

What is Ethical Competence? The Role of Empathy, Personal Values, and the Five-Factor Model of Personality in Ethical Decision-Making

Rico Pohling · Danilo Bzdok · Monika Eigenstetter · Siegfried Stumpf · Anja Strobel

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Abstract The objective of the present research was twofold: (1) to provide a new definition of ethical competence, and (2) to clarify the influence of empathy, personal values, and the five-factor model of personality on ethical competence. The present research provides a comprehensive overview about recent approaches and empirically explores the interconnections of these constructs. 366 German undergraduate students were examined in a cross-sectional study that investigated the relationship of empathy, personal values, and the five-factor model of personality with moral judgment competence and counterproductive work behavior as indicators of moral judgment and behavior. We found self-transcendence values to be related to both, high

Division of Personality Psychology and Assessment, Department of Psychology, Faculty of Behavioural and Social Sciences, Technische Universität Chemnitz, 09120 Chemnitz, Germany e-mail: rico.pohling@gmail.com

A. Strobel e-mail: anja.strobel@psychologie.tu-chemnitz.de

D. Bzdok

Neurospin, CEA Saclay, Bat. 145, 91191 Gif-sur-Yvette Cedex, France

D. Bzdok

Institute of Clinical Neuroscience and Medical Psychology, Heinrich Heine University Düsseldorf, 40225 Düsseldorf, Germany

M. Eigenstetter

Department of Industrial Engineering, Hochschule Niederrhein, 47805 Krefeld, Germany

S. Stumpf

Department for Computer Science and Engineering, University of Applied Sciences Cologne, Campus Gummersbach, 51643 Gummersbach, Germany levels of empathy and ethical competence, in contrast to self-enhancement values. Multiple mediation analysis revealed unique effects of empathy on ethical competence through values as mediators. Affective (but not cognitive) empathy transmitted its effect on ethical competence through benevolence, conformity, tradition, power, and hedonism. Most importantly, perspective taking lost its predictive power when investigated alongside affective empathy dimensions. These results converge to an important role of affective empathy, in particular empathic concern, with regard to personal values and ethical competence. Furthermore, the five-factor model of personality explained variance in measures of ethical competence. Our research suggests that organizational decision makers should consider the role of empathy, personal values, and the five-factor model in their human resource management in order to select employees with high ethical competence.

Keywords Basic human values · Counterproductive work behavior · Empathic concern · Perspective taking · Human resource management · Moral behavior · Moral cognition · Moral judgment

Introduction

In today's complex economic world, actions of organizational actors can have far-reaching impact. An example for a case of severe global consequences could be observed in Japan, in March 2011 (Buesseler 2012; Strickland 2011). The Fukushima Daiichi nuclear power plant got out of control after it was hit by an earthquake and tsunami on March, 11 in 2011 (CNN Wire Staff 2011). Two years after this most dramatic nuclear disaster since Chernobyl (Strickland 2011), human failure was identified as the one

R. Pohling $(\boxtimes) \cdot A$. Strobel

main contributor to the chain of events (Wakatsuki and Mullen 2012). A Japanese parliament report summarized in 2012 that the operator, regulators, and the government "failed to correctly develop the most basic safety requirements—such as assessing the probability of damage, preparing for containing collateral damage from such a disaster, and developing evacuation plans" (Wakatsuki and Mullen 2012). This epitomizes the critical role of ethical competence for individuals in responsible positions in organizations. Ethical competence can be understood as the sensitivity of managers and professionals to moral issues in their organizational structures followed by moral judgment and actions. Hence, organizations are in dire need of employees with high ethical competence.

Scholars in the field of business ethics call for studies to identify the capacities needed for ethical decision-making (EDM) (Hannah et al. 2011). The present study contributes to this aim by delivering a new definition of the core variable—which we call *ethical competence*—and by examining the influence of empathy, personal values, and the five factors of personality on ethical competence.

What is Ethical Competence?

Surprisingly, clear definitions for ethical/moral¹ decisionmaking are scarce (Jones 1991; Tenbrunsel and Smith-Crowe 2008), despite the increased attention to ethics in business research. Tenbrunsel and Smith-Crowe (2008) pointed out the problem in the following way: "...without a universal understanding of the core dependent variable, research will remain inconsistent, incoherent and atheoretical" (p. 548). Although behavioral ethics is a mainly descriptive research field, defining what is meant by the "ethical" inevitably involves normative ethics (Warren and Smith-Crowe 2008). This controversial issue needs special attention. EDM implies that decisions affect other people's welfare. Therefore, a value-free approach is misguided (Tenbrunsel and Smith-Crowe 2008).

Jones (1991) and Trevino et al. (2006) are among the few researchers providing definitions for what is to be understood by ethical versus unethical decisions: "An ethical decision is a decision that is both legal and morally acceptable to the larger community. Conversely, an unethical decision is either illegal or morally unacceptable to the larger community" (Jones 1991, p. 367). Likewise, Trevino et al. (2006) defined it as "behavior that is subject to or judged according to generally accepted moral norms of behavior" (p. 952). A recently proposed definition of morality stems from social psychology: "Moral systems are interlocking sets of values, virtues, norms, practices, identities, institutions, technologies, and evolved psychological mechanisms that work together to suppress or regulate selfishness and make cooperative social life possible" (Haidt and Kesebir 2010, p. 800). Here, the *function* or ultimate goal of morality is underscored, namely the regulation/modulation of selfishness and the incentives for cooperativeness. This notion can help in creating a foundation for a new understanding and definition of ethical behavior in a business context.

Business ethics research needs a definition of ethical behavior with content. For such an endeavor, the behavioral/observable criteria for ethical behavior must be clarified (Tenbrunsel and Smith-Crowe 2008). Therefore, we suggest a new working definition of what is individual ethical competence about-one that is broad enough to be applicable in a variety of business contexts. However, in comparison to former definitions, our definition leaves less space for interpretations which observable criteria could be used for the assessment of ethical competence. It evolved through both conceptual work as well as exchange between science and professionals in business organizations. Thus, it embraces former definitions of what is ethical, and it explicitly sharpens the understanding of which aspects one must consider in the assessment of ethical competence in organizations (cf. Eigenstetter et al. 2012):

Ethical competence is here defined as (1) conscious decisions and actions within a given (2) responsibility situation.² It implies (3) to feel obliged to one's own moral principles and (4) to act responsibly taking into account legal standards as well as economical, ecological, and social consequences. Ethical competence (5) requires normative knowledge and (6) the will-ingness to defend derived behavioral options against occurring resistance.

At the end of this article, we will detail the six basic characteristics highlighted in our definition at the background of this study. In the next sections, we take a closer look at individual capacities needed to provide high ethical competence.

Ethical Competence and Ethical Decision-Making

Considering the present definition, it becomes clear that ethical competence is not a single construct or personality trait. Rather, it can be viewed/conceptualized as a complex/mosaic process in which different components and personal characteristics are involved (Eigenstetter et al.

¹ The terms "ethical" and "moral" will be used interchangeable in the present article as is common in the ethical decision-making literature (cf. Jones 1991; O'Fallon and Butterfield 2005; Tenbrunsel and Smith-Crowe 2008; Trevino et al. 2006).

² This term refers to situations where taking responsibility is a must.

2012; Hannah et al. 2011; Rest 1986). In their comprehensive theory paper, Hannah et al. (2011) asserted that it is insufficiently understood what capacities are needed to successfully perform the EDM. For this purpose, they advanced the classic four-component model of EDM (Rest 1986; Rest et al. 1999) and proposed an extended framework. Firstly, Hannah et al. (2011) reorganized Rest's model (Rest 1986) into moral cognition and moral conation processes. Moral cognition processes entail the awareness (moral sensitivity) to and the processing (moral judgment) of information related to moral issues (Hannah et al. 2011); moral conation processes, on the other hand, entail moral motivation and the practice of moral behavior (Hannah et al. 2011). Further, they proposed two groups of malleable capacities needed to effectively enact these processes-moral maturation and moral conation capacities. Moral maturation is defined as "the capacity to elaborate and effectively attend to, store, retrieve, process, and make meaning of morally relevant information" (Hannah et al. 2011, p. 667). Moral conation is "the capacity to generate responsibility and motivation to take moral action in the face of adversity and persevere through challenges" (Hannah et al. 2011, p. 667). Taken together, their proposed model provides an organizing structure for an expanded set of constructs that explain why some people are better in executing moral cognition and moral conation processes (Hannah et al. 2011), and thus demonstrate higher ethical competence.

The Present Research

Drawing on the conceptual work by Hannah et al. (2011), the present study specifies and extends the set of moral maturation capacities of their framework. It also aims at investigating how empathy, personal values, and the five factors of personality influence moral cognition and moral conation processes. There are two main reasons why we focus on these three constructs. Firstly, though empathy is regarded as one of the building blocks of moral behavior for both humans and animals (Batson 2010; de Waal 2008; Eisenberg 2000; Haidt 2001; Tangney et al. 2007), it is not explicitly mentioned as individual capacity in Hannah et al.'s framework. For this reason, we added it to the set of moral maturation capacities. Secondly, from a social-cognitive perspective, moral identity-the moral maturation capacity with the greatest impact in Hannah et al.'s framework-is a complex cognitive representation (or schema) of moral values, goals, traits and behavioral scripts (Aquino et al. 2009; Shao et al. 2008). Therefore, we investigated personal values and personality as specific aspects of moral identity. Using the frameworks of Schwartz' theory of human values (Schwartz 1992) and the five-factor model of personality (FFM; Digman 1990), we aim to shed light on how the moral personality is shaped (McAdams 2009).

The Role of Empathy, Personal Values, and the Five-Factor Model of Personality in EDM

Empathy is sometimes labeled as moral emotion (Moll et al. 2008) although it is actually the *capacity* to feel specific moral emotions, like sympathy or compassion (Haidt 2003b). Sympathy/compassion is the sincere wish that other living beings shall be free from suffering accompanied by a deep concern for the suffering individual (Baron-Cohen and Wheelwright 2004; Batson 2010; Haidt 2003b). Thus, it fosters both altruistic motivation and behavior toward the person in need (Batson 2010). Empirically empathy is linked to an increase in helping and prosocial behavior and to a decrease of aggression and antisocial behavior (cf. Batson 2010; de Waal 2008; Eisenberg 2000; Haidt 2003b; Hoffman 1975; Tangney et al. 2007). There are at least two different fundamental systems of empathy-a phylogenetically old affective system and a cognitive system involving higher cognitive functions including mentalizing other peoples beliefs and emotions (Shamay-Tsoory 2011). The most widely acknowledged approach to conceptualize and measure empathy is Davis' multidimensional framework (Baron-Cohen and Wheelwright 2004). It consists of four dimensions, only one of which is a cognitive dimension and the other three comprise affective dispositions (cf. Davis 1980, 1983): (1) perspective taking (PT), the tendency to spontaneously adopt the psychological point of view of others; (2) empathic concern (EC), the capacity to feel compassion and concern for others; (3) fantasy (FS), the tendency to transpose oneself imaginatively into the feelings and actions of characters in books, movies, and plays; and (4) personal distress (PD), which encompasses feelings of anxiety and unease in tense interpersonal settings.

We posit that empathy is an essential moral maturation capacity driving moral cognition and moral conation processes. We draw on two complementary theories in explaining our argument. Firstly, the empathy-altruism hypothesis (for an overview see Batson 2010) states that EC produces a genuine altruistic motivation-a motivational state with the ultimate goal of increasing the welfare of other living beings. In doing so, EC prompts behavior that is directed to help the person in need. The empathyaltruism hypothesis explains what EC does with us motivationally and behaviorally. But what is the mechanism that enables this linkage? Here, the broaden-and-build theory (Fredrickson 2001) is able to specify how EC prepares the "breeding ground" for the generation of an altruistic motivation on information processing level. The first tenet of the broaden-and-build theory is that positive emotions expand people's awareness (Fredrickson 2012). In doing so, they allow for processing of more surrounding contextual information in comparison to neutral or negative states of mind. EC encompasses positive emotional states such as valuing others, love, and compassion (Batson 2010; Batson et al. 2007; Davis 1983). Thereby, it creates a feeling of connectedness with others (Pavlovich and Krahnke 2012) while maintaining self-other differentiation (Batson 2010; Bzdok et al. 2012). We think that this open and flexible momentary awareness induced by feelings like compassion facilitates the anticipation of subtle action-consequence chains, usually not perceived in a non-empathic state of mind. Consequently, EC allows for gaining a deeper insight into the situation resulting in greater moral complexity (Hannah et al. 2011). Moral complexity refers to the degree of complexity regarding knowledge structures within a moral domain (Hannah et al. 2011). We argue that the resulting high moral complexity in conjunction with the perception of the importance of the welfare of the person in need generates the altruistic motivation to increase the welfare of this person. In other words, EC increases people's momentary wisdom-the ability to see holistically and integrate different perspectives (Fredrickson 2012)-which results in an altruistic motivation (Batson 2010) and allows for making more elaborate moral judgments (Hannah et al. 2011). We formulate the following hypothesis:

H1 High levels of empathic concern are associated with (a) high levels of moral cognition processes and (b) high levels of moral conation processes.

Moral cognition and moral conation processes should also be fostered by advanced levels of perspective taking (PT). Adopting the psychological perspective of another person helps to understand the consequences that actions have for this person, resulting in higher moral sensitivity and awareness (Bergman 2002; Sparks and Hunt 1998), which is the first step toward a moral action (Jordan 2007). Moreover, PT is a condition for advancing through stages of cognitive moral development (Kohlberg 1984b) andhow recent experimental data showed-for experiencing feelings of EC (Batson et al. 2007). Lastly, functional magnetic resonance imaging (fMRI) studies clarified that PT, EC, and moral judgment competence are inseparably intertwined on the neural level. This is indicated by the observation that all three classes of psychological process recruit a largely common set of brain regions (Bzdok et al. 2012; Decety et al. 2012). Rather than being only formed by slow and "cool" reasoning, moral judgment emerges as a complex interplay between fast and automatic emotional responses and controlled cognition (Decety et al. 2012; Greene 2009; Haidt 2001; Monin et al. 2007). Decety et al. (2011) concluded: "Findings from affective neuroscience,

as well as evolutionary psychology and primatology, indicate that both affective reactions and cognitive reasoning contribute to moral judgments, yet in many contexts, automatic affective processes dominate." (p. 306). We posit:

H2 High levels of perspective taking are associated with (a) high levels of moral cognition processes and (b) high levels of moral conation processes.

PD, on the other hand, because of its self-centered focus, should impair moral cognition and moral conation processes. PD-or emotional contagion (de Waal 2008)-is the most basic mechanism of empathy, which can be found not only in human infants but also in a variety of other primates and animals (de Waal 2006). PD entails the automatic synchronization of our emotional reactions with others, which can be regarded as a precursor for actual feelings of compassion or sympathy (Haidt 2003b). As children progress in development and awareness of themselves (self-other differentiation; Frith and Frith 2003), eventually they become capable of experiencing genuine EC (feelings of sympathy, compassion, and concern for others) instead of simply distress in the face of the suffering of others (cf. Decety et al. 2011; Hoffman 1975). PD itself entails self-oriented feelings of anxiety and discomfort in interpersonal situations (Davis et al. 1999). Therefore, it is assumed to be related negatively with social functioning (Davis 1983; Tangney et al. 2007), for example, with respect to the willingness to encounter needy victims (Davis et al. 1999):

H3 High levels of personal distress are associated with (a) low levels of moral cognition processes and (b) low levels of moral conation processes.

Finally, it is unclear how the fantasy dimension is related to social functioning (cf. Baron-Cohen and Wheelwright 2004; Davis 1983) and thus moral cognition and conation processes. Processes of mental imagery are indeed suspected to subserve many instances of advanced social cognition (Bzdok et al. 2013; Schacter et al. 2007), including moral reasoning. However, we include FS in our analysis for exploratory reasons. Possibly, extensive FS fosters information processing during moral cognition processes but hinders the actual implementation of moral behavior.

Because empathy drives motivation and action as well as fosters cognitive moral development (Kohlberg 1984a), we posit that empathy and personal values are tightly interconnected. According to Schwartz' theory of universal human values (Schwartz 1992), there are six main features characterizing the value concept (cf. Schwartz 1994, 2012): Values (1) are beliefs, (2) refer to desirable goals that motivate action, and (3) transcend specific actions and situations distinguishing them from norms and attitudes. (4) Values guide the selection or evaluation of actions, policies, people, and events. They are (5) ordered by importance forming an ordered system on which people can differ inter-individually. And (6) the relative importance of multiple values guides action. Features 4-6 are the most crucial for the present research since they imply that values can guide information processing and behavior of a person and that people are more likely to act in accordance with behavior that is value expressive (Bardi and Schwartz 2003; Lonnqvist et al. 2013). In his studies (Schwartz 1992, 1994; Schwartz et al. 2012), Schwartz derived 10 types of values, each expressing a distinct motivational goal: universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, stimulation, and self-direction. The theory postulates a circular structure (see Fig. 1): adjacent values share motivational goals and values being opposite on the circle express conflicting motivations (Roccas et al. 2002). That is, if a variable is supposed to correlate most positively with one value and most negatively with another, the expected pattern of correlations for all value types follows from the circular structure (Roccas et al. 2002). Further, the model can be organized into two dimensions (see Fig. 1; cf. Schwartz 1994): The first dimension encompasses self-transcendence versus self-enhancement reflecting the conflict between values emphasizing the acceptance of others as equals and concern for their welfare and those values motivating people to mainly pursue their own personal interests and relative success and dominance over others. The second dimension encompasses conservation versus openness to change reflecting the conflict between values emphasizing self-restriction, protection of stability, preservation of traditional practices, and resistance to change and those values emphasizing independent thought and action and favoring change (cf. Schwartz 1994).

Which values are moral? Basically, because of their motivational goals, some values are more closely connected to the moral realm than others. Firstly, the value universalism—understanding, appreciation, tolerance, and protection for the welfare of all people and for nature (Schwartz 1994)—is the integral part of the most influential moral development theories (Kohlberg 1976; Lind 2008; Rest et al. 1999). Secondly, self-transcendence values together with conservation values share a social focus—concern with outcomes for others or for established institutions—in contrast to self-enhancement and openness to change values containing a personal focus—concern



with outcomes for the self (Schwartz et al. 2012). The assertion that social focus values are moral and are linked with moral development is supported by various studies. For instance, Schwartz (2007) found that self-transcendence (in particular universalism) and conservation values are considered most strongly as being moral when study subjects were asked directly to rate the degree of morality of each value. Weber (1993) found in a sample of managers that social and moral values (measured with the Rokeach Values Survey) were associated with higher stages of cognitive moral development in contrast to personal and competence values. Further, there is evidence from studies with the Schwartz framework that universalism, benevolence, and also self-direction are positively related to Kohlbergian measures of moral development (cf. Myyry et al. 2010). Similar associations could be observed for measures of care reason (Juujarvi et al. 2012) and moral sensitivity (Myyry and Helkama 2002). Thirdly, from the point of view of moral identity research (Shao et al. 2008), holding moral goals as personal ones can be regarded as "hallmark of moral personality" (Frimer and Walker 2008, p. 340; 2009; see also Hardy and Carlo 2005; Hardy and Carlo 2011). Fourthly, from a social-cognitive perspective value priorities are considered to be linked to chronically accessible schemas that are consistent across societal roles (Myyry et al. 2010). Hence, high importance of self-transcendence and conservation values should facilitate information processing of schemas associated with the content of these values-the welfare and protection of others.

In sum, we conclude the following: High levels of moral cognition processes-entailing comprehensive encoding and information processing of stimuli concerning the welfare of others-should mostly be fostered and facilitated by selftranscendence values. Moreover, the motivational goals of self-direction (independent thought and action; choosing, creating, exploring; Schwartz 1994) and conformity (restraint of actions that harm others; Schwartz 1994) should also help to recognize and integrate moral information. On the other hand, we expect the highest negative correlation with power values since the pursuit of control and dominance over people and resources (Schwartz 1994) stands in sharp contrast to the goal of increasing the welfare of others. The adjacent values achievement and hedonism, due to their self-centered focus (Schwartz 1994), should impair moral cognition processes. Hence, we formulate the following integrated hypothesis:

H4 The order of correlations, stated as ranks from the most positive to the most negative, between high levels of moral cognition processes and personal values is as follows: universalism, benevolence (1.5); self-direction (3); conformity (4); tradition, security (5.5); stimulation (7); achievement, hedonism (8.5); power (10).

Regarding moral conation processes, we expect the highest positive correlations with benevolence, which, according to Schwartz (1994), comprises the goal of caring for the welfare of close others. We assume that the concrete pursuit of moral actions is mostly facilitated by the concern for people who are directly involved in the respective situation. In addition, the generation of responsibility and motivation to act morally should also be fostered by universalism and conformity values. On the other hand, the goal of hedonism (focusing on pleasure and sensuous gratification for oneself; Schwartz 1994) conflicts most strongly with the goal of taking moral action in the face of adversity and with the perseveration through challenge (Hannah et al. 2011). The same is true for achievement and stimulation since both values share with hedonism the motivational goal for self-centered satisfaction and the desire for affectively pleasant arousal (Schwartz 1994). We conclude:

H5 The order of correlations, stated as ranks from the most positive to the most negative, between high levels of moral conation processes and personal values is as follows: benevolence (1); universalism, conformity (2.5); tradition, security (4.5); self-direction (6); power (7); achievement, stimulation (8.5); hedonism (10).

Roccas et al. (2002) postulated that values and traits mutually influence each other. As stated above, values can guide behavior. Conversely, it is also conceivable that inborn temperaments constantly exhibit a specific behavioral trait leading to valuing the goals the respective traits serve (Roccas et al. 2002). Yet, the causal direction remains unclear (Silfver et al. 2008). We argue that empathy gives rise to specific value preferences since the achievement of the motivational goal of certain values may be facilitated by empathic tendencies. There are three previous studies confirming this empathy-value link (Myyry and Helkama 2001; Myyry et al. 2010; Silfver et al. 2008). However, only two of the aforementioned studies used Davis multidimensional framework (Davis 1983) and none of them investigated all four dimensions of empathy.

Individuals who score high on PT have a predominant tendency to put themselves into the shoes of others to see the situation from their point of view. This is highly compatible with the motivational goals of universalism and self-direction both expressing the reliance upon one's own judgment and comfort with diversity of existence (Schwartz 1994). Chronically considering the viewpoint of others is also compatible with the goals of benevolence and universalism (transcendence of selfish interests; Schwartz 1994). In contrast, high levels of PT should mostly conflict with the self-centered focus of power values. Further, it should also conflict with security values since adopting others view means accepting a diversity of points of view, which stands in contrast with the security's goal of overcoming the threat of uncertainties (Schwartz 1994).

H6 The order of correlations, stated as ranks from the most positive to the most negative, between high levels of PT and personal values is as follows: universalism, self-direction (1.5); benevolence (3); stimulation (4); conformity, tradition (5.5); hedonism, achievement (7.5); security (9); power (10).

Individuals who score high on EC often and intensively feel compassion and concern for others. They are moved by the suffering of others and naturally want to help. As explained above, emotions like compassion broaden our focus and connect us with others. Therefore, EC is highly compatible with the goal of benevolence. Further, EC should also facilitate the attainment of the goal of universalism. On the other hand, EC mostly conflicts with the goals of power and achievement—both emphasizing social superiority and esteem (Schwartz 1994).

H7 The order of correlations, stated as ranks from the most positive to the most negative, between high levels of empathic concern and personal values is as follows: benevolence (1); universalism (2); conformity, tradition (3.5); self-direction (5); security, stimulation (6.5); hedonism (8); achievement; power (9.5).

We do not specify an integrated hypothesis for PD because we assume—similar to Roccas et al.'s (2002) finding that Neuroticism showed only small correlations with values—that the anxiety and tension people feel who are high on PD may not serve to facilitate the attainment of the goals of any of the ten values. Regarding fantasy, the relationship with the ten values is unclear; however, chronically fantasizing about movie characters and books might be compatible with openness to change values.

According to H1–H7, we can conclude that empathy exerts its influence on moral cognition and moral conation processes via changes in the structure of personal values. PT and EC are mainly associated with preferring self-transcendence values, which are in turn associated with higher levels of moral cognition and moral conation processes:

H8 The influence of cognitive and affective empathy on moral cognition and moral conation processes is mediated via changes in the structure of personal values.

Our last inquiry is about broad dispositional variations in personality. Research on personality and identity has targeted to bridge the thought-action gap—the problem that moral reasoning was seen as most important factor for moral actions but showed only low predictive power (Blasi 1980; Hardy and Carlo 2011; Shao et al. 2008). As answer the concept of moral identity—the centrality of morality for the self—has evolved (Aquino and Reed

2002: Bergman 2002: Frimer and Walker 2008). There are several approaches for studying moral personality and moral identity (cf. Frimer and Walker 2008, 2009; Hardy and Carlo 2005, 2011; McAdams 2009; Shao et al. 2008). In the present study, we used the five-factor model of personality, which can be located at level 1 of McAdams framework of a moral personality (McAdams 2009). McAdams (2009) three-level account of personality is constituted by three layers consisting of dispositional traits, such as the five-factor model (Level 1), characteristic adaptations, such as values, goals, moral schemas (Level 2), and integrative life narratives, which are internalized and evolving life stories (Level 3). Further, McAdams (2009) stated that certain profiles of the Big 5 are associated with moral cognition and conation processes. Whereas high Agreeableness and high Conscientiousness are supposed to be connected with moral conations processes, at least moderately high Openness to Experience may be linked to moral cognition processes (cf. McAdams 2009). Although there is a growing number of studies in business ethics literature targeting personality (Craft 2013), there are only a few studies investigating the influence of the five-factor model on EDM and-to the best knowledge of the authors-barely none of them explore the influence on a facet level of personality (for a notable exception, see Marcus 2006). This is surprising taking in account that the five-factor model is one of the most influential frameworks of personality today (Digman 1990; McCrae and Costa 1997), which is investigated in many other fields of organizational research (Barrick and Mount 1991; Bono and Judge 2004; Ng et al. 2005). Therefore, we explore the influence of the five-factor model on a facet level on moral cognition and moral conation processes.

Q1 What are the relationships between the five factors of personality on a facet level with moral cognition and moral conation processes?

Aims of the Present Study

To summarize, the present study is a two-fold empirical contribution to the EDM literature. Firstly, we investigate two crucial components—moral cognition and moral conation processes. As target variable for operationalizing moral cognition processes, we use Lind's construct of moral judgment and discourse competence (MJDC), which is grounded in Lind's dual-aspect theory and in the cognitive moral development approaches of Piaget and Kohlberg (cf. Lind 2008, 2013). According to Lind (2008) and our definition of ethical competence, high levels of moral cognition processes are shown when someone enters a discourse about controversial moral issues and is able to reflect and

debate about points of view regarding their moral quality, even if those points of view may contradict his own perspective. To investigate moral conation processes, we focus on counterproductive work behavior (CWB) since this concept captures volitional negative employee behavior violating legitimate interests or norms of the respective organization (Trevino et al. 2006). Counterproductive acts can appear in various aspects such as theft, fraud, absenteeism, aggressive behavior, substance use, or sexual harassment (Berry et al. 2007; Marcus and Schuler 2004). Since it comprises the intention to violate accepted rules of the company and behave in a destructive or even antisocial manner, CWB can be distinguished from constructive deviant behavior that aims to contribute to the well-being of the organization (Vadera et al. 2013). Thus, CWB can be regarded as expression of low levels of moral conation processes and, therefore, low ethical competence according to our definition.

Secondly, recent organizational literature called for the investigation of the underlying capacities needed for effectively performing EDM (cf. Hannah et al. 2011). Therefore, we aim to study empathy as a crucial capacity for moral cognition and conation processes and, moreover, personal values and the five factors of personality as important aspects of moral identity. Figure 2 summarizes the research model and the respective hypotheses explained in the section above.

Method

Sample Characteristics

The study main sample consisted of N = 366 German undergraduate students (46.2 % female) from four different

universities in Germany (Dresden, Niederrhein, Freiberg, Köln) and can be regarded as convenience sample. The mean age was 22.51 (SD = 3.79). Additionally, the sample from the Technische Universität Dresden (n = 126; 61.9 % female) served as a subsample for further comprehensive hypotheses testing. The mean age was 23.28 (SD = 4.83). See Table 1 for details.

Research Design and Procedure

We used a cross-sectional design to investigate all hypotheses. At all universities except Dresden, the questionnaires (see below) were filled in during regular courses. Participants had up to 30 min to get everything completed. At the Technische Universität Dresden, the participants completed the questionnaire under supervision. These participants were given additional time (100 min) to finish the task since their questionnaire included additional instruments (see below). All participants were informed about the aims and the content of the study and participated voluntarily.

Measurement

Empathy

Empathy was assessed by the Saarbrücker Persönlichkeitsfragebogen (SPF; Paulus 2009), a German validated form of the Interpersonal Reactivity Index (Davis 1983). Equally to the IRI, the questionnaire measures four aspects of empathy: PT, EC, FS, and PD. Each subscale consists of four items rated by a 5-point Likert scale. Alpha reliabilities were sufficiently high and comparable to Paulus (2009) validation studies: .73 for PT, .67 for EC, .76 for FS, and .64 for PD.



Fig. 2 The research model of the present study

Table 1 Sample characteristics

	Main sample ($N = 366$)	Subsample ($n = 126$)
Nationality		
German	320 (87.2 %)	117 (92.9 %)
Non-German	41 (11.2 %)	8 (6.3 %)
More than 12 month work experience		
Yes	62 (16.9 %)	43 (34.1 %)
No	304 (83.1 %)	83 (65.9 %)
Career training before university education	on	
Yes	68 (18.6 %)	22 (17.5 %)
No	298 (81.4 %)	104 (82.5 %)
Time-in-a-work placement		
Mean (SD)	3.99 (5.95)	4.92 (6.47)
Subject of study		
Psychology	82 (22.4 %)	82 (65.1 %)
Economic science	132 (36.1 %)	17 (13.5 %)
Industrial engineering	68 (18.6 %)	4 (3.2 %)
Other engineering subjects	68 (18.6 %)	14 (11.1 %)
Miscellaneous (residual category)	16 (4.4 %)	9 (7.1 %)
Amount of semesters		
Mean (SD)	3.36 (2.79)	3.80 (3.49)

response. Subsample comprised

SD standard deviation

only data from Technische Universität Dresden

Missing percentages due to non-

Personal Values

Personal values were measured with a German version of the Schwartz Value Survey (SVS; Boehnke 1993). The instrument comprises those 45 single items from Schwartz's original instrument that were confirmed to be transnational valid. According to Rokeach's (1968) distinction of different types of values, the SVS includes terminal (21 items) and instrumental values (24 items). Both types of values are assessed with a 9-point Likert scale ranging from -1 to 7. With the SVS, one can assess the individual importance of 10 value types according to Schwartz' circumplex model of human values (Schwartz 1992): universalism, benevolence, conformity, security, tradition, power, achievement, hedonism, stimulation, and self-direction. Alpha reliabilities ranged between $\alpha = .50$ (tradition) and $\alpha = .81$ (universalism), which is comparable with former studies (e.g., Roccas et al. 2002).

Moral cognition processes

The level of moral cognition processes-the awareness and the processing of information related to moral issues (Hannah et al. 2011)—was measured by the Moral Judgment Test (MJT, Lind 2008; recently renamed into Moral Competence Test, Lind 2014). The MJT measures two aspects: The cognitive aspect (C-score) represents a measure for MJDC) "as the ability of a subject to accept or reject arguments on a particular moral issue consistently in regard to their moral quality even though they oppose the subject's stance on that issue" (Lind 2008, p. 200).

The affective aspect measures moral preferences or attitudes of reasoning toward Kohlberg's six stages of moral orientation (cf. Lind 2008). It is important to underline that the MJT does not classify people regarding their actual cognitive moral development stage; rather the affective aspect reflects the preference for arguments of specific stages. We mainly focused on the C-score as a measure for moral cognition processes since it both reflects a cognitive competence aspect of moral judgment and a preference for higher stages according to Kohlberg (Lind 2008; Rest et al. 1997). The MJT consists of two dilemmata (mercy-killing dilemma and workers dilemma) in which the subject has to decide whether the action performed in the case was right or wrong. Afterward, the subject has to rate the pros and cons on a scale "I strongly reject (-3)" to "I strongly accept (+3)". The two sets of moral arguments (pro and con) are matched to represent the same qualities on each level regarding Kohlbergs stages (cf. Lind 2008). The scoring of the affective aspect is the sum of the preference ratings of all four arguments belonging to the same stage. Because Lind defines his test as a multivariate N = 1 experiment with 6 (moral stage) \times 2 (probing) \times 2 (dilemma) factors, he suggests calculating the cognitive aspect with a MANOVA-like procedure by partitioning the sum of squares. The resulting C-score can range from 1 to 100 with categories ranging from very low (1-9), low (10-19), medium (20-29), high (30-39), very high (40-49) to extraordinarily high (above 50). Higher scores indicate that a person consistently bases their ratings on moral qualities, regardless whether the argument supports or conflicts his/her own opinion. According to Lind (2008) to call the results being valid, the MJT has to meet five criteria. The three

Table 2 Correlations of empathy, personal values, and the five-factor model (BFI-K) with ethical control of the second	npetence
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	Moral cognition (high MJDC)	Moral orientations ^a						Moral conation
		Preconventional		Conventional		Postconventional		(low CWB)
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
Empathy								
Perspective taking	.17***	16**	12*	08	14**	.17**	.08	.19*
Empathic concern	.20***	12*	16**	02	11*	.19***	.12*	.03
Fantasy	.16**	20***	20***	02	02	.09	02	.06
Personal distress	.03	.04	.06	02	.01	.01	.03	07
Values								
Universalism	.12*	21***	21***	03	09	.08	.08	.09
Benevolence	.09*	03	14*	$.10^{\dagger}$	02	.19***	.19***	.26**
Conformity	21***	.27***	.23***	.26***	.06	.03	.06	.32***
Tradition	08^{\dagger}	.07	.08	.18***	02	02	.04	.36***
Security	18***	.17**	.21***	.15**	.08	.01	.02	.11
Power	24***	.26***	.32***	.28***	.19***	04	.01	06
Achievement	09^{\dagger}	.14**	.18***	.16**	.12*	.02	.05	.06
Hedonism	08^{\dagger}	.18**	.06	.08	.02	.11*	.05	29**
Stimulation	.03	.00	.00	.00	03	.06	.05	18*
Self-direction	.06	01	04	.02	.01	.11*	.12*	.01
MJDC								
C-score	1	50***	60***	26***	06	.43***	.35***	.06
Five-factor model ^b								
Neuroticism	.09	03	.01	06	04	.05	.05	18*
Extraversion	.06	03	06	01	.00	.04	.04	.01
Openness to experience	.18**	18**	14**	15**	15**	.16**	$.09^{\dagger}$	01
Agreeableness	.01	05	.00	.07	10^{\dagger}	.12*	.06	.22*
Conscientiousness	06	.05	$.09^{\dagger}$.01	.04	.00	.05	.24*

Pearson correlation coefficients are depicted

MJDC moral judgment and discourse competence, CWB counterproductive work behavior

Due to missing values, sample sizes for all correlations, except for the IBES, varied between 349 < N < 357. The correlations with IBES were taken from the subsample analysis: 111 < N < 113

^a Stage 1: Punishment and obedience orientation, Stage 2: Instrumental relativist orientation, Stage 3: Interpersonal concordance, Stage 4: Law and order, Stage 5: Social contract, Stage 6: Universal ethical principles (cf. Kohlberg and Hersh 1977)

^b In the main sample, Big 5 were measured using the BFK; in contrast, in the subsample the NEO-PI-R was used

*** p < .001; ** p < .01; * p < .05, * p < .10; Bonferroni-corrected level is equal with p < .01 (05/5; the effective number of independent variables was determined by the equation of Li and Ji (2005); all tests one-tailed, except for Big 5, fantasy, and all correlations with stages; all ps < .05 bold, except for BFI-K (only Bonferroni-corrected correlations are bold here)

criteria that need to be tested empirically in every sample (stage preference ordering, quasi-simplex structure, and cognitive-affective parallelism) were found for our data (for cognitive-affective parallelism, cf. Table 2 and 3).

Moral Conation Processes

To measure moral conation processes—the tendency for and the practice of moral behavior (Hannah et al. 2011)—we choose the probability to show CWB as dependent variable. CWB was assessed with the Inventar berufsbezogener Einstellungen und Selbsteinschätzungen (IBES; Marcus 2006). The instrument contains a 60-item overt and a 55-item personality-based part. The IBES was designed to resemble the prototypical content themes repeatedly found in both types of integrity tests in U.S. studies. The overt part of the IBES comprises four subscales: general trust, perceived counter-productivity norms, rationalizations, and behavioral intentions fantasies. The personality-based part comprises five subscales: manipulativeness, trouble avoid-ance, positive self-concept, reliability/dependability, and stimulus seeking. All 115 items are rated by a 5-point Likert

Table 3 Correlations of empathy and personal values

	Social focus						Personal focus					
	Self-Transcendence Values		Conservation values		Self-Enhancement Values			Openness to Change Values				
	UN	BE	СО	TR	SE	РО	AC	HE ^a	ST	SD		
РТ	.38***	.24***	02	.08	05	20***	.01	.05	.11*	.22***		
EC	.48***	.39***	.01	.18***	03	23***	06	.05	.08	.13*		
FS	.30***	$.09^{+}$	13*	04	07	13*	05	.01	.07	$.10^{\dagger}$		
PD	.04	08	04	.07	02	.01	07	16**	13*	16**		

Pearson correlation coefficients are depicted

PT perspective taking, *EC* empathic concern, *FS* fantasy, *PD* personal distress, *UN* universalism, *BE* benevolence, *CO* conformity, *TR* tradition, *SE* security, *PO* power, *AC* achievement, *HE* hedonism, *ST* stimulation, *SD* self-direction

Due to missing values sample sizes varied between 352 < N < 356

^a Note that Hedonism is both belonging to the self-enhancement and the openness to change cluster (see in detail Schwartz 1994) *** p < .001; ** p < .01; * p < .05; [†] p < .10. Pearson correlation coefficients are depicted; all tests one-tailed; all ps < .05 bold

scale. Psychometrical studies proved the IBES main score to be a reliable and valid measure for the prediction of CWB (Marcus 2006, 2007). Higher scores of the IBES main score indicate a low probability to show CWB. The internal consistency of the IBES main score was $\alpha = .88$, which is comparable with former studies (e.g., Marcus 2006).

Five-Factor Model of Personality

In the main sample, all respondents answered a German short version of the Big Five Inventory (BFI-K; Rammstedt and John 2005). It represents a very parsimonious method to assess Neuroticism (BFI-N), Extraversion (BFI-E), Openness to Experience (BFI-O), Agreeableness (BFI-A), and Conscientiousness (BFI-C) with 21 self-report items rated by a 5-point Likert scale. Rammstedt and John (2005) reported excellent psychometric properties of the inventory. In the present study, alpha reliabilities were .72 for BFI-N, .80 for BFI-E, .72 for BFI-O, .63 for BFI-A, and .65 for BFI-C, which is comparable with Rammstedt and Johns (2005).

In the subsample (Technische Universität Dresden), all respondents completed a German adaptation of the Revised NEO Personality Inventory (NEO-PI-R; Ostendorf and Angleitner 2004). The NEO-PI-R measures the five factors Neuroticism (NEO-N), Extraversion (NEO-E), Openness to Experiences (NEO-O), Agreeableness (NEO-A), and Conscientiousness (NEO-C) and six facets hierarchically structured under each domain. Each facet consists of eight 5-point Likert scale items resulting in a total number of 240 items. Alpha reliabilities were .93 for NEO-N, .91 for NEO-E, .88 for NEO-O, .87 for NEO-A, and .91 for NEO-C (facets between $\alpha = .43$ (Values) and $\alpha = .85$ (Assertiveness)), which was comparable with former studies (Ostendorf and Angleitner 2004).

Control variables

EDM is influenced by several socio-demographic and other third variables. However, the empirical results are quite heterogeneous (for comprehensive reviews and meta-analytical results, cf. Craft 2013; O'Fallon and Butterfield 2005; Pan and Sparks 2012). The following factors were included as covariates in our analysis: gender, age, education, work experience, and nationality. Because Pan and Sparks (2012) reported differences in the results between student and non-student samples, we included additional control variables to characterize our sample in greater detail. Consequently, we included subject of study, number of semesters studied, time having been in work placements (number of month), career training (before university education), and work experience (number of month) as operationalization for education and work experience.

Statistical Analysis

For correlation analyses, we used Pearson's correlation coefficient and residualized all correlations for age and gender. Due to unequal sub sample sizes in the ANOVA cells in some of the analyses and to guarantee for a maximum of power, the group comparisons were conducted using the conservative Welch-F-Ratio as crucial test statistic (Field 2013). To account for multiple testing in our exploratory analyses of the five-factor model, statistical significance of each correlation coefficient was determined using Bonferroni correction. For this purpose, we performed a matrix spectral decomposition (matSpD) in the first place to specify the effective number of independent variables for both the BFI-K and the NEO-PI-R. We used the equation of Li and Ji (2005) to calculate the effective number of independent variables. For the correlation analysis of the main sample, given a sample size of at least N = 349, we were able to detect correlations of r = 1.181and greater with an alpha of .01 (Bonferroni-level) and a power of .80. For the subsample, it was r = 1.351(N = 111) considering the Bonferroni-corrected level of .0025. Data of the MJT showed a significant deviance from normal distribution. For the subsequent analyses, we transformed the C-score to correct for the positive skew of the distribution using a square-root transformation (Field 2013). This transformed C-score showed a nearly perfect normal distribution providing the assumptions for parametric statistical testing.

Multiple mediation analyses were performed using the macro script PROCESS (Hayes 2012). In our analyses, we followed Hayes (2009) who posits that a significant total effect of X on Y is not necessary for an indirect/mediation effect to occur (cf. MacKinnon et al. 2000; Shrout and Bolger 2002; Zhao et al. 2010). Therefore, we only used bootstrapped confidence intervals (bootstrapping with k = 50,000 resamples) for making inferences about the existence of indirect/mediation effects. In addition, we simultaneously explored the output of the traditional causal steps approach (Baron and Kenny 1986). One of the advantages of PROCESS is the possibility to compute not only a total indirect effect of all mediators, but also the specific indirect effects. A specific indirect effect is the ability of a variable M to mediate the effect on a dependent variable controlling for all other mediators (Preacher and Hayes 2008). According to Preacher and Hayes (2008), a significant total indirect effect is not required for investigating specific indirect effects. That is, not having found a statistical significant total indirect effect still leaves the researcher the opportunity to investigate each specific indirect effect and gain valuable insights into the indirect processes between independent, mediator, and outcome variables (cf. Preacher and Hayes 2008).

To minimize the thread multicollinearity, we ran two multiple mediation models for each dependent variable because of the intercorrelations of opposite value types: one model with self-transcendence and conservation values and the other with self-enhancement and openness to change values as mediators. According to our preparatory analysis (see below), we included university, subject of study, age, gender, nationality, and work experience as control variables into the mediation model predicting MJDC. For the models predicting CWB, we included age, gender, and career training. Further, we controlled for the five factors of personality in all four models to estimate the indirect effects of personal values that go beyond the variance explained by personality (Roccas et al. 2002) using BFI-K for the main sample and NEO-PI-R for the subsample analyses. Influence of the control variables was partialed out of the mediators and the dependent variable. Regarding the omnibus R^2 test of a multiple regression, given a sample size of at least 319 in the main sample (mediation model 1 and 2), we were able to detect small to medium effects of $f^2 > = .07$ with an alpha of .05 and a power of .80. In the subsample (mediation model 3 and 4), we could detect medium to large effects of $f^2 > = .21$ with an alpha of .05 and a power of .80 (N = 108).

Results

Preparatory Analysis: Testing the Influence of Control Variables on Ethical Competence

As a first step, differences in the C-score of the MJT (reflecting moral judgment and discourse competence/MJDC) concerning each control variable were tested separately. MJDC differed significantly between the subsamples (universities), F(3, 98.70) = 8.63, p < .001, $\eta^2 = .07$. Further, we found a significant effect of subject of study on MJDC, $F(4, 85.84) = 6.63, p < .001, \eta^2 = .07$. Post hoc comparisons with Hochberg's GT2 revealed that students of psychology showed higher levels of MJDC compared to all the other study subjects, $M_{\text{psychology}} = 5.93$, SD = 1.58 versus $M_{\rm all \ other \ subjects} = 4.88, SD = 1.66$. All single comparisons were significant on the level of p < .001, except the one between psychology and the miscellaneous category, which was due to the very unequal sample size in this comparison. However, visual inspection showed a clear mean difference between psychology and the miscellaneous study category $(M_{\text{miscellaneous}} = 4.88, SD = 1.66)$. Furthermore, on average, women (M = 5.35, SE = 1.63) showed higher levels of MJDC than men (M = 4.95, SE = 1.74), t(1, 352) = -2.20,p < .05, r = .12. Regarding nationality, subjects without immigrant background (M = 5.20, SE = 1.70) showed higher levels of MJDC compared to subjects with immigrant background (M = 4.52, SE = 1.65), t(1, 352) = 2.36,p < .05, r = .12. Finally, work experience closely missed the significance level of .05, however, subjects with work experience less than 12 month descriptively showed higher levels of MJDC (M = 5.19, SE = 1.70) than those with work experience more than 12 month (M = 4.77, SE = 1.67), t(1, 1)(356) = 1.74, p = .08, r = .09. The other control variables (age, number of semesters studied, time having been in work placements, and career training) had no influence on moral cognition.

Secondly, the analyses revealed that almost none of the study control variables influenced the IBES main score (reflecting the probability to show Counterproductive work behavior/CWB). Career training closely missed the significance level of .05, however, subjects with a career

training before university education descriptively showed higher values on the IBES main score (lower probability for CWB, M = 394.95, SE = 21.44) than those with without career training (M = 383.08, SE = 29.81), t(1, 115) = -1.69, p = .09, r = .16.

Thirdly, although not all covariates showed a significant influence on the study variables, however, it was tested if adding the other variables improves the explanatory power of the regression model of the covariates for simultaneously predicting MJDC for the subsequent multiple mediation analyses. This procedure was also necessary to address possible suppression and redundancy effects due to weak to moderate intercorrelations between the covariates (intercorrelations varied between .10 and .60 among the covariates). Stepwise OLS regression analysis showed that the variables work experience significantly improved the model comprising solely the covariates from the pre-analyses above, $\Delta R^2 = .03$, p < .01. Even though age showed no effect, we included age because of its theoretical and empirical relationships with the study variables empathy and personal values. Consequently, all six covariates (university, subject of study, age, gender, nationality, and work experience) explained $R^2 = .13$ ($R^2_{corr} = .10$) in the criterion MJDC. Regarding CWB, we found no improvements by adding additional control variables to the regression model. Again, we included age and gender because of its relationships with empathy and personal values and career training (all three covariates explained $R^2 = .03, R_{corr}^2 = .01$ in CWB).

Empathy and Ethical Competence

Concerning all bivariate relationships, the associations between the study variables found in the correlation analyses were small to medium in size. Results (see Table 2) provided support for H2. High PT showed a small correlation with high MJDC (r = .17, p < .001) and low CWB (resulting in a positive association; r = .19, p < .05). Regarding H1, we only found empirical support for H1a: high EC showed a small correlation with high MJDC (r = .20, p < .001); in contrast, there was no association between EC and CWB. Further, PD was unrelated with both MJDC and CWB, leading to the rejection of H3a and H3b. At last, our exploratory analysis of FS revealed a small positive correlation between FS and MJDC (r = .16, p < .01) but no significant correlation with CWB.

Personal Values and Ethical Competence

Regarding moral cognition (see Table 2), in line with the expected order of correlations, the highest positive correlations between MJDC and personal values were found for universalism (r = .12, p < .05) and benevolence (r = .09,

p < .05); the highest negative correlations were found for power (r = -.24, p < .001). Unexpectedly, the second highest negative correlation was found for conformity (r = -.22, p < .001). An integrated hypothesis specified that correlations between levels of moral cognition processes and the whole set of 10 values would follow the motivational circle from universal and benevolence (most positive) in both directions around the circle to power (most negative). A Spearman correlation of $r_s = .68$, p (one-tailed) < .05, provided support for the hypothesis. Correlations decreased monotonically from self-transcendence values to power in both directions around the circle with some deviations. The correlation with conformity deviated most strongly from the predicted order; hedonism, stimulation, and security deviated slightly. Taken together, the results yielded that MJDC showed a stronger negative association with conservation values than predicted.

Regarding moral conation (see Table 2), unexpectedly the highest positive correlation between CWB and personal values was found for tradition (r = .36, p < .001). In line with the expected order of correlations, the second and third highest positive correlations were found for conformity (r = .32, p < .001) and benevolence (r = .26, p < .01). As expected, the highest negative correlations were found for hedonism (r = -.29, p < .01) and stimulation (r = -.18, p < .01). The Spearman correlation between the predicted and observed order of correlations was $r_s = .81$, p (one-tailed) < .01, providing support for the integrated hypothesis. The correlations with tradition and universalism strongly deviated from the predicted order. The results showed that CWB was associated slightly stronger with conservation values than predicted.

The Empathy-Value Link

In line with our assumptions about the order of correlations (see Table 3), the highest positive correlations between PT and personal values were found for universalism (r = .38, p < .001) and self-direction (r = .22, p < .001); the highest negative correlation was found for power (r = -.20, p < .001). A Spearman correlation of $r_s = .92$, p (one-tailed) < .001, provided support for our integrated hypothesis. Correlations decreased monotonically from universalism/self-direction to power in both directions around the circle.

Regarding EC, as expected, the highest positive correlations between EC and personal values were found for universalism (r = .48, p < .001) and benevolence (r = .39, p < .001); the highest negative correlation again was found for power (r = -.23, p < .001). A Spearman correlation of $r_s = .85$, p (one-tailed) < .001, confirmed our integrated hypothesis. Conformity deviated from the predicted order. Further, EC correlated most positively with universalism instead of benevolence, which was the second highest positive correlation.

Our exploratory analyses revealed that the order of correlations between FS and personal values was similar to the observed pattern of PT and EC. We found the highest positive correlation of fantasy with universalism (r = .30, p < .001) and the highest negative correlations with power (r = -.13, p < .05) and—in contrast to the results of PT and EC—with conformity (r = -.13, p < .05). As suspected, PD showed no clear pattern of correlations with personal values. However, we observed small negative correlations with all openness to change values (r = -.13, p < .05 for stimulation).

Multiple Mediation Analysis

The multiple mediation analyses revealed the (total and specific) indirect effects of the mediator variables. For exploratory reasons, we will also report results that closely missed p < .05. The analyses revealed that benevolence, conformity, tradition, power, and hedonism functioned as mediators for transmitting the indirect effects of empathy on MJDC and CWB, respectively. These results provided evidence for H8.

Preacher and Hayes (2008) proposed that investigating multiple mediation should involve two parts: (1) investigating the total indirect effects (the effects of the set of mediators altogether) and (2) investigating specific indirect effects meaning the ability to mediate the effect of the independent variable conditional on the conclusion of the other mediators. In mediation model 1 (see Fig. 3), only EC showed a significant total indirect effect on MJDC (.12), however, this effect was significant only on p < .10. That is, the whole set of five mediators transmitted the effect of EC on MJDC. Further, we observed a positive specific indirect effect of EC through benevolence (.16, p < .01). That is, high EC was associated with preferring benevolence ($\beta = .51, p < .001$), which in turn was associated with higher levels of MJDC ($\beta = .31, p < .01$). Regarding FS, we observed a negative specific indirect effect through benevolence (-.04, p < .05) since FS was related to rejecting benevolence ($\beta = -.12$, p < .10). On the other hand, FS showed a positive specific indirect effect through conformity (.05, p < .10), although the a-path between FS and conformity was not significant. Yet, we observed a specific indirect effect on the level of p < .10. Hayes (2012) discusses such a phenomenon: it is statistically possible for an indirect effect to be different from zero even though one of its constituent is not.

In mediation model 2 (see Fig. 4), we observed no total indirect effects. That is, none of the independent variables transmitted its influence on MJDC through all mediators

taken as a set. However, we observed specific indirect effects. Again EC showed a positive specific indirect effect (.11, p < .001): high EC was associated with rejecting power values ($\beta = -.50$, p < .001) which in turn was associated with higher levels of MJDC since power and MJDC showed a negative association ($\beta = -.22$, p < .01). Further, FS showed a negative specific indirect effect through power (-.03, p < .10). At last, PD showed a positive specific indirect effect through hedonism (.04, p < .05). High PD was associated with rejecting hedonism values ($\beta = -.26$, p < .05) which in turn was associated with higher levels of MJDC since hedonism and MJDC showed a negative association ($\beta = -.16$, p < .10).

In mediation model 3 and 4 (investigating the influence of empathy on CWB through values), we observed no total indirect effects but specific indirect effects. Both models revealed only one single indirect path. In model 3, EC showed a positive specific indirect effect (2.61, p < .05). High EC was associated with preferring tradition values $(\beta = .61, p < .01)$ which in turn decreased CWB, since tradition and the IBES mains score revealed a positive association ($\beta = 4.31, p < .10$). In model 4, high PD was associated with rejecting hedonism ($\beta = -.35$, p < .10) which in turn decreased CWB ($\beta = -5.20, p < .10$). This specific indirect effect (1.82) could be found on the level of 90 %. In both model 3 and 4, almost half of the variance of the data could be explained by our regression models (model 3: $R^2 = .52$, $R^2_{corr} = .43$, F(17, 90) = 5.73, $p < .001, N_1 = 108$; model 4: $R^2 = .51, R_{corr}^2 = .41, F(17, R_{corr}^2)$ $90) = 5.45, p < .001, N_2 = 108)$ underpinning the good fit of our models. Hierarchical regression showed that in both model 3 and 4, the greatest increase of R^2 was found after entering the five-factor model ($\Delta R^2 = .37$, p < .001) and personal values (for model 3: $\Delta R^2 = .11$, p < .01; for model 4: $\Delta R^2 = .09, p < .05$).

In sum, the results are in conjunction with the intervening mechanisms hypothesized in H8. That is, empathy, in particular EC, transmitted its effect on moral cognition and moral conation processes through changes in the preference for certain personal values. Except for the total effects of EC in model 1 and 2, the single correlation of each empathy dimension with MJDC/CWB (reported in Table 1) disappeared when analyzed in a multiple mediation framework alongside the other empathy dimensions, the big 5, and covariates. Thus, almost all reported indirect effects could be found in the absence of total effects. That is, the classic causal steps approach would have missed many of the indirect effects found in our analyses (cf. Preacher and Hayes 2004, 2008). According to Zhao et al. (2010), all indirect effects could be labeled as "indirect-only mediation" since no direct effects were found in the mediation analyses (cf. Zhao et al. 2010). Most importantly, we found no effects for PT at all; only



Fig. 3 Model 1: indirect effects of empathy on MJDC through selftranscendence and conservation values. For visual simplification, only the significant predictors, mediators and their belonging paths are

depicted. DV regression model: $R^2 = .22$, $R^2_{corr} = .16$, F(25, 294) = 3.34, p < .001, $N_1 = 320$. ***p < .001, **p < .01, *p < .01, *p < .05, †p < .10



Fig. 4 Model 2: indirect effects of empathy on MJDC through selfenhancement and openness to change values. For visual simplification, only the significant predictors, mediators and their belonging

affective empathy showed significant effects within the multiple mediation framework. However, additional analyses revealed that PT was correlated with EC (r = .45, p < .001) and FS (r = .33, p < .001).

Five-Factor Model of Personality and Ethical Competence

Our exploratory research question Q1 aimed to clarify the influence of the five factors of personality on moral cognition and moral conation processes. In the main sample (see Table 2), correlation analyses using the BFI-K yielded a small positive association of BFI-O with MJDC (r = .18, p < .05). Table 4 depicts the findings of the correlation analyses between the NEO-PI-R, MJDC, and CWB. Overall, we found medium to large effect sizes in our subsample analysis. In contrast to the main sample, we

paths are depicted. DV regression model: $R^2 = .22$, $R_{corr}^2 = .15$, F(25, 293) = 3.21, p < .001, $N_2 = 319$. ***p < .001, **p < .01, *p < .05, *p < .10

could not replicate the correlation between Openness to Experience and MJDC. Instead, we found that high NEO-N was associated with a greater probability of CWB (resulting in lower scores of the IBES) (r = -.34, p < .0025). On facet level, this relationship between NEO-N and CWB was found for Angry Hostility (r = -.48, p < .0025), Depression (r = -.29, p < .0025), and Impulsiveness (r = -.35, p < .0025). Further, we found that high NEO-C was associated with a lower probability of CWB (r = .40, p < .0025). On facet level, this association between NEO-p < .0025), Dutifulness (r = .34, p < .0025), and Selfdiscipline (r = .35, p < .0025). At last, we observed that high NEO-A was associated with high scores of MJDC (r = .30, p < .0025) and high scores of the IBES (r = .40, p < .0025)p < .0025) reflecting low CWB. On facet level Trust was related to CWB (r = .36, p < .0025), whereas Tender-

Table 4 Correlations of the five-factor model (NEO-PI-R) with ethical competence

	Moral cognition (High MJDC)	Moral orientations ^a						Moral conation
		Preconventional		Conventional		Postconventional		(low CWB)
		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	
NEO-Model								
Neuroticism	.09	.13	.03	11	05	.07	11	34 ***
Anxiety	.12	.12	.00	11	02	.12	.01	23*
Angry Hostility	17^{\dagger}	.19*	.15	01	.03	10	23*	48 ***
Depression	.12	.12	.04	11	07	.11	06	29 ***
Self-consciousness	$.15^{\dagger}$.06	06	11	01	.12	.05	06
Impulsiveness	.04	.07	.01	02	08	.02	15^{+}	35***
Vulnerability	.14	.08	07	02	.03	.13	.02	18^{\dagger}
Extraversion	16^{\dagger}	.11	$.16^{\dagger}$.08	.13	.01	.03	.10
Warmth	04	.08	.11	.05	.09	.13	.06	.23*
Gregariousness	19*	.13	.18*	.08	.05	08	.02	.09
Assertiveness	10	.04	.06	04	.12	04	.01	.07
Activity	23*	.18*	$.17^{\dagger}$.05	$.18^{\dagger}$	04	.05	.07
Excitement seeking	12	.07	.20*	.10	.06	02	03	19*
Positive emotions	07	01	.01	.12	.09	.12	.05	$.16^{\dagger}$
Openness to experience	.06	11	15^{+}	09	12	.15	09	02
Fantasy	.13	10	17^{+}	05	04	.14	15^{+}	06
Aesthetics	08	15	11	.04	11	.06	01	.13
Feelings	.02	.06	.00	09	03	.10	02	04
Actions	06	01	.04	.04	.00	.18*	.07	10
Ideas	.00	08	06	09	21*	01	09	.07
Values	.17*	08	24**	25**	07	.05	08	14
Agreeableness	.30***	16^{\dagger}	21*	07	.01	.27***	.21*	.40***
Trust	.10	09	10	.06	.04	.18*	$.15^{+}$.36***
Straightforwardness	.33***	12	22*	05	.05	.21*	$.17^{\dagger}$.34***
Altruism	.15†	.04	06	12	04	.24**	.03	.25**
Compliance	.19*	08	05	03	.05	.23*	.22*	.27**
Modesty	.16	12	11	10	03	.01	.09	.12
Tender-mindedness	.31***	30***	29***	07	09	.26**	.12	.23*
Conscientiousness	03	.10	.11	.20*	.24**	.13	.19*	.40***
Competence	.00	.05	.01	.03	.18*	.11	.13	.31***
Order	03	.07	.11	.14	.06	.09	.06	.26**
Dutifulness	02	.07	.14	$.18^{\dagger}$.26**	.08	.13	.34***
Achievement striving	07	.08	.09	.18*	.12	.15†	.10	.26**
Self-discipline	06	.08	.11	.24**	.20*	.05	.18*	.35***
Deliberation	.03	.09	.05	.11	.25**	.08	.19*	.26**
MJDC								
C-Score	1	50***	60***	26***	06	.43***	.35***	.05

Pearson correlation coefficients are depicted

MJDC moral judgment and discourse competence, CWB counterproductive work behavior

Due to missing values, sample sizes for all correlations varied between 111 < N < 122

^a Stage 1: Punishment and obedience orientation, Stage 2: Instrumental relativist orientation, Stage 3: Interpersonal concordance, Stage 4: Law and order, Stage 5: Social contract, Stage 6: Universal-ethical-principles (cf. Kohlberg and Hersh 1977)

*** p < .0025 Bonferroni-corrected level (p < .05/20; the effective number of independent variables was determined by the equation of Li and Ji (2005), ** p < .01; * p < .05; [†] p < .10; all tests two-tailed; all ps < .0025 bold

mindedness was related to MJDC (r = .31, p < .0025). The only facet correlating both with MJDC and CWB was Straightforwardness (r = .33 and r = .34, respectively, both ps < .0025).

Discussion

The present research aimed at clarifying individual differences in ethical competence. One of the main contributions was the detailed investigation of the influence of all four empathy dimension on personal values and aspects of ethical competence. In the following sections, we will discuss the findings in detail.

Empathic Concern Broadens Awareness

In line with previous research and theory (e.g., Batson 2010; Batson et al. 2007; de Waal 2008; Eisenberg 2000; Hoffman 1975; Tangney et al. 2007), our study supports the conclusion that empathy, in particular EC—the capacity to feel sympathy, compassion and concern for others— is a crucial moral capacity explaining individual differences in both moral cognition and moral conation processes. Given that high levels of MJDC and the absence of CWB are recognized as expressions of altruistic behavior—namely behavior that aims at increasing the welfare of other people without direct gain—the results of our study are consistent with the empathy–altruism hypothesis (Batson 2010). Therefore, empathy should be added as a fourth moral maturation capacity to Hannah et al.'s framework (Hannah et al. 2011).

We inferred from the broaden-and-build theory (Fredrickson 2001) that EC expands the focus of people's awareness and, thereby, build the foundation for higher levels moral cognition (Fredrickson 2012) and moral conation processes (Batson 2010). The cognitive aspect of the MJT (Lind 2008), which we used to operationalize moral cognition processes, resembles the ability to reflect and debate points of view regarding their moral quality, even if those points of view may contradict his own perspective (high C-score). This entails a much broader and flexible way of information processing than merely pondering on one's own opinion (low C-score). High levels of trait-EC showed robust associations with high MJDC in all analyses. Moreover, we found evidence for the link between EC and preferring self-transcendence (and rejecting self-enhancement) values. This was also true for PT, providing support for the "empathy-value link" and replicating former studies on empathy and values (Myyry and Helkama 2001; Myyry et al. 2010; Silfver et al. 2008). Taken together, our overall findings support the first tenet of the broaden-and-build theory (Fredrickson 2001).

Positive emotions, like compassion (Fredrickson 2012), broaden the information processing of human beings and, in doing so, foster moral cognition and moral conation processes.

Perspective Taking Alone has No Predictive Power

We assumed that high PT is associated with both high levels of moral cognition and moral conation processes. However, our results concerning PT were mixed and need special attention. Previous theory and research (Batson et al. 2007; Eisenberg and Morris 2001; Kohlberg 1984b; Myyry et al. 2010) are underpinning the significant role of PT for developing high levels of moral cognition and moral conation processes. The present data, however, challenge this notion. When analyzed alongside the affective empathy dimensions, PT lost its predictive power for ethical competence. Rather, only the affective empathy dimensions (EC, FS, and PD) remained as significant predictors. This is in line with evidence from neuroscientific studies revealing that affective empathy plays a crucial role for the development of moral cognition in ontogeny (Bzdok et al. 2012; Decety et al. 2011). Note that a lesion study showed a double dissociation between cognitive and affective empathy (Shamay-Tsoory et al. 2009). One explanation of our results may be that PT and EC form a complex interplay and support each other. Indeed, PT and affective empathy are conceptually and neurobiologically overlapping to a considerable extent (Bzdok et al. 2014). As explained above, higher levels of cognitive PT or role taking may be a necessary condition for transforming PD into feelings of sympathy and compassion (Batson et al. 2007; Hoffman 1975). Consequently, these feelings of EC, and not PT alone, are the actual motivational driving force for moral thought and action. This provides a compelling interpretation for our data, since we found relationships between moral cognition/moral conation processes and PT in our correlation analysis and additional analysis revealed that PT and EC are correlated moderately (r = .45,p < .001). Perhaps, the influence of PT on moral cognition and moral conation is mediated by EC. Mature PT tends to be a condition to experience high levels of EC and, thereby, to enhance the motivational force of sympathy and compassion. The "pure" cognitive part of PT on its own (residualized for affective empathy) may have little or even no predictive power for morality. This notion is consistent with clinical research on psychopathy showing that deficits in experiencing moral emotions are at the core of this psychiatric disorder (Blair 2007), while cognitive empathy may be intact (cf. Haidt 2001; see in detail Hare and Neumann 2008). Notably, psychopathic individuals are well known to excel in abstract reflection of social categories yet fail at appropriate emotional responses in

engaged social interaction (Cleckley 1941; Hare 2003). Although plausible, this interpretation of our data is not in line with the findings of Myyry et al. (2010). They found that PT remained as significant predictor for the postconventional schema of the Defining Issue Test (DIT; Rest 1979), even alongside EC and values as further predictors in their regression models. This difference in the results of our and Myyry's et al. (2010) study may be explained by the use of different measures for moral reasoning. While both the DIT (Rest 1979) and the MJT (Lind 2008) are sought to assess the maturity of moral reasoning and both measures are grounded in the cognitive moral development approach of Kohlberg (1976), there is still a debate which measure captures genuine cognitive competence and which one rather resembles a preference test (Lind 1996; Rest et al. 1997). Since the MJT is the only measure with an inbuilt task to assess pro- and counter-arguments and thus simulates a moral discourse, we agree with Lind (2008) that the MJT, more than the DIT, measures a cognitive competence aspect of moral judgment. Perhaps, PT is more predictive for preference tests (DIT scores) than for cognitive competence of moral judgment (C-score of the MJT).

The Role of Personal Distress and Empathic Fantasy

A novel insight of the present research is that PD can have a positive impact on moral cognition and moral conation processes by shaping the value structure of a person. Some authors have argued that the PD subscale reflects more than just emotional contagion but rather resembles a measure of emotional self-control and the ability to distance oneself from emotionally charged situations (Baron-Cohen and Wheelwright 2004; Hassenstab et al. 2007). However, we found that high PD was primarily associated with rejecting hedonism, which in turn was associated with higher ethical competence. Standing in contrast with our initial hypotheses, this unexpected finding sharpens the understanding of the role of PD in EDM.

The fantasy dimension showed no clear pattern of results. This again challenges the validity of the scale with regard to social functioning (Davis 1983; Paulus 2009). We therefore agree with Baron-Cohen and Wheelwright (2004) who stated that FS is not empathy itself because it entails processes much broader than empathy.

Values Entailing a Social Focus are Related to Higher Ethical Competence

Our study extensively investigated important aspects of moral identity, namely personal values and personality traits (Aquino et al. 2009). In doing so, the present research is under the few exploring the relationships between personal values and moral cognition (C-score of MJT; Lind 2008) and—to the knowledge of the authors—the first one investigating personal values and CWB. We found evidence for our integrated hypotheses that explored the associations between personal values on the one side and EC. PT, moral cognition, and moral conation processes on the other side. Most importantly, we found that values are able to explain large proportions of variance in CWB over and above personality traits. The greatest positive associations of CWB and values were found for tradition, conformity, and benevolence, whereas we found the greatest negative relationships with hedonism and stimulation. Regarding values and moral cognition, we replicate findings from previous research (Helkama et al. 2003; Myyry et al. 2010; Weber 1993). MJDC correlated positively with self-transcendence values, in particular universalism, and negatively with self-enhancement values. Although we found evidence for the predicted order of correlations, the effect sizes for the associations with MJDC were only small. Our data clarified the influence of values on moral cognition and conation processes. Whereas the former seems to be guided mostly by self-transcendence (and selfdirection, see Helkama et al. 2003; Myyry et al. 2010), the latter showed a stronger association with conservation values. It seems that some values that foster moral conation processes (conservation values) are a hindrance for moral cognition as we found in our analysis of MJDC.

Taken together, our overall findings on personal values underline the notion that a general respectful and humble orientation to life seeking equality and welfare of others (selftranscendence and conservation values) guides higher levels of moral cognition and moral conation processes. This is consistent with previous theory and research on the newly emerged HEXACO personality framework (Ashton and Lee 2007). HEXACO entails a sixth broad personality factor (Honesty-Humility) complementing the classic FFM approach of personality. Honesty-Humility represents the tendency for active cooperation (cf. Hilbig et al. 2013) that is "the tendency to be fair and genuine in dealing with others, in the sense of cooperating with others even when one might exploit them without suffering retaliation" (Marcus et al. 2007, p. 156). It was found to be a crucial determinant explaining large proportions of variance in measures of morality over and above Agreeableness and other personality factors (Ashton and Lee 2007; Hilbig et al. 2013; Lee et al. 2005).

The Moral Personality

Our study investigated the exploratory research question of the influence of the five-factor model on a facet level on moral cognition and moral conation processes. We used two self-report measures of the FFM to investigate personality. Our results confirm McAdams (2009) assumption that certain

dispositional profiles resemble a moral personality. High Agreeableness (on the facet level: high Trust, Straightforwardness, and Tender-Mindedness) and high Conscientiousness (on the facet level: high Competence, Dutifulness, and Self-discipline) showed positive, medium associations with moral conation processes. On the other hand, high Neuroticism (on the facet level: high Angry Hostility, Depression, and Impulsiveness) showed negative, medium associations with moral conation processes. Further, we found evidence for a weak link between Openness to Experience and moral cognition processes. Our findings have several implications for research and theory on moral identity and personality. Firstly, our results replicate former research on FFM and CWB (Marcus 2006; Marcus et al. 2007). Secondly, our findings are in line with research on ethical leadership and personality. Kalshoven et al. (2011) found that self-reported Conscientiousness and Agreeableness of leaders were related positively with follower's perceived ethical leadership behavior, whereas Neuroticism showed a negative association. Other researchers also found associations of Extraversion and transformational leadership (Bono and Judge 2004) underpinning the different influences of the five-factor model on various behavioral outcomes in the moral domain. Lastly, we found that the Big 5 had a greater impact on moral conation processes in contrast to moral cognition. Obviously, the influence of personality manifests more strongly in later processes of EDM. Agreeableness was the only factor that was correlated with both moral cognition and moral conation processes.

Taken together, we found evidence that broad dispositional variations in personality—which are genetically based, stable across time and situational context, and cross culturally generalizable (McCrae and Costa 1997)—explain variance in measures of morality, in particular in moral conation processes. Yet, there might be no single profile of a moral personality. Rather, it seems that different broad personality factors turn out to alleviate the enactment of different kinds of moral cognition and moral conation processes depending on the respective requirements of the (work)situation (Ashton and Lee 2007; McAdams 2009; Tett and Burnett 2003). Finally, our results underscore McAdams' (2009) position that the five-factor model carries considerable moral meaning and can be used as an operationalization for studying the moral personality.

Strengths, Limitations, and Future Directions

Some potential limitations should be pointed out. The present study included only German students. Hence, future research should clarify if our findings can be generalized to other populations, various organizational contexts, levels of professional experience, and cultural backgrounds. The cultural influence on morality (Haidt 2012) is very important for the study of personal values

(McAdams 2009: Schwartz and Sagiv 1995: Singhapakdi et al. 1995). The present study used a value framework that has been found to be cross-culturally valid (Schwartz et al. 2012). Nevertheless, it is possible that the paths between empathy, personal values, and moral cognition/conation processes are moderated by cultural context. Another limitation of the study is that we considered only one operationalization for both moral cognition and moral conation processes. We chose these dependent variables since they capture aspects of moral cognition and moral conation processes which are essential in organizational structures/ institutions. However, we only found small to medium correlations of the focal predictors with MJDC and CWB. Perhaps, empathy, personal values, and the five factors of personality may explain greater variance in other aspects of ethical competence and/or predictors not included in our study might explain additional variance in MJDC and CWB. Another limitation is the sole use of self-report data which might have led to some common-method bias. Future research should test our framework with objective measures of ethical competence, e.g., supervisor ratings of moral behavior.

Several strength of our study can be highlighted. We explored the whole set of empathy dimensions. We comprehensively studied personality using two measures for the five-factor model. Moreover, using multiple mediation analysis, we isolated the unique contributions of each empathy dimension on the mediator and dependent variables while controlling for relevant covariates. Through our comprehensive mediation models, we were able to investigate the indirect effects over and above variance explained by personality and other control variables. A further strength is that we used integrated hypotheses for studying the relationships between personal values and the other variables instead of only focusing on single value associations.

The present research motivates several lines of future research. Firstly, as called by Hannah et al. (2011), more research is needed to investigate individual differences in capacities needed to perform ethical competence. This knowledge constitutes the essential prerequisite for the design and development of new assessment tools for personnel assessment (Eigenstetter et al. 2012; Strobel et al. 2012). Other successful attempts in exploring individual differences in moral capacities encompass, for instance, research on justice sensitivity (Schmitt et al. 2005), moral attentiveness (Reynolds 2008), moral foundations (Graham et al. 2011; Haidt 2012), moral identity centrality (Aquino and Reed 2002), and the Honesty-Humility factor of the HEXACO personality framework by Ashton and Lee (2007). Future research should systematically investigate how the aforementioned constructs are related to the processes explicated in Hannah et al.'s model (2011).

Moreover, future research should validate our mediation framework with other aspects of these processes, for example, direct measures of moral sensitivity (e.g., Sparks and Hunt 1998) and other (positive) behavioral outcomes, for instance, prosocial behavior, extra-role behavior, or whistle-blowing (Vadera et al. 2013). Secondly, future research should focus more strongly on concepts studied in the field of positive psychology (Cameron et al. 2009; Haidt 2003a; Trevino et al. 2006) since they can help to better understand what it takes to follow through one's moral judgment (Trevino et al. 2006). For instance, the socalled "other-praising moral emotions" (Haidt 2003b)-in particular moral elevation (Haidt 2003a) and gratitude (McCullough et al. 2001)-seem to be important driving forces for moral motivation and moral behavior in organizations (Cameron et al. 2009; Vianello et al. 2010). Future research should explore their influence on moral conation processes. Thirdly, although there is consensus that moral identity is the crucial bridge between moral thought and action (e.g. Bergman 2002; Shao et al. 2008) until now it remains unclear how moral identity evolves over time (Hardy and Carlo 2011). Longitudinal studies should clarify the development of this moral maturation capacity and investigate how moral identity formation can be fostered in organizational contexts (Trevino et al. 2006).

Management Implications

With regard to personnel assessment, previous studies have shown the predictive power of personality for several jobrelated outcomes, for instance, job performance (Barrick and Mount 1991). Our results suggest that personality (trait empathy and the five-factor model) is able to predict ethical competence. Assessors should include the traits found to be predictive for ethical competence in their selection strategy in order to select employees for positions where taking responsibility is highly required. Further, the present and former research (e.g., Helkama et al. 2003; Myyry and Helkama 2002; Weber 1993) found that selfenhancement values are prone to guide judgment and according behavior that is not in accordance with high ethical standards. On the other hand, values that entail a social focus generally seem to foster moral cognition and moral conation processes. Therefore, managers and professionals should be screened for values profiles (see also Weber 1993). For example, knowing which values are endorsed by a person and how these values affects his daily workflow could be a topic of interest in semi-structured assessment interviews. This would allow the assessor to compare the behavioral requirements of the respective target position with the reported values and their pursuit in concrete working situations.

In terms of personnel development, methods for training moral cognition and moral conation processes are required. There is a growing body of evidence that mindfulness meditation improves EDM (Ruedy and Schweitzer 2010; Shapiro et al. 2012). Being attentive and mindful to moral issues in daily (work)life is associated with higher moral awareness and moral behavior (Reynolds 2008). In addition, besides the reported effects on EDM, the mindfulness-component entailed in every meditation practice fosters a variety of other desirable outcomes which are beneficial in an organizational context, e.g., improvement of cognitive abilities and emotion regulation, higher wellbeing and physical health (Germer and Siegel 2012). At last, regular compassion-meditation-a specific form of meditation, where EC is voluntarily cultivated-is able to generate sustaining affective experiences and lasting changes within brain regions that are linked to feeling states, planning of movement, and positive emotions (Lutz et al. 2007). Positive effects of this kind of mental exercise can be observed already after 2 weeks of regular training (Weng et al. 2013). Therefore, mediation-practice in general and compassion-meditation in particular could be introduced as an integral part of organizational ethics programs as means for training ethical competence.

With respect to values, our findings have implications for organizational practices. Business organizations should call into question which values they endorse and promote in their organizational culture. It would be conceivable to deliberately embrace values with a social focus and inbuilt them in all organizational processes as means for supporting ethical practices within organizations. The standard ISO 26,000 (Hahn 2013; ISO 2010) for corporate social responsibility represents a perfect example for such an endeavor. This is because the seven proposed principles and the seven core subjects of social responsibility entailed in ISO 26000 mainly embrace the goals and themes of selftranscendence and conservation values (ISO 2010). Thereby, by providing codes of conduct and by signaling what is valued in their organization (Hannah et al. 2011), organizations support individual ethical competence within their departments. This is consistent with theory and research on moral intensity (Jones 1991). Highlighting the consequences of actions and providing clear norms of ethical behavior raises the perceived moral intensity of a situation and, thus, fosters a sense of moral ownership and subsequent moral conduct (Hannah et al. 2011; Jaffe and Pasternak 2006). Moreover, values primarily influence actions when they are relevant in the context (Schwartz 2012). Hence, an organizational context that is highlighting specific values promotes the activation of these values in the behavior of organization members. Finally, putting certain values into the limelight would help to shape and strengthen the moral identity of its members by means of role-modeling and moral approval of the respective peers and supervisors (see in detail Jones and Ryan 1998; Trevino et al. 2006; Warren and Smith-Crowe 2008).

The six Basic Characteristics of Ethical Competence

In "Introduction" section, we defined ethical competence as follows: (1) conscious decisions and actions within a given (2) responsibility situation. It implies (3) to feel obliged to one's own moral principles and (4) to act responsibly taking into account legal standards as well as economical, ecological, and social consequences. Ethical competence (5) requires normative knowledge and (6) the willingness to defend derived behavioral options against occurring resistance. We will now explicate how this definition relates to moral cognition and moral conation processes. Further we will discuss the definition against the background of our empirical findings.

Firstly, our definition comprises the successful performance of all four components of EDM (Hannah et al. 2011; Rest 1986):

- (1)With the word conscious we underline the importance of conscious awareness of possible courses of action and their respective consequences to others (moral sensitivity). We also point to the rational weighing up of relevant issues for making a moral judgment. However, we do not refuse the existence and importance of intuitive processes in moral judgment (Greene 2009; Haidt 2001). Yet, for being able to engage in a moral discourse (Habermas 1991), an ethical competent employee should be able to consciously interpret the situation and become aware of the complexity of possible action-consequence chains. For this reason, one must be able to verbalize one's post hoc reasons of one's primarily intuitive-driven moral judgments (Haidt 2001). Therefore, we investigated what capacities influence MJDC since it resembles the ability to enter a moral discourse. We found that (affective) empathy fosters this ability by changing the structure of preferences for personal values.
- (2) The term *responsibility situation* refers to the moral issues characteristics of a given situation (cf. Jones 1991). EDM is embedded in concrete (work)situations that can vary in their moral intensity, meaning the "extent of the issue-related moral imperative in a situation" (Jones 1991, p. 372).
- (3) According to Kohlberg (1976, 1984b), binding oneself to moral principles or ideals is a prerequisite for acting according to these principles (see also Lind 2008). Thus, *feeling obligated to one's own*

moral principles is necessary to enter a moral discourse about controversial issues. It resembles the ability to judge arguments with regard to their moral quality and not just to reject or to accept them in accordance of one's own opinion (cf. Lind 2008, 2013). Further, the third point means that a mature moral understanding enhances the motivation to act according to one's moral principles through its integration into the structure of one's self and resulting in high moral motivation (cf. Bergman 2002). Hence, ethical competence entails that moral principles are central to the self (Aquino and Reed 2002). Our results underline this assumption by showing that Agreeableness-a personality factor that entails altruistic tendencies (McAdams 2009)was associated most strongly with ethical competence since it was related to both MJDC and CWB.

- (4) Most importantly, for acting with ethical competence (moral behavior), one needs to take into consideration *legal*, *economic*, *ecological*, *and societal consequences* for all stakeholders being affected. Our study revealed theoretically and empirically that empathy is needed for taking into account action– consequences and therefore builds a necessary requirement for organizational actors to be able to engage into a moral discourse (Habermas 1991) with the respective stakeholders.
- (5) Taking into account possible action-consequence chains is not enough to capture the moral intensity of a situation correctly; normative knowledge (e.g., formal and informal norms of the respective environment) is needed either (cf. Jones 1991). Our study underlines the central role of personal values with respect to ethical competence. On an individual level values can be understood as normative framework since they guide information processing and behavior (Schwartz 2012). In particular, we found that values that entail a social focus foster higher ethical competence. In particular, conservation valuesthose values that are connected the most with normative knowledge-were associated with low CWB. Just like the perception and evaluation of action-consequences, normative knowledge is an important condition to accurately perceive the moral intensity of a situation (Jones 1991).
- (6) Lastly, if one has decided what is right to do and has taken moral action, one must be willing to defend argumentatively one's course of action against resistance. This point does not mean to become inflexible or intolerant to new perspectives, as characteristic three pointed out; rather, it operationalizes what Rest meant by "perseverance" and "implementation skills" that are needed for

moral behavior (Rest 1986, pp. 3-4). Knowing what is right to do but failing to implement the right course of action or instantaneously stop when facing adversity would reflect low ethical competence. Hence, the last point interconnects ethical competence with social skills. Our study revealed that high Neuroticism-a personality factor that is associated with anxiety, anger, insecurity, and depression (Digman 1990)—was a hindrance for later stages of EDM. We found high Neuroticism to be related with higher CWB. On the other hand, we found that high Conscientiousness-a personality trait that entails the will to achieve aims and the ability to hold back impulsive behavior (Roccas et al. 2002)was related positively with moral conation processes, resulting in lower CWB.

Secondly, our definition represents an acceptable compromise between descriptive and normative ethics by emphasizing the consideration of action–consequences and by demanding a moral discourse about the moral issues being at stake (Habermas 1991). Although concrete behavioral criteria still need to be derived for the respective organizational context, our definition of ethical competence leaves much less freedom for arbitrariness of the content of ethical behavior than former definitions. Further, the focus on considering action–consequences and engaging in moral discourse is in line with modern approaches of stakeholder management that draw on habermasian discourse ethics (Habermas 1991) as means for stakeholder engagement and corporate social responsibility reporting (cf. Reynolds and Yuthas 2008; Zakhem 2008).

Conclusion

What is ethical competence? This question was not only the overall research question of the present research but it also constitutes a request for modern organizations to answer this question regarding their respective organizational context. The definition of ethical competence delivered in this paper can help them doing this. Moreover, our empirical findings can be used to improve assessment strategies in order to select employees with high ethical competence. The present and former research on this topic suggests that by means of our empathy and compassion, we can transcend ourselves in order to overcome our selfishness and act with higher ethical competence. Through a compassionate state of mind, we encode other people as precious, morally equal sentient beings and generate the motivation for moral behavior. Organizational decision makers should consider the role of empathy, personal values, and the five-factor model of personality in their human resource management. Selecting employees with ethical competence for jobs with high responsibility is a crucial and indispensable endeavor in today's complex global business. Detrimental man-made disasters as we saw in Fukushima can and must be prevented in the future. The way to achieve this goal is putting ethical competence in the limelight of human resource management.

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References

- Aquino, K., Freeman, D., Reed, A., I. I., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, 97(1), 123–141.
- Aquino, K., & Reed, A., I. I. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440.
- Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, 11(2), 150–166.
- Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, 29(10), 1207–1220.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality* and Social Psychology, 51(6), 1173–1182.
- Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with Asperger syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, 34(2), 163–175.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44(1), 1–26.
- Batson, C. D. (2010). Empathy-induced altruistic motivation. In M. Mikulincer & P. R. Shaver (Eds.), *Prosocial motives, emotions,* and behavior: The better angels of our nature (pp. 15–34). Washington, DC US: American Psychological Association.
- Batson, C. D., Eklund, J. H., Chermok, V. L., Hoyt, J. L., & Ortiz, B. G. (2007). An additional antecedent of empathic concern: Valuing the welfare of the person in need. *Journal of Personality* and Social Psychology, 93(1), 65–74.
- Bergman, R. (2002). Why be moral? A conceptual model from developmental psychology. *Human Development*, 45(2), 104–124.
- Berry, C. M., Ones, D. S., & 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.
- Blair, R. J. R. (2007). The amygdala and ventromedial prefrontal cortex in morality and psychopathy. *Trends in Cognitive Sciences*, 11(9), 387–392.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88(1), 1–45.
- Boehnke, K. (1993). Lehrerinnen und Lehrer als Wertemultiplikatoren im veränderten Bildungssystem der neuen Bundesländern:

Probleme und Perspektiven [Teachers as value multipliers in a changing education system of the new federal states: Problems and prospects]. *Pädagogik und Schulalltag, 48,* 94–105.

- Bono, J. E., & Judge, T. A. (2004). Personality and transformational and transactional leadership: A meta-analysis. *Journal of Applied Psychology*, 89(5), 901–910.
- Buesseler, K. O. (2012). Fishing for answers off Fukushima. *Science*, 338(6106), 480–482.
- Bzdok, D., Groß, D., & Eickhoff, S. B. (2014). The neurobiology of moral cognition. In J. Clausen & N. Levy (Eds.), Springer handbook for neuroethics (pp. 127–148). Heidelberg: Springer.
- Bzdok, D., Langner, R., Schilbach, L., Engemann, D. A., Laird, A. R., Fox, P. T., & Eickhoff, S. B. (2013). Segregation of the human medial prefrontal cortex in social cognition. *Frontiers in Human Neuroscience*, 7, 27.
- Bzdok, D., Schilbach, L., Vogeley, K., Schneider, K., Laird, A. R., Langner, R., & Eickhoff, S. B. (2012). Parsing the neural correlates of moral cognition: ALE meta-analysis on morality, theory of mind, and empathy. *Brain Structure & Function*, 217(4), 783–796.
- Cameron, K. S., Dutton, J. E., & Quinn, R. E. (2009). *Positive* organizational scholarship: Foundations of a new discipline. San Francisco: Berrett-Koehler Publishers.
- Cleckley, H. M. (1941). The mask of sanity: An attempt to reinterpret the so-called psychopathic personality. St. Louis, MO: C. V. Mosby.
- CNN Wire Staff. (2011, June 7). 3 nuclear reactors melted down after quake, Japan confirms, CNN. Retrieved from http://edition.cnn. com/2011/WORLD/asiapcf/06/06/japan.nuclear.meltdown/index. html.
- Craft, J. L. (2013). A Review of the Empirical Ethical Decision-Making Literature: 2004-2011. Journal of Business Ethics, 117(2), 221–259.
- Davis, M. H. (1980). Individual differences in empathy: A multidimensional approach. 40, ProQuest Information & Learning, US. Retrieved from http://search.ebscohost.com/login.aspx?direct= true&db=psyh&AN=1981-50664-001&site=ehost-live. Available from EBSCOhost psyh database.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, 44(1), 113–126.
- Davis, M. H., Mitchell, K. V., Hall, J. A., Lothert, J., Snapp, T., & Meyer, N. (1999). Empathy, expectations, and situational preferences: Personality influences on the decision to participate in volunteer helping behaviors. *Journal of Personality*, 67(3), 469–503.
- de Waal, F. B. M. (2006). Morally evolved: Primate social instincts, human morality, and the rise and fall of 'veneer theory'. In S. Macedo & J. Ober (Eds.), *Primates and philosophers: How morality evolved* (pp. 2–80). Princeton, NJ US: Princeton University Press.
- de Waal, F. B. M. (2008). Putting the altruism back into altruism: The evolution of empathy. *Annual Review of Psychology*, 59(1), 279–300.
- Decety, J., Michalska, K. J., & Kinzler, K. D. (2011). The developmental neuroscience of moral sensitivity. *Emotion Review*, 3(3), 305–307.
- Decety, J., Michalska, K. J., & Kinzler, K. D. (2012). The contribution of emotion and cognition to moral sensitivity: A neurodevelopmental study. *Cerebral Cortex*, 22(1), 209–220.
- Digman, J. M. (1990). Personality structure: Emergence of the fivefactor model. Annual Review of Psychology, 41, 417–440.
- Eigenstetter, M., Strobel, A., & Stumpf, S. (2012). Diagnostik ethischer Kompetenz [Assessment of ethical competence]. In S. Kaiser & A. Kozica (Eds.), *Ethik im Personalmanagement*.

Zentrale Konzepte, Ansätze und Fragestellungen (pp. 225–246). München und Mering: Rainer Hampp Verlag.

- Eisenberg, N. (2000). Emotion, regulation, and moral development. Annual Review of Psychology, 51(1), 665.
- Eisenberg, N., & Morris, A. S. (2001). The origins and social significance of empathy-related responding: A review of empathy and moral development: Implications for caring and justice by M. L. Hoffman. *Social Justice Research*, 14(1), 95–120.
- Field, A. (2013). *Discovering Statistics using IBM SPSS Statistics* (4th ed.). London: SAGE.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226.
- Fredrickson, B. L. (2012). Building lives of compassion an wisdom. In C. Germer & R. D. Siegel (Eds.), Wisdom and compassion in psychotherapy: Deepening mindfulness in clinical practice. New York: Guilford Press.
- Frimer, J. A., & Walker, L. J. (2008). Towards a new paradigm of moral personhood. *Journal of Moral Education*, 37(3), 333–356.
- Frimer, J. A., & Walker, L. J. (2009). Reconciling the self and morality: An empirical model of moral centrality development. *Developmental Psychology*, 45(6), 1669–1681.
- Frith, U., & Frith, C. D. (2003). Development and neurophysiology of mentalizing. *Philosophical Transactions of the Royal Society of London, Series B, Biological sciences*, 358(1431), 459–473.
- Germer, C., & Siegel, R. D. (2012). Wisdom and compassion in psychotherapy: Deepening mindfulness in clinical practice. New York: Guilford Press.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366–385.
- Greene, J. (2009). The cognitive neuroscience of moral judgment and decision-making. In M. S. Gazzaniga (Ed.), *The cognitive neurosciences* (4th ed.). Cambridge, MA: MIT Press.
- Habermas, J. (1991). *Erläuterungen zur Diskursethik* [Notes to discourse ethics] (Vol. 5). Frankfurt: Suhrkamp Verlag.
- Hahn, R. (2013). ISO 26000 and the standardization of strategic management processes for sustainability and corporate social responsibility. *Business Strategy & the Environment*, 22(7), 442–455.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108(4), 814–834.
- Haidt, J. (2003a). Elevation and the positive psychology of morality. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp. 275–289). Washington, DC, US: American Psychological Association.
- Haidt, J. (2003b). The moral emotions. In R. J. Davidson, K. R. Scherer, & H. H. Goldschmith (Eds.), *Handbook of affective sciences* (pp. 852–870). Oxford: Oxford University Press.
- Haidt, J. (2012). *The righteous mind: Why good people are Divided by politics and religion*. New York: Vintage Books.
- Haidt, J., & Kesebir, S. (2010). Morality. In S. T. Fiske, D. T. Gilbert & G. Lindzey (Eds.), *Handbook of social psychology* (Vol 2, 5th ed., pp. 797–832). Hoboken, NJ: Wiley.
- Hannah, S. T., Avolio, B. J., & May, D. R. (2011). Moral maturation and moral conation: A capacity approach to explaining moral thought and action. *The Academy of Management Review*, 36(4), 663–685.
- Hardy, S. A., & Carlo, G. (2005). Identity as a source of moral motivation. *Human Development*, 48(4), 232–256.
- Hardy, S. A., & Carlo, G. (2011). Moral identity: What is it, how does it develop, and is it linked to moral action? *Child Development Perspectives*, 5(3), 212–218.
- Hare, R. D. (2003). The Hare Psychopathy Checklist—revised (2nd ed.). Toronto: Multi-Health Systems.

- Hare, R. D., & Neumann, C. S. (2008). Psychopathy as a clinical and empirical construct. *Annual Review of Clinical Psychology*, 4, 217–246.
- Hassenstab, J., Dziobek, I., Rogers, K., Wolf, O. T., & Convit, A. (2007). Knowing what others know, feeling what others feel. A controlled study of empathy in psychotherapists. *Journal of Nervous & Mental Disease*, 195(4), 277–281.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408–420.
- Hayes, A. F. (2012). Introduction to mediation, moderation, and conditional process analysis. A regression-based approach. New York: Guilford Press.
- Helkama, K., Uutela, A., Pohjanheimo, E., Salminen, S., Koponen, A., & Rantanen-Väntsi, L. (2003). Moral reasoning and values in medical school: A longitudinal study in Finland. *Scandinavian Journal of Educational Research*, 47(4), 399.
- Hilbig, B. E., Zettler, I., Leist, F., & Heydasch, T. (2013). It takes two: Honesty-Humility and Agreeableness differentially predict active versus reactive cooperation. *Personality and Individual Differences*, 54(5), 598–603.
- Hoffman, M. L. (1975). Developmental synthesis of affect and cognition and its implications for altruistic motivation. *Devel*opmental Psychology, 11(5), 607–622.
- ISO. (2010). Guidance on social responsibility—ISO 26000:2010(E). Geneva: Swiss.
- Jaffe, E. D., & Pasternak, H. (2006). Moral intensity as a predictor of social responsibility. Business Ethics: A European Review, 15(1), 53–63.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. Academy of Management Review, 16(2), 366–395.
- Jones, T. M., & Ryan, L. V. (1998). The effect of organizational forces on individual morality: Judgment, moral approbation, and behavior. *Business Ethics Quarterly*, 8(3), 431–445.
- Jordan, J. (2007). Taking the first step toward a moral action: A review of moral sensitivity measurement across domains. *Journal of Genetic Psychology*, 168(3), 323–359.
- Juujarvi, S., Myyry, L., & Pesso, K. (2012). Empathy and values as predictors of care development. *Scandinavian Journal of Psychology*, 53(5), 413–420.
- Kalshoven, K., Den Hartog, D., & De Hoogh, A. (2011). Ethical leader behavior and big five factors of personality. *Journal of Business Ethics*, 100(2), 349–366.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitivedevelopmental approach. In T. Lickona (Ed.), *Moral development and behavior: Theory, research and social issues* (pp. 31–53). New York: Holt, Rinehart & Winston.
- Kohlberg, L. (1984a). Essays in moral development (Vol. II: The psychology of moral development: The nature and validity of moral stages). New York: Harper and Row.
- Kohlberg, L. (1984b). *The psychology of moral development*. San Francisco: Harper & Row.
- Kohlberg, L., & Hersh, R. H. (1977). Moral development: A review of the theory. *Theory Into Practice*, 16(2), 53–59.
- Lee, K. B., Ashton, M. C., & Shin, K. H. (2005). Personality correlates of workplace anti-social behavior. Applied Psychology—An International Review (Psychologie Appliquee— Revue Internationale), 54(1), 81–98.
- Li, J., & Ji, L. (2005). Adjusting multiple testing in multilocus analyses using the eigenvalues of a correlation matrix. *Heredity*, 95(3), 221–227.
- Lind, G. (1996). Testing moral judgment competence. A critical review of the attempt by Rest, Thoma and Edwards to calculate a C-Score from the DIT, Konstanz, Germany. Retrieved from

http://www.uni-konstanz.de/ag-moral/pdf/Lind-1996_Kritik_ Rest_C-score.pdf.

- Lind, G. (2008). The meaning and measurement of moral judgment competence revisited—A dual-aspect model. In D. Fasko & W. Willis (Eds.), *Contemporary philosophical and psychological perspectives on moral development and education* (pp. 185–220). Cresskill, NJ: Hampton Press.
- Lind, G. (2013). 30 Years of the moral judgment test—Support for the dual-aspect theory of moral development. In C. S. Hutz & L. K. de Souza (Eds.), *Festschrift for Angela Biaggio*. Porto Alegre: Universidade Federal do Rio Grande do Sul.
- Lind, G. (2014, March 24). Moral Competence Test (MCT), from http://www.uni-konstanz.de/ag-moral/mut/mjt-engl.htm.
- Lonnqvist, J.-E., Verkasalo, M., Wichardt, P. C., & Walkowitz, G. (2013). Personal values and prosocial behaviour in strategic interactions: Distinguishing value-expressive from value-ambivalent behaviours. *European Journal of Social Psychology*, 43(6), 554–569.
- Lutz, A., Dunne, J. D., & Davidson, R. J. (2007). Meditation and the neuroscience of consciousness. In P. D. Zelazo, M. Moscovitch, & E. Thompson (Eds.), *Cambridge handbook of consciousness* (pp. 499–555). New York: Cambridge University Press.
- MacKinnon, D. P., Krull, J. L., & Lockwood, C. M. (2000). Equivalence of the mediation, confounding and suppression effect. *Prevention Science: The Official Journal of the Society* for Prevention Research, 1(4), 173–181.
- Marcus, B. (2006). IBES—Inventar berufsbezogener Einstellungen und Selbsteinschätzungen [IBES—Job-related attitudes and selfevaluations inventory]. Göttingen: Hogrefe.
- Marcus, B. (2007). Neuere Erkenntnisse zum Inventar berufsbezogener Einstellungen und Selbsteinschätzungen (IBES). [Recent evidence on the job-related attitudes and self-evaluation inventory (IBES)]. Zeitschrift für Personalpsychologie, 6(3), 129–132.
- Marcus, B., Lee, K., & Ashton, M. C. (2007). Personality dimensions explaining relationships between integrity tests and counterproductive behavior: Big five, or one in addition? *Personnel Psychology*, 60(1), 1–34.
- Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: A general perspective. *Journal of Applied Psychology*, 89(4), 647–660.
- McAdams, D. P. (2009). The moral personality. In D. Narvaez & D. K. Lapsley (Eds.), *Personality, identity, character: Explorations* in moral psychology (pp. 11–29). New York: Cambridge University Press.
- McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. American Psychologist, 52(5), 509–516.
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A., & Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, 127(2), 249–266.
- Moll, J., De Oliveira-Souza, R., & Zahn, R. (2008). The neural basis of moral cognition: Sentiments, concepts, and values. *Annals of* the New York Academy of Sciences, 1124, 161–180.
- Monin, B., Pizarro, D. A., & Beer, J. S. (2007). Deciding versus reacting: Conceptions of moral judgment and the reason-affect debate. *Review of General Psychology*, 11(2), 99–111.
- Myyry, L., & Helkama, K. (2001). University students' value priorities and emotional empathy. *Educational Psychology*, 21(1), 25–40.
- Myyry, L., & Helkama, K. (2002). The role of value priorities and professional ethics training in moral sensitivity. *Journal of Moral Education*, 31(1), 35–50.
- Myyry, L., Juujarvi, S., & Pesso, K. (2010). Empathy, perspective taking and personal values as predictors of moral schemas. *Journal of Moral Education*, 39(2), 213–233.

- Ng, T. W. H., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A metaanalysis. *Personnel Psychology*, 58(2), 367–408.
- O'Fallon, M. J., & Butterfield, K. D. (2005). a review of the empirical ethical decision-making literature: 1996–2003. *Journal of Busi*ness Ethics, 59(4), 375–413.
- Ostendorf, F., & Angleitner, A. (2004). NEO-PI-R—NEO Persönlichkeitsinventar nach Costa und McCrae—Revidierte Fassung (PSYNDEX Tests Review) [NEO-PI-R—NEO Personality Inventory by Costa and McCrae—Revised (PSYNDEX tests Review)]. Göttingen: Hogrefe.
- Pan, Y., & Sparks, J. R. (2012). Predictors, consequence, and measurement of ethical judgments: Review and meta-analysis. *Journal of Business Research*, 65(1), 84–91.
- Paulus, C. (2009). Der Saarbrücker Persönlichkeitsfragebogen SPF(IRI) zur Messung von Empathie: Psychometrische Evaluation der deutschen Version des Interpersonal Reactivity Index. [The Saarbrueck Personality Questionnaire on Empathy: Psychometric evaluation of the German version of the Interpersonal Reactivity Index]. Retrieved from http://psydok.sulb.uni-saar land.de/volltexte/2009/2363/.
- Pavlovich, K., & Krahnke, K. (2012). Empathy, connectedness and organisation. *Journal of Business Ethics*, 105(1), 131–137.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments & Computers*, 36(4), 717–731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Rammstedt, B., & John, O. P. (2005). Short version of the Big Five Inventory (BFI-K): Development and validation of an economic inventory for assessment of the five factors of personality. *Diagnostica*, 51(4), 195–206.
- Rest, J. R. (1979). Development in judging moral issues. Minneapolis, MN: University of Minnesota Press.
- Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York: Praeger Publishers.
- Rest, J. R., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). Postconventional moral thinking: A Neo-Kohlbergian approach. Mahwah, NJ: Lawrence Erlbaum Associates Inc.
- Rest, J. R., Thoma, S., & Edwards, L. (1997). Designing and validating a measure of moral judgment: Stage preference and stage consistency approaches. *Journal of Educational Psychology*, 89(1), 5–28.
- Reynolds, S. J. (2008). Moral attentiveness: Who pays attention to the moral aspects of life? *Journal of Applied Psychology*, 93(5), 1027–1041.
- Reynolds, M., & Yuthas, K. (2008). Moral discourse and corporate social responsibility reporting. *Journal of Business Ethics*, 78(1–2), 47–64.
- Roccas, S., Sagiv, L., Schwartz, S. H., & Knafo, A. (2002). The big five personality factors and personal values. *Personality and Social Psychology Bulletin*, 28(6), 789–801.
- Rokeach, M. (1968). Theory of organization and change within valueattitude systems. *Journal of Social Issues*, 24(1), 13–33.
- Ruedy, N., & Schweitzer, M. (2010). In the moment: The effect of mindfulness on ethical decision making. *Journal of Business Ethics*, 95, 73–87.
- Schacter, D. L., Addis, D. R., & Buckner, R. L. (2007). Remembering the past to imagine the future: The prospective brain. *Nature Reviews Neuroscience*, 8(9), 657–661.
- Schmitt, M., Gollwitzer, M., Maes, J., & Arbach, D. (2005). Justice sensitivity. *European Journal of Psychological Assessment*, 21(3), 202–211.

- Schwartz, S. H. (1992). Universal in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social/psychology* (Vol. 25, pp. 1–65). New York: Academic Press.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human-values? *Journal of Social Issues*, 50(4), 19–45.
- Schwartz, S. H. (2007). Universalism values and the inclusiveness of our moral universe. *Journal of Cross-Cultural Psychology*, 38(6), 711–728.
- Schwartz, S. H. (2012). An overview of the Schwartz The ory of basic values. Online Readings in Psychology and Culture, 2(1). Retrieved from http://scholarworks.gvsu.edu/orpc/vol2/iss1/11.
- Schwartz, S. H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., & Konty, M. (2012). Refining the theory of basic individual values. *Journal of Personality and Social Psychology*, 103(4), 663–688.
- Schwartz, S. H., & Sagiv, L. (1995). Identifying culture-specifics in the content and structure of values. *Journal of Cross-Cultural Psychology*, 26(1), 92–116.
- Shamay-Tsoory, S. G. (2011). The neural bases for empathy. *Neuroscientist*, 17(1), 18–24.
- Shamay-Tsoory, S. G., Aharon-Peretz, J., & Perry, D. (2009). Two systems for empathy: A double dissociation between emotional and cognitive empathy in inferior frontal gyrus versus ventromedial prefrontal lesions. *Brain*, 132, 617–627.
- Shao, R., Aquino, K., & Freeman, D. (2008). Beyond moral reasoning: A review of moral identity research and its implications for business ethics. *Business Ethics Quarterly*, 18(4), 513–540.
- Shapiro, S. L., Jazaieri, H., & Goldin, P. R. (2012). Mindfulnessbased stress reduction effects on moral reasoning and decision making. *Journal of Positive Psychology*, 7(6), 504–515.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422–445.
- Silfver, M., Helkama, K., Lönnqvist, J.-E., & Verkasalo, M. (2008). The relation between value priorities and proneness to guilt, shame, and empathy. *Motivation & Emotion*, 32(2), 69–80.
- Singhapakdi, A., Rallapalli, K. C., Rao, C. P., & Vitell, S. J. (1995). Personal and professional values underlying ethical decisions. *International Marketing Review*, 12(4), 65.
- Sparks, J. R., & Hunt, S. D. (1998). Marketing researcher ethical sensitivity: Conceptualization, measurement, and exploratory investigation. *Journal of Marketing*, 62(2), 92–109.
- Strickland, E. (2011, March 16). Explainer: What went wrong in Japan's Nuclear Reactors, *IEEE SPECTRUM*. Retrieved from http://spectrum.ieee.org/tech-talk/energy/nuclear/explainer-whatwent-wrong-in-japans-nuclear-reactors.
- Strobel, A., Duscha, M. C., Holz, C., Lehmann, S., Prescher, R., & Eigenstetter, M. (2012). Ethisch kompetente Mitarbeiter finden: Sind AC Bausteine geeignete Verfahren? [Selecting ethical competent employees: Are assessment center exercises suitable methods?]. In Arbeitskreis Assessment Center e.V. (Ed.), *Talente entdecken und fördern: Personaldiagnostik als Wettbewerbsvorteil. Dokumentation zum 8. Deutschen Assessment-Center-Kongress* (pp. 183–198). Lengerich: Pabst.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. In S. Fiske & D. Schacter (Eds.), *Annual Review of Psychology* (Vol. 58, pp. 345–372). Palo Alto: Annual Reviews.
- Tenbrunsel, A., & Smith-Crowe, K. (2008). Ethical decision making: Where we've been and where we're going. *The Academy of Management Annals*, 2(1), 545–607.

- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500–517.
- Trevino, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32(6), 951–990.
- Vadera, A. K., Pratt, M. G., & Mishra, P. (2013). Constructive deviance in organizations: Integrating and moving forward. *Journal of Management*, 39(5), 1221–1276.
- Vianello, M., Galliani, E. M., & Haidt, J. (2010). Elevation at work: The effects of leaders' moral excellence. *Journal of Positive Psychology*, 5(5), 390–411.
- Wakatsuki, Y., & Mullen, J. (2012, July 5). Japanese parliament report: Fukushima nuclear crisis was 'man-made'. CNN. Retrieved from http://edition.cnn.com/2012/07/05/world/asia/ japan-fukushima-report/index.html.

- Warren, D. E., & Smith-Crowe, K. (2008). Deciding what's right: The role of external sanctions and embarrassment in shaping moral judgments in the workplace. *Research in Organizational Behavior*, 28, 81–105.
- Weber, J. (1993). Exploring the relationship between personal values and moral reasoning. *Human Relations*, 46(4), 435–463.
- Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J. Z. K., Olson, M. C.,... Davidson, R. J. (2013). Compassion Training Alters Altruism and Neural Responses to Suffering. *Psychological Science*, 24(7), 1171–1180.
- Zakhem, A. (2008). Stakeholder management capability: A discoursetheoretical approach. *Journal of Business Ethics*, 79(4), 395–405.
- Zhao, X., Lynch, J. G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal* of Consumer Research, 37(2), 197–206.

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