An Interactional Dual-Process Model of Moral Decision Making to Guide Military Training

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We presented a holistic model of moral decision making known as the interactional dual-process (IDP) model of moral decision making. The IDP model provides a systematic description of the complex process of moral decision making, integrating findings from the fields of moral reasoning, moral intuition, and social interaction. Implications for military training interventions in moral decision making are presented and discussed.

Military personnel are often confronted with morally challenging situations. Actions taken in such situations may have far-reaching consequences on the conscience of the decision maker, the well-being of the recipient, the credibility of the organization, and the success of the mission. Examples from incidents involving the abuse of prisoners in Abu Ghraib in Iraq and the UN sex scandal in Congo or the Haditha Incident in Iraq highlight the importance of the moral dimension in military decision making. The underlying questions after the disclosure of an incident are always the same: How could this happen? How could an individual/group of people engage in such behaviors? And what can be done to prevent such failures in moral decision making? Similar questions have also emerged in the fields of business (e.g., managerial misconduct and power abuse), medicine (e.g., patient mistreatment), and re-
search (e.g., data manipulation or plagiarism), demonstrating that the problem of professional ethical misconduct is not limited to the military. Not surprisingly, these incidents have spurred interest in understanding the nature of moral challenges in professional behavior and in the effectiveness of training programs across various settings (Johnson, 2008; D. A. Jones, 2009; Mumford et al., 2006, 2008; Offstein & Dufresne, 2007; Seiler, 2009; Verweij, Hofhuist, & Soeters, 2007; Waples, Antes, Murphy, Connelly, & Mumford, 2009).

Evidence on the effectiveness of moral decision-making programs shows conflicting results (Mumford et al., 2008). Some studies find that ethics training has positive effects on moral decision making (Al-Jalahma & Fakroo, 2004; Bebeau & Thoma, 1994), whereas others find that ethics training has little effect on moral decision making (Kalichman & Friedman, 1992; Macrina, Funk, & Barrett, 2004). Reasons for these conflicting findings may be explained by differences in the (a) duration and intensity of training programs, (b) focus of ethics education (training content), and (c) measurement of moral decision-making competence from one study to another. Studies have found that the duration of ethics education is positively related to participants’ moral judgment abilities (Bebeau & Thoma, 2003; Linstrum, 2009; Rest & Narvaez, 1998). Variations in the content of ethics education and measurement criteria are usually caused by differences in the conceptualization of moral decision-making competence. For example, some researchers focused on complex, cognitive processes in moral decision making (e.g., Kohlberg, 1969; Oser, 1998; Rest, Narvaez, Bebeau, & Thoma, 1999; Turiel, 1983), whereas others focused on intuitive processes that do not involve conscious cognitive judgment (e.g., Haidt, 2001; Haidt & Bjorklund, 2007; Haidt, Bjorklund, & Murphy, 2000). Although the debate on the primacy of cognitive or intuitive processes has yet to be resolved (Lazarus, 1984; Zajonc, 1980, 1984), we believe this debate has little impact on moral decision making in leadership practice.

There is evidence that the two processes are systematically linked to each other and that their influence on the moral judgment and decision vary from situation to situation, depending on the activated processes (Greene, Nystrom, Engell, Darley, & Cohen, 2004; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Monin, Pizarro, & Beer, 2007; Pizarro & Bloom, 2003; Pizarro, Uhlmann, & Bloom, 2003; Van den Bos, 2003, 2007). Individuals may analyze moral conflicts in depth or react spontaneously by following their intuition, dependent on the situation and problem at hand. They may also interact with others when solving a complex problem, which could result in a change in their decision. As illustrated in examples involving the abuse or killing of prisoners or civilians in Abu Ghraib, Congo, and Haditha, individual’s moral misconduct is often the result of a complex interaction between intuitive/emotional and planned/reasoned processes, developed and executed in a social setting with formalized roles and responsibilities. In fact, Curphy et al. (1998) showed that beside the interpretation of the severity of misconduct, the emotional closeness to an individual and the presence or absence of other wit-
nesses can influence an individual’s reaction. Therefore, we argue that the practical relevance of moral decision making can only be understood by analyzing moral decision making in a holistic real-life context.

In this article, we focus on the nature of moral decision-making processes in professional situations. We emphasize the mental and social processes that lead to a moral decision in a real-life context. The relevant elements involved in the moral decision-making process are identified and their mutual dependencies and interactions are described, resulting in the conceptualization of an interactional dual-process (IDP) model of moral decision making. Based on this integrated and comprehensive understanding of moral decision making in a professional environment, implications for moral development interventions in the military are formulated and discussed.

TOWARD AN UNDERSTANDING OF MORAL DECISION MAKING IN PROFESSIONAL REAL-LIFE SITUATIONS—AN INTERACTIONAL DUAL-PROCESS MODEL OF MORAL DECISION MAKING

Professionals are confronted with many situations that require them to make decisions. Whenever an individual’s well-being is directly or indirectly influenced by another’s decision, the decision-making process inevitably involves a moral evaluation of the presenting issue. The mental processes and social interactions that occur during the decision-making process differ from situation to situation according to situational circumstances (Seiler & Pfister, 2009). For example, individuals who are under time pressure and do not have much time to analyze the problem in depth may utilize different processes compared to those who have sufficient time for an exact framing and definition of the nature of the problem. Similarly, individuals who have experienced similar situations and can anticipate potential consequences of their behavior may utilize different processes than when they are confronted with new, unfamiliar situations. Interaction with others may also influence the way they analyze a problem or the outcome of their decision through post hoc insights or feedback from others. Hence, a model that aims to describe moral decision making in a professional real-life context has to consider all these possible circumstances. Therefore, the relevant question is not “Which process occurs first—cognition or intuition? Or which process is more important?” but “How can individuals make a morally right decision under the assumption that cognitive, intuitive, and social processes influence their decision?” Based on numerous dual-process models (e.g., Chaiken & Trope, 1999; Kahneman, 2003; Lieberman, Gaunt, Gilbert, & Trope, 2002; Stanovich & West, 2000), we developed the IDP model that integrates these elements into a comprehensive moral decision-making framework by combining models that focus on individual cognitive moral reasoning (e.g., Kohlberg, 1969; Oser, 1998; Rest, 1986; Rest et al., 1999; Turiel, 1983), intuitive processes in moral decision making (e.g., Haidt,
The IDP model comprises the following five aspects: (1) moral perception—the individual perceives the inherent moral conflict of the eliciting situation, (2) internal dual-process—the individual undergoes the internal dual-process of reasoning and intuition, (3) moral judgment and decision—the individual achieves a moral judgment and decision, (4) post hoc reasoning—the individual undergoes a post hoc reasoning process to further support or adjust his or her previously made judgment, and (5) social interaction—the individual’s social interaction with others during and after the problem-solving process influences his or her internal dual process to reach a more elaborated or new moral judgment and decision. It is important to note that the IDP model is not a five-step process model. Once a moral conflict is perceived, the dual-process between cognition and intuition (aspect 2), post hoc reasoning (aspect 4), and the social influence from others (aspect 5) occur in a recurring interaction loop. A final decision is only reached when the iterative processes between reasoning and intuition, post hoc reasoning, and social interaction are terminated. Figure 1
shows the graphical representation of the IDP model. The following discussion focuses mainly on the moral decision-making process. However, we recognize the importance of the transfer from moral judgment and decision into moral action and have addressed this highly complex topic in the final section of this article.

Moral Perception

The IDP model begins with the perception and interpretation of situational stimuli. The moral decision-making process is activated only when a moral conflict (or problem) is perceived. Through an interpretative process, an individual detects whether there is a moral problem in a specific situation and whether a moral principle or a moral rule has been violated. In his four-component analysis of ethical decision making, Rest (1986) labeled this first component as *moral awareness*. He emphasized that an individual must first recognize the moral component of a given situation before moving on to further processing. This is in accordance with Kohlberg’s (1969, 1981) notion that moral judgment requires a conscious cognitive activity that results in a qualitatively more or less complex cognitive assessment of the situation, depending on the stage of moral development.

However, recent research shows that an individual’s judgment or decision in a moral conflict situation is often intuitive and emotional (Haidt, 2001). In other words, moral stimuli can also be identified spontaneously, unconsciously and automatically. In our approach, we integrated both Rest’s (1986) and Haidt’s views in the definition of moral perception in the IDP model and refer to it as the identification of moral stimuli that could happen consciously or unconsciously.

There are two different but related aspects that influence moral perception: moral sensitivity and moral intensity. *Moral sensitivity* describes an individual’s ability to detect whether a decision-making process involves moral stimuli (Clarkeburn, 2002; Sparks & Hunt, 1998). *Moral intensity* focuses on the aspects of moral issues that are important to the given situation (T. M. Jones, 1991). If the moral intensity of a stimulus is high, then the stimulus is more vivid and salient and therefore attracts the individual’s attention (M. A. Davis, Johnson, & Ohmer, 1998; Dukerich, Waller, George, & Huber, 2000; Frey, 2000; T. M. Jones; Malloy et al., 2008; May & Pauli, 2002). Hence, moral sensitivity refers to an individual’s capability to identify relevant moral aspects and moral intensity to the salience of moral aspects in a given context.

The Internal Dual Process—Reasoning and Intuition

After the individual has perceived the moral conflicts within the eliciting situation, he or she begins to process these stimuli to reach a moral judgment or a moral decision. Until the late 1990s, research on moral decision making was dominated by Kohlberg’s cognitive development theory (Kohlberg, 1969, 1981; Kohlberg & Candee, 1984), which was based primarily on Piaget’s (1965) work. Based on his
cognitive-developmental theory, Kohlberg established the rationalist position that a moral judgment is reached based on conscious, language-based processes of moral reasoning and moral reflection.

However, the view that only conscious reasoning processes lead to a moral judgment has been subject to criticism during the 1990s. In this context, the findings of studies that showed that people often assess a moral issue intuitively and without great efforts (Haidt, 2001; Haidt et al., 2000; Kagan, 1984; Shweder & Haidt, 1993; Wilson, 1993) was crucial. Haidt et al. presented scenarios to a group of participants that included violations of moral rules that needed to be judged as morally right or wrong. They found that the participants often did not consider the consequences of a violation in their judgment. Though they were able to decide whether they found the actions of the fictional actors morally right or not, they could not provide a reasonable argument for their decision. It was apparent that the participants judged the scenarios intuitively without evaluating all the available facts. Based on these findings, Haidt developed the social intuitionist model (SIM). In his model, he linked rational and intuitive processes in a dual-process model following the tradition of dual-process models of persuasion in attitude research (Chaiken, Libermann, & Eagly, 1989; Petty & Cacioppo, 1986a, 1986b) but emphasized the position that moral judgments are mainly dependent on moral intuitions. These intuitions are defined as “… the sudden appearance in consciousness of a moral judgment, including an affective valence (good–bad, like–dislike), without any conscious awareness of having gone through steps of searching, weighing evidence or inferring a conclusion” (Haidt, p. 818). Haidt did not deny the rationalist component that states that judgments can be rationalized post hoc by conscious reasoning, which may trigger a new intuition that contradicts the initial one. However, by arguing that moral decisions are mainly dependent on intuition and that the reasoning process is only activated after an intuitive decision has been made (post hoc), he clearly prioritized intuition before reasoning. Numerous studies have focused on intuitive and automatic emotional processes (Blair, 1995; Haidt; Nichols, 2002, 2004; Pizarro & Salovey, 2002; Price & Norman, 2008; Rozin, Lowery, Imada, & Haidt, 1999; Van den Bos, 2003).

Traditional dual-processing models adopt two main concepts regarding the interaction between intuition and reasoning: (a) the default-interventionist and (b) the parallel-competitive approach (Elster, 2007; Evans, 2008, Sahlin, Wallin, & Persson, 2010). In a default-interventionist model, only one process is active at a time. The automatic, effortless, and unconscious system is often assumed to be the default process. According to this view, moral intuitions and heuristics are activated first, especially under boundary conditions such as time pressure, cognitive load, and aging (Finucane, Alhakami, Slovic, & Johnson, 2000; Hess, 2000); low need for cognition and high preferences for intuitions (Florack, Scarabis, & Bless, 2001); positive mood (de Vries, Holland, & Witteman, 2008); or promotion focus (Florack, Scarabis, & Gosejohann, 2005). In contrast, when there is sufficient time
and working memory, or when the problem is of high complexity (Narvaez, 2010), the reasoning system may take control. On the other hand, in a parallel-competitive model, both systems are connected and activated at the same time. This is in line with the idea that even automatic processes could consume conscious resources and that controlled processing could be mediated by unconscious automatic processes (Kihlstrom, 1999).

Findings from studies in the field of neuroscience indicate that reasoning and emotions are indivisibly connected in the human brain (Damasio, 1994; Greene et al., 2001; Harenski, Antonenko, Shane, & Kiehl, 2010). Although which areas of the brain are involved in emotional decision making can be shown, it is impossible to identify a specific area that is solely responsible for moral judgment. Rather, human morality is reflected by a complex interaction between intuitive–emotional and reasoning processes. Hence, neither a purely intuitionist–emotional nor a purely rationalist model can explain the complexity of moral decision making.

The interaction between intuition and reasoning is still not fully understood (Narvaez, 2010). Therefore, in the IDP model, both processes are regarded as indivisibly connected and depending on the situation, one of the two processes may play a more important role than the other in the moral decision-making process. This view respects the variety and potential complexity of moral challenges in a professional environment and integrates current findings from different fields in moral decision-making research.

Moral Judgment and Decision

Through the internal dual-process of reasoning and intuition, the individual reaches a moral judgment and decision that allows him or her to form an evaluation of one’s behavior (e.g., ethical or unethical, good or bad) or character in the eliciting situation. Post hoc reasoning (process 4 in Figure 1) and social interaction (process 5 in Figure 1) are two important aspects that influence the internal dual process leading to a moral decision. A final moral decision is only reached when the recurring feedback loops between cognition, intuition, post hoc reasoning, and social interaction are terminated. Termination can occur for the following reasons: (a) a temporary decision is satisfying and is not challenged through social interactions, contradicting intuitions, or reasoned arguments; (b) there is a time constraint and an urgent decision is required; or (c) there is a lack of cognitive resources or motivation, which does not encourage further analysis.

The Post Hoc Reasoning

The process in which the individual continues to search for evidence to justify and support or change his or her initial judgment after a moral decision has been made is known as post hoc reasoning. The post hoc reasoning link incorporated into our IDP model has been widely discussed and researched in the literature on moral de-
cision making (e.g., Garz et al., 1999; Haidt, 2001; Kunda, 1990; Perkins, Farady, & Bushey, 1991). Post hoc reasoning may cause biased search for previously made judgments (Perkins et al.), because a decision maker tries to support his or her decision with reasoned arguments. However, if post hoc reasoning leads to moral dissonance (e.g., through arising contradicting moral arguments), then the post hoc reasoning link can lead to a modification of the initial judgment and decision.

Social Interaction

The focus of moral psychology lies primarily on individual processing. Little attention is paid to the fact that moral decisions in a working environment are typically made within a social context. Haidt (2001) emphasized that an individual’s expression of moral judgment can have a direct (Davis & Rusbult, 2001; Newcomb, 1943; Sherif, 1935) or an indirect (i.e., conformity pressure; Asch, 1956) persuasion-effect on the moral decision making process of another person and lead through post hoc reasoning to new intuitions or reflective thinking. We believe that social interactions do not only influence moral decision making through post hoc reasoning but also during the internal dual process. Sometimes, moral decision making is a process of discussing preliminary ideas with others and, by doing so, being (consciously or unconsciously) influenced by them during the decision-making process or after having reached a decision. Therefore, we integrated two social interaction links that influence moral decision making in our model: one during the internal dual-process and the other after having reached a preliminary decision. A final moral decision is only reached when the loop between individual processing and social interaction is terminated.

Moral Action

Once an individual has reached a moral judgment or decision, the question is whether this leads to a corresponding moral action. Although the link between moral decision and moral action is not part of the decision-making process, we would like to highlight some important aspects of this complex relation because it is of particular importance to practitioners. Olsen, Eid, and Johnsen (2006) showed in a study in the Norwegian Navy that postconventional moral reasoning is positively correlated with transactional and transformational leadership behavior in the military. However, research showed that there is only a moderate correlation between judgments made by conscious moral reasoning and moral behavior (Blasi, 1980; Garz et al., 1999; Kohlberg, 1969; Treviño & Youngblood, 1990). In addition, cases of sociopathy showed that people who are able to make an appropriate and complex moral judgment did not form any intention to behave in accordance with this judgment (Roskies, 2003). Hence, it is insufficient to be able to make good and fair judgment or to reach a moral decision; it is necessary to ensure that the respective action is volitional and that personal responsibility for the out-
come is assumed. The degree of commitment to pursuing the moral course of action was described by Rest et al. (1999) as moral motivation.

Because moral reasoning does not necessarily lead to moral behavior, there must be alternative explanations. Intuitionist approaches suggest that moral judgment and moral motivation can both be based in scripted, intuitive responses triggered in specific situations. This view is supported by findings from Narvaez and Lapsley (2005), who showed that individuals engaging in moral behavior showed a high degree of automaticity. The automaticity of moral behavior can be influenced by an individual’s moral identity. As found by Reynolds and Ceramic (2007), there is a positive correlation between an individual’s moral identity and the motivation to display moral behavior. In this context, Hannah and Sweeney (2007) emphasized the importance of moral agency and moral efficacy, in addition to an intuitive or reasoned moral decision, in minimizing the gap between moral decision and moral action. Bandura (1991) proposed four major facets to be included in moral agency: (a) actions are done intentionally, (b) consequences of actions are anticipated, (c) an actor can act in a self-regulated manner, and (d) an actor can reflect upon the quality and impacts of his or her behavior. These four facets are directly related to moral behavior and underline the importance of strong and directed motivation to transform moral decisions into moral actions. Individuals with a strong moral agency see themselves as moral agents who have to act in a moral way and hold their own as well as their professional moral values as guiding principles and part of their core self-concepts; not acting in a moral way would be in strong opposition to the individual’s moral identity and cause strong cognitive dissonance. In addition, individuals need to be confident in their ability to be successful when acting morally right (moral effectiveness). Hannah and Sweeney (2007) defined moral effectiveness as “… one’s confidence in his or her capabilities to organize and mobilize the motivation and cognitive resources needed to attain desired moral ends while persisting in the face of moral adversity” (p. 82). Therefore, individuals may not only need high moral self-efficacy (i.e., confidence in their ability to succeed based on personal competence and resilience) but also high moral means-efficacy (i.e., confidence in their beliefs that the environment [e.g., people, policies, culture, and equipment] will enable them to achieve success). Because moral agency and moral efficacy minimize the gap between moral decision and action, moral education should aim to develop a sense of moral agency and foster moral efficacy. The purpose is to enable individuals to view themselves as powerful moral actors, who are responsible toward their environment and are committed to be role models for others.

The relationship between moral judgment and moral action is highly complex and is not only influenced by moral but as well as by nonmoral aspects such as extrinsic motivation, interpersonal dependencies, individual interests, etc. (Garz et al., 1999). Therefore, an individual’s motivation to act morally needs to be guided in the right direction; for example, by superiors and organizational culture. Re-
sponsible leadership and organizational culture are required to set the right moral
guidance and create an ethical climate in which right behavior is rewarded and
wrong behavior is sanctioned.

IMPLICATIONS FOR MORAL DEVELOPMENT INTERVENTIONS

The IDP model stresses two important aspects. Firstly, it highlights the important
roles of reasoning and intuition in guiding individual moral evaluations and
choices. Secondly, it includes a social-interactional perspective because decisions
are rarely made by individuals on their own in complex military interventions. For
these reasons, we believe that this framework is relevant for real-life moral deci-
sion-making processes in the military. In the sections below we describe four crite-
rria that seek to inform planning and execution of moral development interventions
within military organizations.

Developing Moral Perception

Because the moral decision-making process begins by detecting morally relevant
stimuli, educational interventions in moral decision making should promote an ad-
equate perception of professionally relevant, moral conflicts. Because moral deci-
sion making is often bounded to specific situations, the quality of the conflict situ-
ation chosen for training is of utmost importance. Therefore, moral development
programs have to be tailored to the individual’s needs in order to provide adequate
improvement in moral perception.

As described above, moral perception depends on an individual’s ability to de-
tect moral stimuli (moral sensitivity) and the salience and vividness of these stim-
uli in a given context (moral intensity). For these reasons, effective training in
moral decision making has to focus on the following two aspects. First, training
and education must aim to improve one’s moral sensitivity. Although no standar-
dized training methods exist to improve moral sensitivity, there is evidence that
training and experience in dealing with moral conflict situations have a positive
impact on moral sensitivity. For example, Clarkeburn (2002) found in a study with
young adults that short discussions of ethical issues can have a significant impact
on the student’s ability to identify moral problems. Similar results can be found in
numerous other work-related studies (Baab & Bebeau, 1990; Bebeau & Brabeck,
1987; Bebaeu, Rest, & Yamoor, 1985; Blodgett, Lu, Rose, & Vitell, 2001; Lutzen,
Dahlgvist, Eriksson, & Norberg, 2006; Myyry & Helkama, 2002; Sparks & Hunt,
1998; Yetmar & Eastman, 2000).

Second, the moral intensity of training situations should be as similar as possi-
ble to the anticipated professional reality because moral sensitivity interacts with
moral intensity of the moral stimuli (Jones, 1991; Reynolds, 2006). The link to reality can be established by using professionally relevant moral dilemmas such as conflict situations that may occur in a soldier’s or commander’s professional life. Decision-making in the professional environment is often highly contextual (Seiler & Pfister, 2009) and therefore the focus should not only be on the general moral judgment but on the actual situation as well (Oser, 1998). Although moral intensity can never be ideally simulated in trainings, dilemmas that are linked to reality should be preferred over hypothetical dilemmas. Studies have shown that the variations of moral processing patterns that lead to different moral judgments are dependent on the types of dilemma utilized (Armon, 1995; Krebs & Denton, 2005; Walker, de Vries, & Trevethan, 1987). Mumford et al. (2006, 2008) emphasized the importance of identifying job-related moral challenges. Because the intention is to train processing patterns that are relevant in professional life, these findings support the use of professionally relevant conflict situations.

Furthermore, we need to consider that, in professional reality, decision makers cannot merely focus on the moral aspects of a situation but have to fulfill their actual tasks. This is also known as instrumental rationality of professional behavior (Oser, 1998; Seiler, 2002). When the two dimensions success (instrumental rationality) and ethics (ethical rationality) overlap, they have to be considered intrinsically linked and are both of equal importance (Oser). The systematic interdependence of instrumental and ethical aspects in moral decision making in a professional context can only be analyzed and trained if work-related moral conflicts are used in development programs.

As a consequence, moral development initiatives in the military should be based on task- and context-related, realistic moral challenges/dilemmas in current or future missions and functions of the program participants. By analyzing mission- and function-specific situations, the participant’s ability to identify moral aspects of a situation (moral sensitivity) in a particular context can be increased. This is because the participant experiences the interconnectedness between mission success and moral behavior in their training environment.

Developing Moral Reasoning and Emotional–Intuitive Processes

Literature on moral decision making emphasizes the importance of reasoning and intuitive–emotional processes. As shown in the IDP model (Figure 1), the moral stimuli of a situation are processed in a way that combines both reasoning as well as emotional–intuitive processes. Moral development training should focus on developing both of these processes.

In a moral conflict situation, the quality of a moral decision depends on all identified moral and instrumental aspects and on all potential consequences of an action. However, decision makers are often subject to cognitive bias that tends to re-
duce the number of possible outcomes (Messick & Bazerman, 1996) and they rarely search for evidence on both sides of an issue (Kuhn, 1991; Perkins et al., 1991). In order to prevent such distortions in the professional context, decision makers should be warned of possible cognitive biases (Banaji, Bazerman, & Chugh, 2003; Messick & Bazerman, 1996; Moore, Tetlock, Tanlu, & Bazerman, 2006). Furthermore, with the help of general process knowledge of problem analysis and problem solving, they should acquire a repertoire of practices that allows a systematic problem analysis and problem-solving process.

The situation is similar in the case of intuitive decisions; intuition is, by and large, based on experiences. By experiencing real situations, we obtain procedural knowledge that is activated in a similar, new situation and that leads to an intuitive reaction (Bartsch & Wright, 2005). This knowledge is represented in moral schemata that are chronically accessible for individual information processing (Narvaez & Lapsley, 2005). Therefore, intuition helps to make quick and automatic decisions without considering the pros and cons of an action. Although intuitive thinking is very economical, it can lead to decisions that are unjustified from a normative standpoint (Hauser, 2006; Oswald & Stucki, 2009; Ritov & Baron, 1999). In addition, impulsivity (spontaneous reactions, based on emotional impulse and desire rather than thought) has been identified as an important risk factor for antisocial behavior in a military environment (Booth-Kewley, Larson, Alderton, Farmer, & Highfill-McRoy, 2009).

Consequently, effective training must ensure that decision makers do not present a rash decision without having made a well-founded problem analysis and without having reflected upon the consequences thoroughly. At the same time, it must enable the decision maker to allow intuitive processes and judge them appropriately. Training programs should encourage intuitive reactions and cognitive reasoning in a way that immediate intuitive reactions are formulated, followed by an in-depth analysis of the problem and a comparison between intuitive and reasoned solutions. We believe that this can be best achieved by teaching procedural knowledge. In the form of so-called thinking patterns or moral processing schemata, the learner acquires a systematic strategy and a problem-solving technique for moral conflicts in the sense of listening to his or her intuitive reaction, analyzing it, and deciding based on feelings and reflections. Hence, decision makers develop a pattern that enables them to consider cognitive and intuitive processes while making a decision. They have to reflect on their intuitions and understand their cognitive biases during training programs; in other words: cognition controls intuition and intuition challenges cognition.

Fostering Social Interaction

Kohlberg (1981) linked the qualitative improvement of moral judgment capabilities with a broadening of the social horizon. One’s social environment offers pos-
sibilities to adopt roles and perspectives. Therefore, an incident or a problem can be seen and evaluated comparatively from different perspectives. This ability can only be acquired by active participation in social life. Hence, adopting the society-oriented perspective and, even more so, overcoming it in order to approach a postconventional form of thinking is not possible without familiarization with the fundamental institutions of society and the corresponding forms of participation.

Kohlberg showed in his Just Community approach that when children and teachers discussed moral problems and transgressions and made decisions together, the active engagement with each others’ arguments and views stimulated the development of moral judgment (Blatt & Kohlberg, 1975).

Not only moral argumentation capabilities are benefited from social interaction but to a large extent, moral intuition as well. Haidt (2001) stated that moral development is primarily a matter of the maturation and cultural shaping of endogenous intuitions. The maturation and shaping of these intuitions happen mainly during a sensitive period in late childhood and adolescence in which an individual’s own physical and emotional experiences build sensory, motor, and other forms of implicit skills within the framework of reference of an individual’s peers (Damasio, 1994; Fiske, 1999; Harris, 1995; Lakoff & Johnson, 1999; Lieberman, 2000; Shweder et al., 1998). Therefore, it is believed that everyone is born with a sense for good and bad, a moral instinct that is formed by active contact with the social environment. However, Treviño, Weaver, and Reynolds (2006) were not convinced that moral intuitions can only be formed during the early period of life. Moral intuitions that shape moral decisions in complex organizations in particular may be influenced by social learning and persuasion processes that take place during interactions in the professional working environment. Therefore, we argue that the development of moral decision-making competencies is not limited to childhood and that social interactions during the decision-making process can stimulate the moral decision-making competencies in adults as well. By working on the same issue, individuals will be confronted with various viewpoints. This helps them to identify new aspects of the moral problem at hand and to decide on an appropriate problem-solving strategy for the problem (Aronson & Patnoe, 1997; Mumford et al., 2008).

Analyzing the above-cited examples of moral misconduct in the military such as the Somalia affair, the prisoner abuse in Abu Ghraib, the scandal in the Congo, as well as in the Haditha incident underlines the importance of social interaction. These incidents showed that decisions that lead to moral misconduct were not solely taken by individuals but by groups of people. Booth-Kewley et al. (2009) showed that antisocial behavior of peers has a negative impact on an individual’s social behavior. Therefore, military training programs at all levels have to focus on the improvement of individual moral decision-making competence and at the same time on the management of group processes. Both can be achieved by group discussions about moral dilemmas. Such discussions stimulate the development of
individual moral sensitivity and moral judgment (Blatt & Kohlberg, 1975) and at the same time they encourage participants to challenge viewpoints that do not address or neglect moral issues at hand; this last aspect is of particular importance in a highly formalized and hierarchical organization such as the military. It can be concluded that including social interaction when solving moral conflicts in military training programs is an important aspect to improve individual moral decision-making competencies and the management of group dynamics.

Developing Procedural Knowledge

It is often inadequate to transfer a solution from one moral conflict to another because each conflict is presented in a different context and is, as such, unique. Therefore, effective training should not only focus on the potential outcome of a decision but rather on the decision-making process itself. This can be achieved by teaching procedural knowledge. Participants acquire systematic strategies and problem-solving techniques for moral conflicts and hopefully internalize them in form of a so-called thinking-pattern or processing schema. Such a schema is equivalent to the IDP model of moral decision making (Figure 1). This schema should be activated when the decision maker perceives a moral conflict. Consequently, the decision maker has to balance between the intuitive and the reasoning part of the internal decision-making process. In other words, he or she has to first check whether an intuitive decision is appropriate or whether it should be overridden by reasoning or whether a reasoned decision is biased or in conflict with his or her intuition. Then, the decision maker should actively seek interaction with other individuals to discuss the problem. Feedback from others may increase the probability of a balanced decision. Developing these thinking patterns will enable decision makers to transfer their moral decision-making competencies and to make quick and adequate moral decisions in various contexts.

The development of automated processing schema requires time and it cannot be internalized without multiple repetitions. Practical exercises using the same procedural process repeatedly over a long period of time are a prerequisite for the development of moral thinking patterns. Therefore, it is not surprising that the duration of ethics education programs has an effect on their effectiveness (Bebeau & Thoma, 2003; Linstrum, 2009; Rest & Narvaez, 1998).

CONCLUSIONS

We emphasized the importance of utilizing function- and mission-related moral conflict situations, developing thinking patterns to reduce biases, balancing intuitive decisions by forcing the decision maker to decide for accountability reasons, and focusing on social interactions. Empirical research is required to examine the
relevance of these implications for moral decision-making programs, and further discussion among scholars, educators, and practitioners is needed to maximize the effectiveness of moral development interventions in the military. The implementation of systematically developed training programs in moral decision making in the military requires substantial organizational commitment and support at different levels. We believe that this is of utmost importance and that this article provides a conceptual framework of moral decision making that fosters such discussions.

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