarded as morally unacceptable to the stakeholders may cause severe negative consequences for the organization.

Our results add to the growing literature on the influence of personal attributes and organizational conditions on ethical attitudes. Most previous research applied SCT as theoretical underpinnings (e.g. Galperin *et al.* 2011), and if empirically tested, only specific factors such as self-efficacy or moral-self (e.g. Claybourn 2011) were analyzed. In this study, the fundamental antecedents of SCT (i.e. personal attributes and organizational conditions) were investigated simultaneously. Our results contribute to theory as they confirm parts of the triadic interaction between personal, organizational, and behav-

ioral events. According to SCT, our study proves that personal attributes and organizational conditions do not impact ethical attitudes in equal measure. Rather, personal attributes affect ethical attitudes more strongly than organizational conditions. Further, while SCT theoretically supposes a reciprocal influence between personal attributes and organizational conditions, our data reveal an additional impact of organizational conditions on the relationships between personal attributes and ethical attitudes.

In addition, we simultaneously investigated personal attributes and organizational conditions with ethical attitudes using unethical practices that were directed to both internal stakeholders and external stakeholders. While we assumed differences regarding ethical attitudes toward investors, employees, customers, suppliers, and the society, the results proved to be highly correlated.

Finally, prior studies often used student samples to investigate ethical attitudes in the workplace. In this study, employees were surveyed who had worked for at least 1 year for their current employer. Although no comparison between employees and students regarding ethical attitudes is provided in this study, previous research concluded that both samples differ significantly in their responses. For instance, Wood *et al.* (1988) and Glenn & Van Loo (1993) found students to make less ethical choices than professionals. One explanation may be that older individuals have stronger ethical attitudes due to cognitive moral development. As our data reveal, age does affect ethical attitudes significantly. Also, it is likely that organizational conditions (e.g. leadership style, pressure to perform) affect ethical attitudes of employees that students do not encounter. Therefore, using employee samples provide more reliable results than student samples.

Even though our study contributes substantially to theory and practice, some limitations have to be taken into account when interpreting the results and understanding the implications. First, data from this study were collected from German employees. Consequently, the generalizability of our findings to other national contexts is questionable. Future research should validate whether our results hold across different national contexts, especially as previous studies reveal that individual's assessments of

ethical attitudes are culture-bound (e.g. Ardichvili *et al.* 2012; Stedham & Beekun 2013).

Second, we analyzed personal attributes and organizational conditions simultaneously. Potential influences from the macro environment on ethical attitudes, however, have not been investigated. Events such as recent business scandals or other cases of unethical behavior may have at least influenced ethical attitudes of employees in the short run. Therefore, future studies should consider this effect.

Third, we investigated ethical attitudes toward corporate misdeeds instead of actual behavior. Although our data revealed no differences between stakeholders on the attitude level, it may be that respondents do actually *behave* differently toward specific stakeholders. Future research should analyze whether different clusters of behaviors exist toward specific stakeholders and whether similar or different measures have to be employed to prevent unethical behavior.

A fourth limitation concerns the low internal reliability of the brief personality traits measures. As Gosling *et al.* (2003) pointed out, the TIPI-G scale measures personality at the broadest level of abstraction, summarizing several more specific facets to only two items per dimension. Hence, it is not surprising that the internal reliability is low if small numbers of items are used and if those reflect both the positive and negative pole of a trait. For this reason, Woods & Hampson (2005) pointed out that internal reliability coefficients are misleading when calculated on scales with small numbers of items. Given this fact, future studies should apply more extensive personality scales in order to increase their internal reliability. For example, the consideration of narrow personality traits and their facets (e.g. friendliness, excitement seeking of the trait extraversion) may explain a higher degree of variance in ethical attitudes.

Fifth, we did not differentiate between various occupations. However, it is reasonable to assume that in different occupations, different opinions about ethical and nonethical practices exist. For instance, accounting professionals may have different perceptions of manipulating financial accounts than employees with other professional backgrounds (Douglas *et al.* 2001). This may be considered in future studies.

Finally, along with Schmidt *et al.* (2012) and Colbert *et al.* (2004), our results support the need for additional research on context-specific factors that may moderate the effects of personality traits on ethical attitudes. For example, future studies should include further variables on the organizational level such as existing codes of conduct or ethics committees. Another promising alley for future research may be to analyze the impact of individual measures such as ethics training or reward systems. The consideration of these and other factors may further increase the explanatory power of our SCT-based framework.

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## References

- Aguilera, R.V. and Vadera, A.K. 2008. 'The dark side of authority: antecedents, mechanisms, and outcomes of organizational corruption'. *Journal of Business Ethics*, 77:4, 431–449.
- Al-Rafee, S. and Cronan, T.P. 2006. 'Digital piracy: factors that influence attitude toward behavior'. *Journal of Business Ethics*, 63:3, 237–259.
- Analoui, F. 1995. 'Workplace sabotage: its styles, motives and management'. *Journal of Management*, 14:7, 48–65.
- Andreoli, N. and Lefkowitz, J. 2009. 'Individual and organizational antecedents of misconduct in organizations'. *Journal of Business Ethics*, 85:3, 309–332.
- Aquino, K., Freeman, D., Reed, A. II, Lim, V.K.G. and Felps, W. 2009. 'Testing a social cognitive model of moral behavior: the interaction of situational factors and moral identity centrality'. *Journal of Personality and Social Psychology*, 97:1, 123–141.
- Ardichvili, A., Douglas, J., Kowske, B., Cornachione, E., Li, J. and Thakadipuram, T. 2012. 'Ethical cultures in large business organizations in Brazil, Russia, India, and China'. *Journal of Business Ethics*, 105:4, 415–428.
- Armstrong, J.S. and Overton, T.S. 1977. 'Estimating nonresponse bias in mail surveys'. *Journal of Marketing Research*, 14:3, 396–402.
- Bandura, A. 1986. *Social Foundations of Thought and Action*. Englewood Cliffs, NJ: Prentice-Hall.

- Bandura, A. 1991. 'Social cognitive theory of moral thought and action'. In Kurtines, W.M. and Gewirtz, J.L. (Eds.), *Handbook of Moral Behavior and Development*, Vol. 1: 45–103. Hillsdale, NJ: Erlbaum.
- Bandura, A. 1999. 'A social cognitive theory of personality'. In Pervin, L. and John, O. (Eds.), *Handbook of Personality*: 154–196. New York: Guilford Publications.
- Barrick, M. and Mount, M. 1991. 'The big five personality dimensions and job performance: a meta-analysis'. *Personnel Psychology*, 44:1, 1–26.
- Berry, C.M., Ones, D.S. and Sackett, P.R. 2007. 'Interpersonal deviance, organizational deviance, and their common correlates: a review and meta-analysis'. *Journal of Applied Psychology*, 92:2, 410–424.
- Bolton, L.R., Becker, L.K. and Barber, L.K. 2010. 'Big five trait predictors of differential counterproductive work behavior dimensions'. *Personality and Individual Differences*, 49:5, 537–541.
- Cable, D. and Judge, T.A. 1997. 'Interviewers' perceptions of person–organization fit and organizational selection decisions'. *Journal of Applied Psychology*, 82:4, 546–561.
- Claybourn, M. 2011. 'Relationships between moral disengagement, work characteristics and workplace harassment'. *Journal of Business Ethics*, 100:2, 283–301.
- Colbert, A.E., Mount, M.K., Harter, J.K. and Barrick, M.R. 2004. 'Interactive effects of personality and perceptions of the work situation on workplace deviance'. *Journal of Applied Psychology*, 89:4, 599–609.
- Conroy, S.J., Emerson, T.L.N. and Pons, F. 2010. 'Ethical attitudes of accounting practitioners: are rank and ethical attitudes related?'. *Journal of Business Ethics*, 91:2, 183–194.
- Costa, P.T. Jr. and McCrae, R.R. 1992. *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI)*. Odessa: Psychological Assessment Resources.
- Dalal, R.S. 2005. 'A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior'. *Journal of Applied Psychology*, 90:6, 1241–1255.
- Douglas, P.C., Davidson, R.A. and Schwartz, B.N. 2001. 'The effect of organizational culture and ethical orientation on accountants' ethical judgments'. *Journal of Business Ethics*, 34:2, 101–121.
- Eweje, G. and Brunton, M. 2010. 'Ethical perceptions of business students in a New Zealand university: do gender, age and work experience matter?'. *Business Ethics: A European Review*, 19:1, 95–111.
- Franke, G.R., Crown, D.F. and Spake, D.F. 1997. 'Gender differences in ethical perceptions of business ethics practices: a social theory perspective'. *Journal of Applied Psychology*, 82:6, 920–934.
- Furnham, A. 2008. *Personality and Intelligence at Work. Exploring and Explaining Individual Differences at Work*. London: Routledge.
- Galperin, B.L., Bennett, R.J. and Aquino, K. 2011. 'Status differentiation and the protean self: a social cognitive model of unethical behavior in organizations'. *Journal of Business Ethics*, 98:3, 407–424.
- Glenn, J.R. Jr. and Van Loo, M.F. 1993. 'Business students' and practitioners' ethical decisions over time'. *Journal of Business Ethics*, 12:11, 835–847.
- Goldberg, L.R. 1990. 'An alternative "description of personality": the big-five factor structure'. *Journal of Personality and Social Psychology*, 59:6, 1216–1229.
- Gosling, S., Rentfrow, P.J. and Swann, W.B. Jr. 2003. 'A very brief measure of the Big-Five personality domains'. *Journal of Research in Personality*, 37:6, 504–528.
- Graziano, W.G. and Eisenberg, N.H. 1997. 'Agreeableness: a dimension of personality'. In Hogan, R., Johnson, J. and Briggs, S. (Eds.), *Handbook of Personality Psychology*: 795–824. San Diego, CA: Academic Press.
- Greenberg, J. 2002. 'Who stole the money, and when? Individual and situational determinants of employee theft'. *Organizational Behavior and Human Decision Processes*, 89:1, 985–1003.
- Haidt, J. 2001. 'The emotional dog and its rational tail: a social intuitionist approach to moral judgment'. *Psychological Review*, 108:4, 814–834.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. 1995. *Multivariate Data Analysis: With Readings*. Englewood Cliffs, NJ: Prentice-Hall.
- Harman, H.H. 1967. *Modern Factor Analysis*. Chicago, IL: University of Chicago Press.
- Hartnell, C.A., Ou, A.Y. and Kinicki, A. 2011. 'Organizational culture and organizational effectiveness: a meta-analytic investigation of the competing values framework's theoretical suppositions'. *Journal of Applied Psychology*, 96:4, 677–694.
- Hastings, S.E. and O'Neill, T.A. 2009. 'Predicting workplace deviance using broad versus narrow personality variables'. *Personality and Individual Differences*, 47:4, 289–293.
- Hershcovis, M.S., Turner, N., Barling, J., Arnold, K.A., Dupré, K.E., Inness, M., LeBlanc, M.M. and

- Sivanathan, N. 2007. 'Predicting workplace aggression: a meta-analysis'. *Journal of Applied Psychology*, 92:1, 228–238.
- Jackson, C.J., Levine, S.Z., Furnham, A. and Burr, N. 2002. 'Predictors of cheating behavior at a university: a lesson from the psychology of work'. *Journal of Applied Social Psychology*, 32, 1031–1048.
- Jaffee, S. and Hyde, J.S. 2000. 'Gender differences in moral orientation: a meta-analysis'. *Psychological Bulletin*, 126:5, 703–726.
- John, O.P. and Benet-Martínez, V. 2000. 'Measurement: reliability, construct validation, and scale construction'. In Robins, R.W., Fraley, R.C. and Krueger, R.F. (Eds.), *Handbook of Research Methods in Social and Personality Psychology*: 339–369. New York: Cambridge University Press.
- Kalshoven, K., Den Hartog, D.N. and De Hoogh, A.H.B. 2011. 'Ethical leader behavior and big five factors of personality'. *Journal of Business Ethics*, 100:2, 349–366.
- Kaptein, M. 2008. 'Developing a measure of unethical behavior in the workplace: a stakeholder perspective'. *Journal of Management*, 34:5, 978–1008.
- Kaptein, M. 2011. 'Toward effective codes: testing the relationship with unethical behavior'. *Journal of Business Ethics*, 99:2, 233–251.
- Kuenzi, M. and Schminke, M. 2009. 'Assembling fragments into a lens: a review, critique, and proposed research agenda for the organizational work climate literature'. *Journal of Management*, 35:3, 634–717.
- Kumar, N., Stern, L.W. and Anderson, J.C. 1993. 'Conducting interorganizational research using key informants'. *Academy of Management Journal*, 36:6, 1633–1651.
- Lämsä, A.-M., Vehkaperä, M., Puttonen, T. and Pesonen, H.-L. 2008. 'Effect of business education on women and men students' attitudes on corporate responsibility in society'. *Journal of Business Ethics*, 82:1, 45–58.
- Lau, V., Au, W.T. and Ho, J.M.C. 2003. 'A qualitative and quantitative review of antecedents of counterproductive behavior in organizations'. *Journal of Business and Psychology*, 18:1, 73–99.
- Lee, K., Ashton, M.C. and Shin, K.-H. 2005. 'Personality correlates of workplace anti-social behavior'. *Applied Psychology*, 54:1, 81–98.
- Lee, R.M. 1993. *Doing Research on Sensitive Topics*. Thousand Oaks, CA: Sage.
- Liao, H., Joshi, A. and Chuang, A. 2004. 'Sticking out like a sore thumb: employee dissimilarity and deviance at work'. *Personnel Psychology*, 57:4, 969–1000.
- Lindell, M.K. and Whitney, D.J. 2001. 'Accounting for common method variance in cross-sectional research designs'. *Journal of Applied Psychology*, 86:1, 114–121.
- McCrae, R.R. and Costa, P.T. 1997. 'Personality trait structure as a human universal'. *American Psychologist*, 52:5, 509–516.
- Martin, C.L., Ruble, D.N. and Szkrybalo, J. 2002. 'Cognitive theories of early gender development'. *Psychological Bulletin*, 128:6, 903–933.
- Martin, K.D. and Cullen, J.B. 2006. 'Continuities and extensions of ethical climate theory: a meta-analytic review'. *Journal of Business Ethics*, 69:2, 175–194.
- Mason, E.S. and Mudrack, P.E. 1996. 'Gender and ethical orientation: a test of gender and occupational socialization theories'. *Journal of Business Ethics*, 15:6, 599–604.
- Miller, J.D. and Lynam, D. 2001. 'Structural models of personality and their relation to antisocial behavior: a meta-analytic review'. *Criminology*, 39:4, 765–798.
- Moon, H. 2001. 'The two faces of conscientiousness: duty and achievement striving in escalation of commitment dilemmas'. *Journal of Applied Psychology*, 86:3, 533–540.
- Mount, M., Ilies, R. and Johnson, E. 2006. 'Relationship of personality traits and counterproductive work behaviors: the mediating effects of job satisfaction'. *Personnel Psychology*, 59:3, 591–622.
- Muck, P.M., Hell, B. and Gosling, S.D. 2007. 'Construct validation of a short five-factor model instrument'. *European Journal of Psychological Assessment*, 23:3, 166–175.
- Mudrack, P.E. 1989. 'Group cohesiveness and productivity: a closer look'. *Human Relations*, 42:9, 771–785.
- Nunnally, J.C. 1978. *Psychometric Theory*. New York: McGraw-Hill.
- O'Fallon, M.J. and Butterfield, K.D. 2005. 'A review of the empirical ethical decision-making literature: 1996–2003'. *Journal of Business Ethics*, 59:4, 375–413.
- Ones, D.S., Viswesvaran, C. and Schmidt, F.L. 1993. 'Comprehensive meta-analysis of integrity test validities: findings and implications for personnel selection and theories of job performance'. *Journal of Applied Psychology*, 78:4, 679–703.
- Pan, Y. and Sparks, J.R. 2012. 'Predictors, consequence, and measurement of ethical judgments: review and meta-analysis'. *Journal of Business Research*, 65:1, 84–91.



- Paulhus, D.L. 1991. 'Measurement and control of response bias'. In Robinson, J.P., Shaver, P.R. and Wrightsman, L.S. (Eds.), *Measures of Personality and Social Psychological Attitudes*, Vol. 1: 17–59. San Diego, CA: Academic Press.
- Peterson, D.K. 2002. 'Deviant workplace behavior and the organization's ethical climate'. *Journal of Business Ethics*, 17:1, 47–61.
- Peterson, D.K., Rhoads, A. and Vaught, B.C. 2001. 'Ethical beliefs of business professionals: a study of gender, age and external factors'. *Journal of Business Ethics*, 31:3, 225–232.
- Podsakoff, P.H., McKenzie, S.B., Lee, J.Y. and Podsakoff, N.P. 2003. 'Common method biases in behavioral research: a critical review of the literature and recommended remedies'. *Journal of Applied Psychology*, 88:5, 879–903.
- Quinn, R.E. and Spreitzer, G.M. 1991. 'The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life'. *Research in Organizational Change and Development*, 5, 115–142.
- Rammstedt, B. and John, O.P. 2007. 'Measuring personality in one minute or less: a 10-item short version of the Big Five Inventory in English and German'. *Journal of Research in Personality*, 41:1, 203–212.
- Randall, D. and Fernandes, M. 1991. 'The social desirability response bias in ethics research'. *Journal of Business Ethics*, 10:11, 805–817.
- Reynolds, S.J. 2006. 'A neurocognitive model of the ethical decision-making process: implications for study and practice'. *Journal of Applied Psychology*, 91:4, 737–748.
- Reynolds, W.M. 1982. 'Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale'. *Journal of Clinical Psychology*, 38:1, 119–125.
- Robin, D. and Reidenbach, R. 1996. 'The perceived importance of an ethical issues as an influence on the ethical decision-making of ad managers'. *Journal of Business Research*, 35:1, 17–28.
- Robins, R.W., Hendin, H.M. and Trzesniewski, K.H. 2001. 'Measuring global self-esteem: construct validation of a single-item measure and the Rosenberg self-esteem scale'. *Personality and Social Psychology Bulletin*, 27:2, 151–161.
- Roozen, I., Pelsmacker, P.D. and Bostyn, F. 2001. 'The ethical dimensions of decision processes of employees'. *Journal of Business Ethics*, 33:2, 87–99.
- Sackett, P.R. and DeVore, C.J. 2001. 'Counterproductive behaviors at work'. In Anderson, C.V.N., Ones, D. and Sinangil, H. (Eds.), *Handbook of Industrial, Work, and Organizational Psychology*: 145–164. London: Sage.
- Salgado, J.F. 2002. 'The big five personality dimensions and counterproductive behaviors'. *International Journal of Selection and Assessment*, 10:1–2, 117–125.
- Schmidt, J.A., Ogunfowora, B. and Bourdage, J.S. 2012. 'No person is an island: the effects of group characteristics on individual trait expression'. *Journal of Organizational Behavior*, 33:7, 925–945.
- Skarlicki, D.P., Folger, R. and Tesluk, P. 1999. 'Personality as a moderator in the relationship between fairness and retaliation'. *Academy of Management Journal*, 42:1, 100–108.
- Smith, P.L. and Oakley, E.F. 1997. 'Gender-related differences in ethical and social values of business students: implications for management'. *Journal of Business Ethics*, 16:1, 37–45.
- Stajkovic, A.D. and Luthans, F. 1997. 'Business ethics across cultures: a social cognitive model'. *Journal of World Business*, 32:1, 17–34.
- Stedham, Y. and Beekun, R.I. 2013. 'Ethical judgment in business: culture and differential perceptions of justice among Italians and Germans'. *Business Ethics: A European Review*, 22:2, 189–201.
- Sulea, C., Maricutoiu, L., Zaborila Dumitru, C. and Pitariu, H.D. 2010. 'Predicting counterproductive work behaviors: a meta-analysis of their relationship with individual and situational factors'. *Psychology of Human Resources*, 8:1, 66–81.
- Terpstra, D.E., Rozell, E.J. and Robinson, R.K. 1993. 'The influence of personality and demographic variables on ethical decisions related to insider trading'. *Journal of Psychology*, 127:4, 375–389.
- Tett, R.P. and Burnett, D.D. 2003. 'A personality trait-based interactionist model of job performance'. *Journal of Applied Psychology*, 88:3, 500–517.
- Treviño, L., Butterfield, K. and McCabe, D. 1998. 'The ethical context in organizations: influences on employee attitudes and behaviors'. *Business Ethics Quarterly*, 8:3, 447–476.
- Vardi, Y. 2001. 'The effects of organizational and ethical climates on misconduct at work'. *Journal of Business Ethics*, 29:4, 325–337.
- Vardi, Y. and Weitz, E. 2004. *Misbehavior in Organizations*. Mahwah, NJ: Erlbaum.
- Walumbwa, F.O., Wang, P., Lawler, J.J. and Shi, K. 2004. 'The role of collective efficacy in the relations between transformational leadership and work outcomes'. *Journal of Occupational and Organizational Psychology*, 77:4, 515–530.

- Wimbush, J.C., Shepard, J.M. and Markham, S.E. 1997. 'An empirical examination of the relationship between ethical climate and ethical behavior from multiple levels of analysis'. *Journal of Business Ethics*, 16:16, 1705–1716.
- Wood, J.A., Longenecker, J.G., McKinney, J.A. and Moore, C.W. 1988. 'Ethical attitudes of students and business professionals: a study of moral reasoning'. *Journal of Business Ethics*, 7:4, 249–257.
- Woods, S.A. and Hampson, S.E. 2005. 'Measuring the Big Five with single items using a bipolar response scale'. *European Journal of Personality*, 19:5, 373–390.

**Dirk Holtbrügge** is a professor of international management (head of department) at the School of Business and Economics, Friedrich-Alexander-University of Erlangen-Nürnberg, Germany. He received his doctorate and his habilitation from the University of Dortmund, Germany. His main research interests are in the areas of international management, human resource management, and management in emerging markets. He has published seven books, eight edited volumes, and more than 70 articles in refereed journals such as *Academy of Management Learning & Education*, *Asian Business & Management*, *European Journal of International Management*, *European Management Journal*, *Human Resource Management*, *International Business*

*Review*, *International Journal of Cross Cultural Management*, *International Journal of Emerging Markets*, *Journal of Business Ethics*, *Journal of East European Management Studies*, *Journal of International Business Studies*, *Journal of International Management*, *Management International Review*, and *Thunderbird International Business Review*. He is also a member of the editorial boards of *Journal for East-European Management Studies* and *Management International Review*.

**Anastasia Baron** graduated from the School of Business and Economics, Friedrich-Alexander-University of Erlangen-Nürnberg, Germany. Afterwards, she has founded an IT start-up. Her main research interests are in the areas of international management and business ethics.

**Carina B. Friedmann** received her PhD from the School of Business and Economics, Friedrich-Alexander-University of Erlangen-Nürnberg, Germany, and now works as a consultant at Accenture. Her main research interest is in the area of international management with a focus on India. She has published several articles in refereed journals such as *Human Resource Management*, *International Journal of Business and Emerging Markets*, and *Team Performance Management*.