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Moral motivation within groups

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MORAL MOTIVATION WITHIN GROUPS

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Chapter 1

General Introduction

“Try not to become a man of success, but rather try to become a man of value” —
Albert Einstein

Morality refers to ethics, to that which is considered to be right or wrong, to codes of conduct. These codes of conduct, or normative rules about how one is supposed to feel, think, and behave, are put forward by the social groups one belongs to. At the most abstract level, these are explicitly formulated by societies in terms of laws, and by religions in terms of, for example, the Ten Commandments. In everyday life, however, codes of conduct are set by the smaller social groups one belongs to, such as companies, schools, and clubs. Usually these codes of conduct are not explicitly formulated but rather manifest itself in implicit norms and expectations as to how one should, and should not, behave as a member of that group. Individuals are not only *expected* to behave in line with the group's norms and expectations, they are also *motivated* to do so. That is, individuals derive part of their self-esteem from their group membership, and consequently strive towards attainment of a positive social identity (i.e., a positive evaluation of that part of their self that comprises their group membership; Tajfel & Turner, 1979). At the intragroup level this means that groups evaluate the extent to which individual group members adhere to the group's norms and expectations, thereby affirming and maintaining the positive social identity of the group. In turn, individual group members care about how the group evaluates them and are motivated to act accordingly.

Despite the great potential to influence others on the basis of morality judgments, the majority of previous studies examining what motivates group members have mainly focused on competence judgments as the primary domain of evaluation. Competence judgments are important because they reflect the group's and individual group members' level of success, which in turn determines both their individual and the group's status. More recently, however, the attention of researchers who investigate group processes and intergroup relations has shifted towards the motivational power of judgments on the domain of morality (e.g., Ellemers & Van den Bos, 2012; Leach, Bilali, & Pagliaro, 2013). As Albert Einstein implied, it might be more important for individuals to adhere to the group's moral standards than to try to meet the group's standards of competence.

Indeed, *moral motivation* refers to the motivational force of morality judgments (The Stanford Encyclopedia of Philosophy, 2008). That is, morality judgments seem to have an intrinsic connection with motivation and behavior.

When something is judged to be (im)moral, for example as either being right or wrong, individuals tend to be intrinsically motivated to act accordingly (e.g., Aquino & Reed, 2002). Morality judgments thus have a motivational impact on individuals, because individuals are generally inclined to behave in ways that they judge to be “good”, “right”, and “fair”. This is not only the case for individuals’ own morality judgments, but also for the morality judgments of the group. Research has demonstrated how morality judgments at the individual level motivate behavioral choices (e.g., moral reasoning and decision making; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Haidt & Ksebir, 2010), whereas research at the intergroup level has demonstrated how morality judgments affect intergroup relations (e.g., stereotyping, intergroup violence; Bandura, 1999; Janoff-Bulman, Sheikh, & Hepp, 2009). Yet, little research has examined how morality judgments regulate behavior *within* groups. This is the focus of the research described in this dissertation.

The aim of the current dissertation is to shed more light on the impact of moral motivation on individuals in groups by adopting a social identity approach. This approach can help us understand how individuals as members of social groups feel, think, and behave. Building on the premise that a social identity can motivate individual group members, in the research described in this dissertation I examine the impact of morality judgments on group members’ motivational responses—in terms of affect, cognition, psychophysiology, and behavior—and compare those to the impact of competence judgments. I investigate the regulation of group behavior by taking on an intragroup perspective: In Chapter 2, I focus on how group members respond to the group’s morality or competence judgments of their *own* prior behavior; in Chapter 3, I demonstrate how the morality or competence judgments of *another* ingroup member’s behavior reflect on the self as a group member; and in Chapter 4, I examine how group members respond to *prospective* group members who are judged on the domain of morality or competence. In sum, the goal of the current dissertation is to enhance our understanding of how morality vs. competence judgments regulate the motivated behavior of individuals in groups.

A social identity approach to intragroup evaluations

In examining the motivated behavior of individuals in groups, the social identity approach offers a comprehensive theoretical framework that provides an integrative perspective on group processes and intergroup relations. The social identity approach—consisting of Social Identity Theory and Self-Categorization Theory—is indeed one of most influential approaches to understanding inter- and intragroup behavior. It has been extensively applied in research on the motivational, cognitive, and behavioral aspects of group processes, and explains, among other phenomena, individual motivation in groups in terms of the value of group membership for the self (e.g., Ellemers, 2012; Hornsey, 2008; Postmes, Haslam, & Swaab, 2005; Turner, 1991). According to Social Identity Theory (SIT; Tajfel & Turner, 1979), individuals derive part of their self-concept from their social identity. Social identity is that part of the self that stems from the social groups one belongs to and includes the emotional and evaluative consequences of this group membership. Considering that people are motivated to maintain positive self-esteem, they strive for a positive social identity (i.e., a positive evaluation of their group membership). Consequently, individuals care deeply about how the group evaluates them as well as other individuals in the group, because these others constitute part of their social identity. Following SIT's propositions, Self-Categorization Theory (SCT; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) elaborates on the cognitive aspects of social identification by explaining how individuals (self)categorize as members of social groups. This categorization leads to *depersonalization*, meaning that individuals, once categorized as members of a social group, see themselves more in terms of the attributes (e.g., emotions, attitudes, behavior) of the group than in terms of their relatively unique combination of personal attributes. In other words, individuals internalize the attributes of the group through a social identity (Postmes et al., 2005). According to the social identity approach, a social identity thus not only represents to which group an individual belongs, but also provides the individual with group norms as a useful guideline for the appropriate ways to feel, think, and act. Individuals are motivated to emphasize intragroup agreement about core group values (e.g., Brown, 2000; Hornsey, 2008). In turn, they strive to behave in ways that maintain the legitimacy of the group's values and ultimately their positive social identity,

because this leads them to be liked and praised, and they gain ingroup respect from doing so (Branscombe, Spears, Ellemers, & Doosje, 2002; Hogg & Hardie, 1991; Schmitt, Silvia, Branscombe, 2000).

A primary strategy through which individuals can maintain the positive social identity of their group is by validating the group's norms. Adherence to the prescriptive norms—the requirements that group members must meet in order to validate their positive social identity (e.g., Pinto, Marques, Levine, & Abrams, 2010)—are particularly relevant for this purpose, because they lead to a set of expectations about how group members should feel, think, and act. The subjective group dynamics model describes how groups, through a process of intragroup differentiation, validate the group's positive social identity (e.g., Abrams, Marques, Bown, & Henson, 2000; Marques, Abrams, & Serôdio, 2001; Marques, Abrams, Paez, & Martinez-Taboada, 1998). That is, groups differentiate between individual group members depending on the extent to which they adhere to the group's standards, because validation of those standards legitimizes the group's positive social identity (e.g., Doosje, Ellemers, & Spears, 1995; Lee & Ottati, 1995).

This differentiation in the extent to which group members adhere to the group's norms can be established by means of a socialization process (Levine & Moreland, 1994; Moreland & Levine, 1982). During the socialization process, groups encourage individuals to adopt the group's norms and evaluate whether they already fit these norms (Ellemers & Jetten, 2013). This process is important for both the group and its individual members: The outcome determines whether individual group members are seen to meet the standards of the group, and, as a consequence, affects not only the social identity of the group as a whole, but also the identity of individual members in the group (Luhtanen & Crocker, 1992). When individual behavior is evaluated as being in line with the group's expectations, the positive social identity of the individual and the group is validated and legitimized. However, when the evaluation reveals that there are discrepancies between the group's expectations and the individual's behavior, the positive social identity is at risk and the group undertakes action (e.g., excluding the individual) in order to protect its image.

Indeed, deviating group members—group members who do not act in line with the group's norms or expectations—undermine the positive social identity and as a consequence are often reprimanded. Rebukes can range from

a warning to derogation, hostility, punishment, and even social exclusion (e.g., Marques & Paez, 1994; Moreland & Levine, 1982; Pinto et al., 2010; Williams, Forgas, & Von Hippel, 2005). For example, the ‘Black Sheep Effect’ describes how deviating ingroup members are derogated and excluded from the group in order to uphold the positive social identity of the group (Marques, Yzerbyt, & Leyens, 1988). Although the majority of researchers examining responses to deviating group members have focused on negative deviants (i.e., group members who *negatively* deviate from the group’s standards; e.g., Marques et al., 1988; Pinto et al., 2010), there is also research that demonstrates how group members who *positively* deviate from the group’s standards can arouse negativity (e.g., Abrams et al., 2000; Cleveland, Blascovich, Gangi, & Finez, 2011; Monin, Sawyer, & Marquez, 2008; Parks & Stone, 2010).

The key in understanding the negative responses to deviating group members—regardless of the direction of deviance—is whether or not group members behave in line with the group’s expectations. Deviance, whether it is positive or negative, undermines the legitimacy of the group’s values and distinctiveness, and poses a threat to the positive social identity. Consequently, groups derogate deviant group members as a way to protect the group’s positive social identity. In turn, these negative responses have a major impact on the deviating target, as rejection has been shown to threaten basic needs and mirrors physical pain (e.g., Eisenberger, Lieberman, & Williams, 2003; Williams et al., 2005). Acting in line with the group’s expectations is thus not only beneficial for individual group members’ self-esteem because it validates their positive social identity and commands respect (e.g., Branscombe et al., 2002); it also avoids painful rebukes from the group.

Thus, an important function of intragroup evaluations is that they validate the positive social identity. In particular, evaluations that reveal a discrepancy between an individual’s behavior and the group’s expectations are useful, because they indicate a potential threat to the group’s positive social identity. These evaluations can consequently be used to reprimand deviating group members and to elicit desired behaviors that validate the group norms. Group members are in turn motivated to gain ingroup respect and to avoid the costs of being reprimanded by acting in line with the group’s expectations. Thus, intragroup evaluations can motivate individual group members to display desirable behavior and ultimately validate the group’s positive social

identity. With the research described in the current dissertation, I aim to further examine the impact of intragroup evaluations on group members' motivational responses, by distinguishing between two different evaluative domains: Morality and competence.

The evaluative domains of morality versus competence

Social judgments generally seem to differ along two fundamental domains: Competence and warmth (Fiske, Cuddy, Glick, & Xu, 2002; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). However, in examining what drives the behavior of individuals in groups, the focus of past research has almost solely been on judgments of competence (e.g., Bettencourt, Dorr, Charlton, & Hume, 2001; Ellemers, 1993; Ouwerkerk & Ellemers, 2002). Evaluations of abilities and task performance are seen as important indicators of individual and group success in terms of outcomes and resources, and determine the status of both the individual and the group (e.g., Fiske et al., 2002). Evaluations of warmth have been considered as an alternative source of esteem, or as a source of information that qualifies the competence judgments (i.e., cooperative or competitive intentions towards others; Fiske et al., 2002). Recent research, however, demonstrated that within the warmth cluster sociability judgments (i.e., friendliness, likeability) can and should be distinguished from morality judgments (i.e., trustworthiness, honesty; Leach, Ellemers, & Barreto, 2007). This research has caused a shift in focus from competence judgments as the main driving force behind motivated behavior to the importance of morality judgments for individuals and groups.

Indeed, various literatures describe morality as a primary source of value for the self, others, and groups. On the individual level, people across different cultures consider moral values to be among the most important guiding principles in their lives (Dahlsgaard, Peterson, & Seligman, 2005; Schwartz, 1992), and people desire having a moral identity (Aquino & Reed, 2002; Monin & Jordan, 2009). When judging others, people primarily consider information about morality (Wojciszke, 1994), and value characteristics that are indicative of morality—such as trustworthiness—the most (Cottrell, Neuberg, & Li, 2007). At the group level, morality is seen as essential for survival and cooperation (e.g., De Waal, 1996; Skitka, 2003). Moreover, morality is argued to regulate the behavior of individuals in groups (Ellemers & Van den Bos,

2012; Leach et al., 2013). In sum, research has alluded to the importance of morality by showing that—both at the interpersonal and the group level—people want to be considered moral and want to belong to moral groups.

Considering the centrality of morality for people's identity, it stands to reason that individuals care deeply about judgments regarding their own and relevant others' (i.e., group members') morality. An additional reason for the importance of morality judgments is provided by research on the asymmetry of morality judgments in terms of attributional diagnosticity during impression formation (e.g., Skowronski & Carlston, 1987). That is, negative information about morality is perceived to be more diagnostic of individual dispositions than negative information about competence. The opposite is argued for positive information: Positive information about competence is perceived as more diagnostic of the individual than positive information about morality. Negative morality judgments in particular have thus been argued to be valuable sources of information because they are considered to be diagnostic, stable, and therefore of predictive value in terms of future behavior (Martijn, Spears, Van der Pligt, & Jakobs, 1992; Reeder & Spores, 1983; Skowronski & Carlston, 1987). Not surprisingly then, people are particularly attuned to morality judgments; they possess a certain degree of moral attentiveness (Reynolds, 2008). Continuing this line of reasoning, it is also not surprising that morality judgments elicit strong affective responses in people (Skitka, Bauman, & Sargis, 2005; Wojciszke, 2005) and, as outlined in more detail below, impact on the regulation of individual motivation and behavior.

At the individual level, morality affects the behavioral choices that people make. Generally speaking, morality judgments impact on individuals' self-regulatory efforts and motivation to refrain from behaving inhumanly and to strive to behave humanly (Bandura, 1999). Prior displays of *immoral* behavior are argued to threaten one's sense of self-worth, and consequently individuals engage in compensatory behaviors in an effort to regain their sense of esteem and identity. These 'moral cleansing' effects have been related to different compensatory behaviors, such as pro-social behaviors like donating to charity and volunteering (e.g., Jordan, Mullen, & Murnighan, 2011; Sachdeva, Iliev, & Medin, 2009). Contrary, prior displays of *moral* behavior are argued to have affirmed the individual's esteem and identity (i.e., the individual has established moral credentials), and therefore allow the individual to temporarily refrain

from moral behavior (because engaging in moral behavior is often costly and effortful). This ‘moral licensing’ has been related to a range of immoral behaviors, such as cheating (Jordan et al., 2011; Sachdeva et al., 2009). These effects of morality judgments on subsequent behavior are not only demonstrated when the morality judgment concerned individuals’ own prior behavior, but also when the morality judgment concerned the behavior of others. That is, individuals display vicarious (im)moral behavior in response to witnessing (im)moral behavior of *others*. On the one hand, research has demonstrated that when one’s group has established moral credentials by behaving in a nonprejudiced manner, individuals are more willing to subsequently express prejudiced attitudes (i.e., vicarious moral licensing; Kouchaki, 2001). On the other hand, the unethical behavior of one’s group member can also enhance individuals’ subsequent cheating behavior (i.e., moral contagion), arguably because individuals infer social norms from the morality judgments of others’ behavior (Gino, Ayal, & Ariely, 2009).

Other lines of research examined the impact of morality on individual behavior by focussing on decision making in so-called moral dilemmas. Whereas developmental psychology has traditionally argued for a key role of cognition in moral reasoning (e.g., Kohlberg, 1969), more recent research argues for “the new synthesis in moral psychology”, emphasizing the role of emotion and intuition in moral decision making (e.g., Haidt, 2001; 2008; Haidt & Kesebir, 2010). By employing research methods such as the trolley and footbridge dilemmas—in which individuals are confronted with the dilemma of saving five people at the expense of one, or saving five people at the cost of harming one, respectively (e.g., Greene et al., 2001)—the role of affect and emotion-related brain areas in moral decision making are investigated (Greene & Haidt, 2002; Greene, Nystrom, Engell, Darley, & Cohen, 2004; Haidt, Koller, & Dias, 1993). In summary, as outlined above, an extensive body of research demonstrated the impact of morality judgments on the regulation of individual motivation and behavior.

At the group level, morality judgments also impact on motivation and behavior regulation. Morality is seen as an important regulator of social relationships (Rai & Fiske, 2011) and affects intergroup relations. For example, it has been argued that liberals and conservatives have different moral standards (Haidt & Graham, 2007), which has implications for the role of

morality in social regulation and justice (for a discussion see Janoff-Bulman et al., 2009; Janoff-Bulman & Carnes, 2013). More generally, morality appears to be an important domain of social categorization, even more so than is the case for competence (Van Leeuwen, Park, & Penton-Voak, 2012). Morality judgments, compared to competence judgments, guide information gathering (Brambilla, Rusconi, Sacchi, & Cherubini, 2011) and dominate impression formation when judging other groups (Brambilla, Sacchi, Rusconi, Cherubini, & Yzerbyt, 2011). When considering the ingroup, morality judgments are more important than competence judgments for a positive evaluation (Leach et al., 2007) and guide the behavioral choices of individual group members (Ellemers, Pagliaro, Barreto, & Leach, 2008). That is, group members are motivated to act in line with the group's moral standards, because they anticipate gaining ingroup respect by behaving in this way (Pagliaro, Ellemers, & Barreto, 2011). In addition, morality judgments about a newcomer determine group members' willingness to help the newcomer adjust (Pagliaro, Brambilla, Sacchi, D'Angelo, & Ellemers, 2013).

Taken together, different literatures describe the impact of morality judgments on motivation and behavior-regulation at the individual, interpersonal, and group level. The current research operates at the intersection of these interpersonal and group processes by examining the impact of morality judgments in intragroup relations. Specifically, in the experiments reported in this dissertation I investigate how morality judgments, compared to competence judgments, affect the motivational responses of individual group members. In doing so, the current research aims to enhance our understanding of how morality regulates motivation and behavior *within* groups. Before providing an overview of the research described in this dissertation, I will first elaborate on the concept of morality, and subsequently describe different aspects of group members' motivational responses—affect, cognition, psychophysiology, behavior—on which these morality judgments may impact.

Morality defined

Considering the extensive body of research on morality judgments, part of which is reviewed above, it is both surprising and important to note that there is no generally accepted definition of morality. Morality is sometimes defined

as that which is good and right (e.g., Aquino & Reed, 2002), as consisting of generic virtues such as care vs. harm (e.g., Haidt & Graham, 2007; Graham, Nosek, Haidt, Iyer, Koleva, & Ditto, 2011), or as indicated by specific traits such as honesty and trustworthiness that can characterize individuals or groups (e.g., Leach et al., 2007). Regardless of the level of abstraction at which morality is defined, however, there seems to be a general consistency regarding the content of what exactly constitutes morality, namely *trustworthiness*. Trustworthiness is a necessity for inferences about morality, because it is what people find most desirable in others, it is viewed similar across societies, and it is most beneficial for interacting and cooperating with others (for an overview see Leach et al., 2013). Trustworthiness thus appears to be the most important aspect underlying notions of “right” and “wrong”, which can be expressed by endorsing the moral foundations (Haidt & Graham, 2007) of Care/Harm and Fairness/Reciprocity, both to others (Ingroup/Loyalty and Authority/Respect) and to the self (Purity/Sanctity). These virtues can in turn be deduced to concrete personality traits that pertain to trustworthiness, such as sincerity and honesty. These traits indicate how individuals relate to others, and it has been shown that people judge these to be moral traits (Leach et al., 2007; Leach et al., 2013). The social implications of morality judgments—besides their conceptual content—are, however, pivotal to understanding the impact of morality in groups (e.g., Ellemers & Van den Bos, 2012). In this dissertation, I therefore primarily focus on the social implications of morality judgments rather than on the content of the morality judgments per se.

Motivational responses

As outlined earlier, morality vs. competence judgments of group members’ behavior are argued to have an impact on their motivational responses. Motivation refers to the way in—and degree to—which individuals try to attain their goals (e.g., Carver, Sutton, & Scheier, 2000; Higgins, 1997; Locke & Latham, 1990; 2002; Pinder, 1998). The literature on motivation generally distinguishes between two basic strategies for self-regulation towards goal attainment: The first strategy aims at approaching positive outcomes, ideals, and challenges; while the second strategy aims at avoiding negative outcomes, obligations, and threats (e.g., Blascovich & Tomaka, 1996; Carver & Scheier, 1990; Higgins, 1997). These motivations have been linked to different

responses in terms of affect, cognitions, psychophysiology, and behavior (e.g., Blascovich & Tomaka, 1996, Carver & Scheier, 1990; Higgins, 1997). For example, approach motivation has been associated with positive affect, whereas avoidance motivation has been associated with negative affect (e.g., Cacioppo, Gardner, & Berntson, 1999; Carver et al., 2000). Motivational responses—whether affective, cognitive, psychophysiological or behavioral—can thus be perceived as responses that follow goal pursuit and are affected by the degree to which goal striving is effective.

Connecting these insights to intragroup evaluations suggests that validation of the group's positive social identity is a goal that group members highly value, and that intragroup evaluations are informative of the extent to which attainment of this goal is met. Indeed, people have a “sociometer” that monitors the degree to which they are included or excluded by others, and motivates them to behave in ways that maintain their connections with others (Leary, Tambor, Terdal, & Downs, 1995). Whereas intragroup evaluations can indicate that goal striving is successful, evaluations can also reveal a discrepancy between the individual's behavior and the group's expectations, indicating a less successful pursuit of the positive social identity. I argue that the morality judgments of the group are more important indicators of group members' successful goal pursuit than the group's competence judgments, and that these judgments consequently elicit different motivational responses in group members. In order to examine this notion, I compare how morality and competence judgments impact on group members motivational responses, in terms of affect, cognition, psychophysiology, and behavior. I will next elaborate on each of these responses.

Affective responses

When considering the impact of an event, the emotional response is intuitively one of the first that individuals attend to (i.e., how does it *feel*). In general, people categorize emotions in terms of valence (pleasant – unpleasant) and degree of arousal (high – low; Russell, 1980). Although both the valence and intensity (i.e., arousal) of affective responses have been linked to motivational consequences (e.g., Gable & Harmon-Jones, 2010), affective valence directly emerges from motivation (Carver & Scheier, 1990). Put differently, goal pursuit leads to the experience of positive and/or negative affect. When goal

striving is successful, individuals report positive feelings such as happiness, enthusiasm, and excitement. In a similar vein, when goal striving is unsuccessful, people generally experience negative feelings, such as anxiety, sadness, and despair. Because one of the aims of the current dissertation is to examine how intragroup evaluations impact on the direction of the affective experience rather than on the intensity of the affective responses, I specifically focus on the valence dimension of affect.

Cognitive responses

Research on motivation and coping has illuminated the ways in which goal pursuit can affect cognitive responses. Individuals' coping ability with regard to any given situation is indicated by their cognitive appraisals of how the situational demands relate to their currently available personal resources (Folkman & Lazarus, 1988; Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984). Two kinds of cognitive appraisals can be distinguished: Primary and secondary appraisals. Primary appraisals refer to the immediate assessment of the stakes for one's self-esteem in terms of situational demands (i.e., danger, uncertainty). Secondary appraisals refer to the degree of available resources (i.e., abilities) to overcome or solve the situation whilst benefiting, or without harming, one's self-esteem. Once a situation is appraised as a potential threat to one's self-esteem (i.e., demanding in terms of e.g., uncertainty, required effort), cognitive appraisals of personal resources (i.e., knowledge, skills) thus determine one's perceived coping ability.

In situations where group members are evaluated on the extent to which their behavior is in line with the group's standards, this implies an immediate risk for their self-esteem. That is, if the evaluation indicates that there is a discrepancy between the group's expectations and the individual's behavior, the positive social identity of the group is undermined. Intragroup evaluations are thus demanding in the sense that they are likely to be primarily appraised as a potential threat to one's positive social identity. In the current dissertation, I therefore focus on group members' cognitive appraisals as indicating the balance between the situational demands and personal resources in coping with intragroup morality and competence evaluations.

Psychophysiological responses

According to the Biopsychosocial model (BPSM) of challenge and threat, appraisals of a situation in terms of situational demands and personal resources also induce different psychophysiological states (e.g., Blascovich & Mendes, 2000; Blascovich & Tomaka, 1996). When situational demands outweigh individual resources, a state of *threat* emerges. Conversely, when individual resources outweigh situational demands, a state of *challenge* emerges. The BPSM focuses specifically on motivated performance situations—situations that require instrumental responses in terms of affective, cognitive, and behavioral actions that can be evaluated—because these situations are engaging and goal relevant (e.g., working on a group task, giving a presentation). Although often discussed as similar, challenge and threat differ from approach-avoidance energization models of motivation (for a discussion see Blascovich, 2008b). Whereas both challenge and threat states are engaging and goal relevant, both involve approach tendencies. In a state of threat, however, there simultaneously is a desire to avoid. The BPSM thus describes motivational states along a bipolar motivational continuum ranging from threat to challenge, because both contain approach, but are separated by their level of avoidance.

The BPSM also describes how specific patterns of cardiovascular markers indicate the motivational states of challenge and threat. Because both challenge and threat involve approach tendencies and engagement, both involve activation of the sympathetic neural and adrenal medullary (SAM) axis. SAM activation involves sympathetic nervous system activity, which mobilizes the body in stressful situations that require action (flight-or-flight responses). This produces increases in myocardial (i.e., heart muscle) contractility, visible in increased heart rate (HR) and decreased pre-ejection period (PEP; an index of left ventricular contractile force). The epinephrine released due to SAM activation further increases HR which results in increased cardiac output (CO; the amount of blood in liters that is pumped through the heart per minute), but also leads to a dilation of the arteries, resulting in decreased total peripheral vascular resistance (TPR; the resistance of blood flow through the arterial system). Challenge states primarily involve SAM activation. In a state of threat, however, there is not only SAM activation but simultaneously also activation of the hypothalamic pituitary adrenal (HPA) axis. HPA activation leads to the

release of cortisol which inhibits the effects of SAM activation on TPR, resulting in an increase in TPR and decrease in CO. Based on SAM and HPA activity, which lead to measurable cardiovascular responses (HR, PEP, CO, TPR), challenge and threat motivational states can thus be distinguished. First, task engagement and goal relevance (a fundamental characteristic of motivated performance) are indicated by an increase in HR and a decrease in PEP. Second, a combination of CO and TPR index challenge and threat: Challenge is marked by relatively high CO and low TPR, whereas threat is marked by relatively low CO and high TPR. Taken together, both challenge and threat states involve SAM activation, indicating approach tendencies towards a goal in terms of task engagement and goal relevance. Additional HPA activity indicates simultaneous avoidance tendencies in threatening, but not challenging, situations. Challenge states thus represent a relative efficient pattern of cardiovascular reactivity during motivated performances (more and easy blood flow through dilated arteries), whereas threat states represent a rather inefficient pattern of cardiovascular reactivity (reduced blood flow through constricted arteries).

Over the last years, research on the BPSM has associated the motivational states of challenge and threat (and their cardiovascular correlates) to specific cognitive and behavioral outcomes. In general, and parallel to the cognitive demands/resources ratio, challenge facilitates better performance than threat (see Blascovich, 2008b for a review). For example, challenge states enhance subsequent athletic performance relative to threat states (Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004), as well as academic performance (Seery, Weisbuch, Hetenyi, & Blascovich, 2010). Depending on the nature of the task, threat states may however also facilitate performance compared to challenge states. In tasks that require vigilance and rigidity, threat has, for example, been related to better performance outcomes than challenge (De Wit, Scheepers, & Jehn, 2012). In the long run, challenge and threat states have different implications for health. For example, threat can have negative health effects; it has been associated with cardiovascular diseases, immune system dysfunction, and mental health problems such as anxiety and depression (Blascovich, 2008a).

At the interpersonal and group level, challenge and threat motivational states have been, among others, related to social comparison, stigma, and

stereotype threat. For example, upward interpersonal comparison induces a relative state of threat, whereas downward comparison is associated with a state of challenge (Mendes, Blascovich, Major, & Seery, 2001). As for understanding the motivational underpinnings of intergroup relations, research has demonstrated that interacting with stigmatized others is associated with threat rather than challenge (e.g., Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001; Mendes, Blascovich, Hunter, Lickel, & Jost, 2007). In addition, the BPSM provided insight in the motivational implications of stereotype threat effects (Vick, Seery, Blascovich, & Weisbuch, 2008).

Only recently research has begun to examine how the BPSM of challenge and threat relate to intragroup processes. For example, deviance in recently-formed teams is associated with threat rather than challenge (Cleveland et al., 2011), whereas in other studies deviance of an ingroup member yielded no clear distinction between challenge and threat, or evoked a challenge response (Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012). In the current dissertation, I aim to further examine the motivational underpinnings of intragroup processes. Considering that intragroup evaluations regarding the legitimacy of the positive social identity require immediate actions of the individual, they meet the requirements of a motivated performance situation. Hence, the evaluations should impact on group members' motivational responses in terms of challenge and threat motivational states. This is relevant to our understanding of how intragroup morality and competence judgments impact on group members' motivational responses. More specifically, these cardiovascular indices go beyond group members' conscious and self-presentational motives and provide insight in their implicit motivational responses. In several of the reported experiments in the current dissertation, I therefore examine the cardiovascular indices of challenge and threat motivational states in response to intragroup morality and competence evaluations.

Behavioral responses

When examining motivational responses, an investigation of behavior, or behavioral intentions, can also provide a fruitful source of information. Behavioral responses can be examined at the individual level, for example in terms of task performances, or at the group level, such as behavior directed

towards others, which can be either members of the own group (intragroup interactions) or members of an outgroup (intergroup interactions). So far I have discussed *individual* responses to intragroup evaluations in terms of affect, cognition and psychophysiology. Considering that the aim of the current dissertation is to examine the impact of intragroup evaluations on group members' motivational responses, I will examine motivated behavioral responses in an intragroup setting. In other words, in the current dissertation, I will investigate individuals' behavioral responses towards *other group members* who pose a potential threat to the group's positive social identity. These behavioral responses—both intentions and actual behavior—follow from the morality and competence judgments of other group members and are thus aimed at protecting the group's positive social identity.

As outlined above, groups are inclined to undertake action in order to protect its positive social identity when a potential threat arises. Group members, or prospective group members, who deviate from the group's standards, pose such a threat. In general, behavioral responses aimed at protecting the positive social identity can be divided into two categories: One consisting of inclusive forms of rebukes, and one consisting of social rejection and exclusion. Inclusive forms of rebukes include derogation and attempts to conform the deviant by teaching appropriate behaviors, whilst allowing the deviant to remain a member of the group (e.g., Marques et al., 1988; Moreland & Levine, 1982; Pinto et al., 2010). Such forms of punishment keep the deviance within the group, which can in itself serve as an identity protecting strategy (Hornsey, De Bruijn, Creed, Allen, Ariyanto, & Svensson 2005; Van Leeuwen, Van den Bosch, Castano, & Hopman, 2010). These inclusive forms of punishment are thus aimed at correcting the deviant, and can be labeled as socializing responses (e.g., Moreland & Levine, 1982). Other forms of punishments, such as rejection and social exclusion, deny or withhold membership from the deviant and have a major negative impact on the deviant's well-being (e.g., Van Leeuwen et al., 2010; Williams et al., 2005). In several of the experiments reported in this dissertation, I included both types of rebukes, and examine behavioral responses towards prospective group members in terms of socializing responses and exclusion behavior.

Overview of the current dissertation

Intragroup evaluations provide a group with valuable insights in the extent to which individual group members contribute to the group's positive social identity, and can help to define and elicit desirable behavior from group members. These evaluations affect group member's motivational responses and are aimed to validate and secure their positive social identity. I propose, however, that the impact of such evaluations depends on the evaluative domain in question. Specifically, I argue that the impact of intragroup evaluations on group members' motivational responses depends on whether group members are evaluated in terms of morality or competence. In doing so, I adopt a social identity approach by building on the premise that a social identity can motivate individual group members. That is, I examine the impact of morality and competence judgments on individuals' motivational responses in groups by investigating intragroup evaluations from different perspectives, namely evaluations of 1) group member's *own* prior behavior, 2) *another* group member's behavior, as well as 3) the behavior of a *prospective* group member. In addition, I incorporate different types of motivational responses— affective, cognitive, psychophysiological, and behavioral—and vary those along different intragroup perspectives. That is, in Chapter 2, I examine the impact of the group's morality and competence judgments about group members' own prior behavior, and focus specifically on affective and cognitive motivational responses. In Chapter 3, I examine how morality and competence judgments of group members' own prior behavior, as well as another group member's behavior, impact on psychophysiological motivational responses. Finally, in Chapter 4, I examine the impact of morality and competence judgments of prospective group members on psychophysiological and behavioral motivational responses towards the prospective group member.

In the experiments reported in the following empirical chapters, I operationalized morality and competence at the trait level. Traits, or characteristics, are inferred from behavioral observations, and give rise to expectations about future behavior. In order to examine the impact of intragroup evaluations of own or a group member's behavior or characteristics, some degree of trait inferences is involved. That is, intragroup evaluations also include an assessment of likely future behavior, which are based on the trait inferences derived from the currently evaluated behavior.

Defining morality and competence at the trait level therefore seemed the appropriate level of operationalization when examining the social implications of intragroup judgments. Following prior research on moral and competence traits (e.g., Leach et al., 2007), morality is defined as trustworthiness, honesty, and sincerity; competence is defined as competencies, intelligence, and skills.

Considering the differences in diagnosticity between morality and competence judgments (e.g., Skowronski & Carlston, 1987), I compare the impact of negative morality and competence judgments with the impact of positive judgments on the domain of morality and competence in multiple of the reported experiments in this dissertation. The general prediction is that, regarding the importance of morality for individuals' identity, morality judgments have a more pronounced impact on group members' motivational responses than competence judgments. I will next present a short overview of each of the empirical chapters that examine this general hypothesis.

Chapter 2

In the three experiments that comprise this chapter, group members' affective and cognitive responses towards the group's morality and competence evaluations of their own behavior were examined. In Experiment 2.1a, group members reflected on their own prior behavior that was negatively evaluated by the group in terms of morality or competence. Their affective responses with regard to the evaluation were assessed, and it was predicted that evaluations of one's immoral behavior induce more negative affect than evaluations of incompetent behavior. The aim of Experiment 2.1b was to investigate whether this might occur because morality evaluations generate more intense affective responses overall. Group members reflected on their own prior behavior that was positively evaluated by the group, and it was predicted that being evaluated as competent by others in a group elicits more positive affect than being evaluated as moral. Experiment 2.2 again focused on negative morality and competence evaluations, but included additional measures of group members' cognitive responses. I assessed how negative morality (vs. competence) evaluations impact on group members' perceived coping ability, and predicted that negative morality judgments of one's prior behavior would diminish group members' perceived coping ability compared to negative competence judgments. In addition, Experiment 2.2 also examined

whether group members' affective and cognitive responses are affected by a new opportunity to restore their image as a moral group member. In this chapter, I thus investigated whether the initial impact of negative morality rather than competence judgments on group members' affective and cognitive responses can be overcome when group members are given a chance to restore their image.

Chapter 3

In Chapter 3, I examined how negative morality and competence judgments of one's own and another group member's behavior impact on psychophysiological responses. I predicted that negative morality judgments with the aim of improving group members' behavior might backfire, because these raise a motivational state of threat rather than challenge. In two experiments, group members worked on a group task while cardiovascular indices of challenge and threat motivational states were measured following the BPSM (Blascovich & Tomaka, 1996). In Experiment 3.1 participants recalled their own prior behavior evaluated as immoral or incompetent by the group; in Experiment 3.2 participants were exposed to an ingroup member's prior behavior evaluated as immoral or incompetent. I assessed the prediction that negative morality judgments induce a state of threat rather than challenge, whereas negative competence judgments induce a challenge rather than threat response. Moreover, I predicted that the pattern of psychophysiological motivational responses would be similar in both experiments—in other words, regardless of whether the judgment concerned own prior behavior or the prior behavior of another group member. In this chapter I thus investigated whether negative morality judgments, which often tend to be used to motivate group members to adapt their behavior, are effective or might actually be counter-effective.

Chapter 4

What determines whether an individual will be accepted by, or excluded from, a group? In this chapter, I examined group members' behavioral responses towards prospective group members depending on how they compare to the group in terms of morality or competence. In three experiments, I examined the overall prediction that the morality of prospective group members has

more impact on the group's tendency to accept versus exclude them than their competence. In Experiment 4.1, group members were presented with an individual who lacked morality or competence; in Experiment 4.2, the prospective group member excelled in morality or competence. The level of identity threat that the prospective group member aroused was assessed, as well as group members' tendency to accept and socialize, or to exclude the prospective group member. In Experiment 4.3, I directly compared responses to prospective group members who either lacked or excelled in morality or competence. In addition, psychophysiological measures were included to assess group members' stress and coping responses when considering the credentials of a prospective group member. It was predicted that due to the social identity threat they impose, individuals who lack morality are more likely to be excluded from the group than individuals lacking competence. Conversely, the group should be keener to include individuals who can contribute to the group's morality rather than its competence. Overall, the experiments described in Chapter 4 examined the notion that the morality, rather than the competence, of prospective group members elicits more pronounced motivated behavioral responses from group members.

In sum

The experiments reported in the three empirical chapters that follow examine the impact of intragroup morality and competence judgments on group members' motivational responses. Specifically, I examined the effect of morality and competence judgments on group members' affective responses (Chapter 2), cognitive responses (Chapter 2), psychophysiological responses (Chapters 3 and 4), and behavioral responses (Chapter 4). In the final chapter (Chapter 5: General Discussion) I reflect on the key findings and implications of these findings for moral psychology and group processes. Because the empirical chapters were written as independent research articles, readers might notice some overlap in the theoretical introductions and method sections. The empirical chapters can be read independently.

Chapter 2

Moral Misery and Competent Contentment

Affective and Cognitive Responses

This chapter is based on Van der Lee, R., Ellemers, N., & Scheepers, D. (2012a). Moral misery and competent contentment: The role of affect in group members' perceived coping ability with morality vs. competence evaluations. *Manuscript under review*.

We are evaluated on a daily basis by others, such as family members, friends, and co-workers. Behavioral evaluations often serve the purpose of eliciting and encouraging desired behaviors. Consequently, we are motivated to behave in ways that will yield respect and esteem from important others. This is particularly the case when the judgments of others are relevant to us, for example because these others belong to the same group. But how do these evaluations shape our feelings and behaviors? Whereas negative evaluations have a major impact on individuals (see Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001 for a review) and may consequently be used to elicit behavioral change, they can also be counter-effective, for example when such evaluations increase individuals' perceptions of threat (Ruiter, Abraham, & Kok, 2001). In the current research, we propose that the impact of a behavioral evaluation in a salient group context depends on whether the evaluation concerns behavior indicative of one's *morality* or *competence*. As will be outlined in more detail below, we argue that criticism of one's moral behavior is experienced more negatively—both in terms of affect and perceived coping ability—than criticism of one's competence. In addition, we argue that group members can overcome the negative experience triggered by moral criticism when presented with an opportunity to restore their moral image in the group.

In group contexts, much of the behavior of individual group members is driven by concerns for a positive social identity. Research examining how individuals and groups compare to each other has mainly focused on *competence* judgments (e.g., Bettencourt, Dorr, Charlton, & Hume, 2001; Ellemers, 1993). Evaluations of abilities and task performance are seen as important indicators of individual and group success in terms of outcomes and resources. Competence is thus not only a basis for intergroup comparisons; it is also considered an important within-group source of membership-esteem. The present research complements prior work by also examining *morality* judgments as a source of membership-esteem in groups.

Several authors have argued for the central role of morality judgments in regulating individual behavior in groups as an important reason for why people care about morality (e.g., De Waal, 1996; Skitka, 2003). Although the importance of morality for groups and its members is acknowledged in various literatures, little is actually known about the consequences of morality evaluations for individual behavior within groups. While the consequences of

morality for individual behavior as incorporated in laws and social norms tend to focus on sanctioning negative breaches of morality and the avoidance of *immoral* behavior (e.g., the Ten Commandments: “Thou shalt not...”), we examine how group members can overcome this negative impact and display moral behavior. In two experiments, we investigate whether the tendency to comment on behavior that is seen as lacking morality (vs. competence) constitutes the best way to motivate group members to behave more morally in the future by assessing its impact on affective responses and coping ability.

Behavioral feedback through intragroup evaluations

According to Social Identity Theory (Tajfel & Turner, 1979), people derive part of their self-concept from their group membership, and are motivated to maintain a positive social identity. In doing so, people evaluate the extent to which their past and present behavior contributes to attaining this valued goal (Levine & Moreland, 1994). This evaluation process is important for both the group and its individual members: The outcome determines whether individual group members meet group standards and, as a consequence, affects the identity of both the group and its individual members (Luhtanen & Crocker, 1992). It is thus important for individual group members to know whether other group members approve of their behavior. The esteem they receive from their group depends on feedback indicating whether their behavior is in line with the group’s expectations (Moreland & Levine, 1982), and group members are motivated to act accordingly (Tyler & Blader, 2003).

The social implications of morality and competence evaluations

Morality is a primary source of value. Across cultures people consider moral values to be the most important guiding principles in their lives (Schwartz, 1992), and appreciate having a moral identity (Monin & Jordan, 2009). Prior research has addressed the content of morality (e.g., Haidt & Graham, 2007) and the foundations of moral judgments (Greene et al., 2004). Additionally, it has been demonstrated that morality judgments have strong interpersonal consequences: Morality information impacts on person perception (Brambilla, Rusconi, Sacchi, & Cherubini, 2011; Wojciszke, 1994), elicits strong affective responses (Skitka, Bauman, & Sargis, 2005; Wojciszke, 2005), and, in particular

negative information about morality, seems highly diagnostic of the self (Skowronski & Carlston, 1987). These findings all indicate that morality judgments of self and others are of particular importance to people's social image and social responses.

At the group level, morality is seen as essential for individual survival and cooperation (e.g., De Waal, 1996; Skitka, 2003). However, in examining what drives the behavior of group members, past research has almost solely addressed judgments of competence. Other evaluative dimensions, such as warmth (Fiske, Cuddy, Glick, & Xu, 2002; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005), have been considered as alternative sources of individual and group-esteem that are used when competence seems lacking. Yet, recent research has demonstrated that, within the warmth cluster, sociability ratings (i.e., friendliness, likeability) can and should be distinguished from morality judgments (i.e., trustworthiness, honesty; Leach, Ellemers, & Barreto, 2007). More relevant to the current work, there is now converging evidence that morality is most important—more so than competence or sociability—for a positive evaluation of the group (Ellemers, Pagliaro, Barreto, & Leach, 2008; Leach et al., 2007), and for individuals within the group. Moral ingroup norms guide the behavioral choices of individual group members more so than competence-based ingroup norms (Ellemers et al., 2008), and individuals are motivated to act in line with moral ingroup norms as they anticipate gaining ingroup respect by enacting their social identity in this way (Pagliaro, Ellemers, & Barreto, 2011).

In sum, research on the importance of morality at both the interpersonal and the group level suggests that people want to be considered moral and want to belong to moral groups. Thus, generally speaking, living up to the moral expectations of the group should be more important for group members than behaving in line with the group's expected level of competence. We therefore argue that criticism of one's moral behavior impacts more negatively on group members' affective responses and coping ability than criticism of one's competence.

Responses to behavioral evaluations

To gain insight in how intragroup morality and competence evaluations impact on group members, we connect to the literature on goal behavior, indicating

that aspects of the message (i.e., evaluation) determine its effectiveness in eliciting behavioral change (e.g., Kahneman & Tversky, 1984). The negativity bias, for example, states that negative information generally has more impact than positive information (Baumeister et al., 2001; Fiske, 1980). Negative feedback is thus considered as an effective tool for eliciting desirable behavior. Yet, if this negative response is too intense, the outcome can be counter-effective. Negative information relevant to the self—as is the case with behavioral evaluations—has the potential to increase perceptions of threat and elicit defensive responses (e.g., Good & Abraham, 2007; Leventhal, 1970).

The impact of negative self-relevant information is partially determined by the individual's perceptions of self-efficacy (Van 't Riet, Ruiter, Werrij, & De Vries, 2008), that is, the individual's perceived ability to cope with the situation. Research on stress and coping indicates that subjective appraisals of a specific situation depend on how perceived situational demands relate to the individual's available resources to cope with the situation (Folkman & Lazarus, 1988). When the perception of threat increases, this places situational demands at the forefront (e.g., increased required effort, increased uncertainty), lowering one's perceived ability to cope with the situation, compared to when the focus is on the coping resources available to the individual (Blascovich, 2008b; Folkman, Lazarus, Gruen, & DeLongis, 1986). Thus, we argue that group members' affective responses to critical comments regarding their morality vs. competence impact on their perceived ability to cope with the behavioral evaluation.

The current research

Two central dimensions of interpersonal and group evaluations are morality and competence (e.g., Leach et al., 2007). We examine how the outcome of such evaluations impacts on group members' affective experiences and coping abilities. Connecting to the literature on evaluative judgments, we propose that the impact of the evaluation is affected by both dimension and valence (e.g., Skowronski & Carlston, 1987). That is, whereas *positive* information about *competence* is perceived as more diagnostic of the self (in its predictive value for future behavior) than positive information about morality, *negative* information about *morality* is likely to be seen as more diagnostic of the self than negative information about competence. Thus, we predict that a *negative* evaluation of

one's moral behavior by others in a group elicits more negative affect than a negative evaluation of one's competence (*Hypothesis 1*). This is not to say that morality judgments always elicit more intense emotions. In fact, we predict that a *positive* evaluation of one's competence elicits more positive affect than a positive evaluation of one's moral behavior (*Hypothesis 2*). In addition, the negative affect elicited by the critical evaluation of one's immoral (vs. incompetent) behavior is likely to increase the salience of situational demands, indicated by a lower ability to cope with the situation. We thus predict that the relationship between critical evaluations of immoral and incompetent behavior on the one hand and perceived coping ability on the other hand is mediated by group members' initial negative affective responses (*Hypothesis 3*).

Intragroup evaluations criticizing one's moral behavior (rather than one's competent behavior) are regarded as diagnostic of their lack of morality, and as a result group members may be discouraged from striving towards being a good group member who adheres to the moral behavioral standards of the group. Yet, recent research suggests that individuals actually *increase* moral strivings after a moral failure (Jordan, Mullen, & Murnighan, 2011). This seeming contradiction may be resolved when we separate affective responses to evaluations of one's past behavior from the perceived ability to cope with a new opportunity to behave as a good group member. While the importance of morality for the group and the individual should be evident from more intense negative affective responses to criticism of one's past moral behavior, a new opportunity to show one's worth as a moral (vs. competent) group member should motivate rather than discourage group members since it is likely to increase the salience of available coping resources rather than situational demands. We predict that this will decrease the negative affective response to the prior criticism of one's morality (vs. competence) and increase the positive affective response towards the opportunity to show moral, rather than competent, behavior (*Hypothesis 4*).

We tested these hypotheses in two experiments. In both studies individual group members recalled behavior that was evaluated by other group members in terms of morality vs. competence. Experiment 2.1a investigated the impact of negative morality vs. competence evaluations on group member' affective responses. Experiment 2.1b assessed positive evaluations to demonstrate that the impact of morality judgments is specific for negative

evaluations. Experiment 2.2 examined the mediating role of negative affect on perceived coping ability, and assessed whether group members can alleviate their negative affective response after prior criticism to their morality (vs. competence) when offered an opportunity to display moral, rather than competent, behavior in a novel group context.

Experiment 2.1a

Participants in this experiment recalled a situation in which their group evaluated their behavior negatively in terms of morality or competence. Next, we assessed their affective responses with regard to the recalled situation. We predicted that recalling a negative evaluation of one's moral behavior elicits more negative affect than recalling a negative evaluation of one's competent behavior (*Hypothesis 1*).

Method

Participants and Design. Sixty-four individuals (36 women, $M_{\text{age}} = 30.20$ years, $SD = 13.23$) were recruited by undergraduate students as part of their Bachelor thesis. Participants consisted of family, friends, and/or colleagues of these students. Participants filled out the paper and pencil questionnaire in return for a lottery ticket with which they could win one of four gift certificates each worth 20 Euros. In a 1-factor (Dimension: Morality vs. Competence) between-subjects design, participants were randomly assigned to one of the two experimental conditions. Participation took approximately 20 minutes.

Procedure. The experiment explained that all people belong to multiple groups, and that every group has its own norms and values. The cover story further told that we were interested in the value of either morality (i.e., trustworthiness, honesty) or competence (i.e., intelligence, skills), depending on condition, and how it affects the behavior of group members. Participants were then asked to recall a situation in which they had behaved in a way that was evaluated as either *immoral* or *incompetent* (depending on condition) by others in a group context, and to describe both their behavior and how

(someone from) their group confronted them with their behavior.¹ Participants then completed the questionnaire containing the dependent measures.

Measures. All items were presented on 7-point scales (1 = *completely disagree* to 7 = *completely agree*). To check the effectiveness of the manipulation, participants reported the extent to which they recalled a situation in which they were negatively evaluated by their group on their 1) moral and 2) competent behavior.

We included a total of 31 emotions in the questionnaire, based on the Positive And Negative Affect Scales (PANAS) by Watson and Clark (1988), and extended these with several additional emotions. To construct the affect scales we conducted a Principle Component Analysis (varimax rotation) and selected the emotions that loaded on the first two factors. We then ran the analysis again with only those items. These 10 items explained 58.91% of the total variance. Eigenvalues were 3.46 for the first factor (i.e., negative affect) and 2.43 for the second factor (i.e., positive affect). Both scales consisted of five items (negative affect: “worried”, “anxious”, “vulnerable”, “tense”, “nervous”, $\alpha = .83$; and positive affect: “happy”, “enthusiastic”, “inspired”, “pleased”, “proud”, $\alpha = .80$). Participants indicated the extent to which they experienced these emotions while recalling their behavior.

Because we used pre-existing groups rather than experimental groups, we controlled for possible individual differences regarding group identification and self-esteem. Group identification was measured with four items (Ellemers, Spears, & Doosje, 1999; e.g., “I felt connected to the others in this group”; $\alpha = .86$); personal self-esteem was assessed by five items adapted from Rosenberg (1965; e.g., “I was satisfied with myself in that situation”; $\alpha = .82$); and membership-esteem was measured using four items (Luhtanen & Crocker, 1992; e.g., “I was a worthy member of the group”; $\alpha = .72$).

¹ 95.2% of participants described a situation in line with the intended manipulation, $\chi^2(1, N = 62) = 106.65, p < .001$. Participants indicated the following groups in which the evaluation took place: 51.61% work group (e.g., classmates), 16.13% family, 9.68% friends, 12.90% sports team, 3.22% other and 6.45% did not specify the group. An example of immoral behavior is: “*It was at a meeting of my fraternity, when I was wearing a shirt of a different fraternity. I was called on my loyalty towards my fraternity*”. An example of incompetent behavior is: “*I was supposed to make some arrangements for a show on behalf of my fraternity, but I made several mistakes. Eventually it had to be cancelled all together. It was considered as something important, they confronted me with it*”. Removing participants who failed to describe a situation conform condition from the subsequent analyses did not significantly change our results. We therefore included those participants in all analyses.

Results

Unless reported otherwise all data were analyzed by means of Analyses of Variance with dimension as independent variable.

Checks. The manipulation of dimension was successful: Participants in the morality condition indicated to a stronger extent that they described a situation about their immoral behavior ($M = 5.03$, $SD = 1.71$) than participants in the competence condition ($M = 3.13$, $SD = 2.00$), $F(1, 62) = 16.81$, $p < .001$, $\eta_p^2 = .21$. Contrary, participants in the competence condition indicated to a stronger extent that they described a situation about their incompetent behavior ($M = 4.97$, $SD = 1.73$) than participants in the morality condition ($M = 3.25$, $SD = 1.70$), $F(1, 62) = 16.02$, $p < .001$, $\eta_p^2 = .20$. As expected, we found no differences in group identification, personal self-esteem, and membership-esteem (all F s < 1 , p s $> .5$).

Affect. A repeated measures ANOVA with dimension as between-subjects factor and affect as within-subject factor revealed a significant main effect of affect, $F(1, 62) = 6.12$, $p = .02$, $\eta_p^2 = .09$. Participants reported overall more negative affect ($M = 3.34$, $SD = 1.28$) than positive affect ($M = 2.80$, $SD = 1.11$). As anticipated, the Affect X Dimension interaction was also significant, $F(1, 62) = 6.84$, $p = .01$, $\eta_p^2 = .10$. Simple main effect analyses revealed the predicted effect of dimension on negative affect, $F(1, 62) = 4.88$, $p = .03$, $\eta_p^2 = .07$. Participants in the morality condition reported more negative affect ($M = 3.69$, $SD = 1.36$) than participants in the competence condition ($M = 3.00$, $SD = 1.12$). For positive affect, the simple main effect analyses revealed a marginally significant effect of dimension, $F(1, 62) = 2.94$, $p = .09$, $\eta_p^2 = .04$. Participants in the competence condition reported slightly more positive affect ($M = 3.03$, $SD = 1.14$) than participants in the morality condition ($M = 2.56$, $SD = 1.04$).

Discussion

This experiment investigated how negative evaluations of behavior indicating one's morality or competence influences group members' affective responses. Our prediction was supported: Recalling a critical evaluation of one's immoral behavior by others in a group elicited more negative affect than a critical

evaluation of one's incompetent behavior (*Hypothesis 1*). Not surprisingly, after recalling a negative evaluation, participants reported overall more negative affect than positive affect. We found no reliable differences between critical evaluations of immoral and incompetent behavior on positive affect.

These results extend previous research, which shows that negative information about morality is seen as more diagnostic of the self than negative information about competence (Skowronski & Carlston, 1987), by empirically demonstrating the affective impact of such information. Recalling a critical evaluation of one's immoral behavior constitutes a more intense negative affective experience for group members than a critical evaluation of one's incompetence. It might be possible, however, that group members respond more intensely—regardless of valence—to morality evaluations than to competence evaluations. To rule out this possibility, we conducted a follow-up study in which we examined positive evaluations of group members' moral vs. competent behavior.

Experiment 2.1b

In Experiment 2.1b we asked participants to recall a situation in which their behavior was evaluated as moral or competent by others in a group. As outlined above, we predicted that recalling a critical evaluation of one's competent behavior elicits more positive affect than recalling a critical evaluation of one's moral behavior (*Hypothesis 2*), because of the perceived diagnosticity of positive information about competence, compared to morality, for the self (Skowronski & Carlston, 1987).

Method

Participants & Design. As part of their Bachelor Thesis, undergraduate students recruited sixty-five participants among their family, friends, and/or colleagues (39 women, $M_{\text{age}} = 32.35$, $SD = 14.53$). Similar to the participants in Experiment 2.1a, they received a lottery ticket. Using a 1-Factor (Dimension: Morality vs. Competence) between-subjects design, participants were randomly assigned to one of the two experimental conditions of the paper and pencil questionnaire.

Procedure. The procedure was identical to Experiment 2.1a, except for the valence of our manipulation. Participants recalled a situation in which they behaved in a way that was evaluated as *moral (competent)* by others in a group context², after which they completed the questionnaire.

Measures. A Principal Component Analysis (varimax rotation) showed that the same items as selected in Experiment 2.1a loaded on the first two factors, with Eigenvalues of 5.18 for the first factor (i.e., positive affect) and 1.84 for the second factor (i.e., negative affect), and explained 70.22% of the total variance. Both scales were reliable: $\alpha = .91$ for positive affect, and $\alpha = .85$ for negative affect. Additionally, we measured group identification ($\alpha = .85$), personal self-esteem ($\alpha = .77$), and membership-esteem ($\alpha = .78$), as well as the effectiveness of our manipulations.

Results

Checks. The manipulation of dimension was successful: Participants in the morality condition indicated to a stronger extent that they described a situation about their moral behavior ($M = 5.40$, $SD = 1.22$) than participants in the competence condition ($M = 3.14$, $SD = 2.05$), $F(1, 63) = 27.95$, $p < .001$, $\eta_p^2 = .31$. Contrary, participants in the competence condition indicated to a stronger extent that they described a situation about their competent behavior ($M = 5.40$, $SD = 1.59$) than participants in the morality condition ($M = 3.23$, $SD = 1.98$), $F(1, 63) = 23.91$, $p < .001$, $\eta_p^2 = .27$. As expected, we found no differences in group identification, personal self-esteem, and membership-esteem (all F s < 1 , $ps > .4$).

Affect. A repeated measures ANOVA with dimension as between-subjects factor and affect as within-subject factor revealed a significant main effect of affect, $F(1, 62) = 49.95$, $p < .001$, $\eta_p^2 = .45$. Participants reported overall more

² 92.2% of participants described a situation in line with our manipulation, $\chi^2(1, N = 64) = 99.76$, $p < .001$. Participants indicated the following groups in which the evaluation took place: 58.21% work group, 11.94% family, 16.42% friends, 8.95% sports team, 1.49% other and 2.98% did not specify the group. An example of moral behavior is: “*In my group of friends there was a lot of gossip about one person. I did not participate with the gossiping. Other friends in the group told me they admired that I stayed out of it*”. An example of competent behavior is: “*We were losing a soccer match. The whole team already gave up. I kept going and made a goal at the end of the first half. The coach set me as an example for the others in the team*”.

positive affect ($M = 4.42$, $SD = 1.58$) than negative affect ($M = 2.32$, $SD = 1.27$). Importantly, the Affect X Dimension interaction was also significant, $F(1, 62) = 10.51$, $p = .002$, $\eta_p^2 = .14$. Simple main effect analyses revealed a main effect of Dimension: As expected, participants in the competence condition reported more positive affect ($M = 5.12$, $SD = 1.22$) than participants in the morality condition ($M = 3.64$, $SD = 1.60$), $F(1, 62) = 17.47$, $p < .001$, $\eta_p^2 = .22$. For negative affect, simple main effect analyses yielded no effect of Dimension, $F(1, 62) = 1.57$, $p = .21$, $\eta_p^2 = .02$ ($M = 2.53$, $SD = 1.37$ in the morality condition, and $M = 2.13$, $SD = 1.17$ in the competence condition).³

Discussion

As predicted, Experiment 2.1b showed that recalling a positive evaluation of one's competent behavior by others in a group elicits more positive affect than recalling a positive evaluation of one's moral behavior (*Hypothesis 2*). These results are in line with the idea that positive information about competence is more diagnostic of the self than positive information about morality (Skowronski & Carlston, 1987). Importantly, these results rule out that morality evaluations elicit more intense affective responses overall, since a

³ We also analyzed the data of Experiments 2.1a and 2.1b in one combined 2(Dimension: Morality vs. Competence) X 2(Evaluation valence: Negative vs. Positive) design. For positive affect, main effects of Dimension, $F(1, 124) = 18.99$, $p < .001$, $\eta_p^2 = .13$, and Evaluation valence, $F(1, 124) = 50.17$, $p < .001$, $\eta_p^2 = .29$, emerged: Participants in the competence condition reported overall more positive affect ($M = 4.11$, $SD = 1.57$) than participants in the morality condition ($M = 3.08$, $SD = 1.44$), and participants in the positive evaluation condition reported overall more positive affect ($M = 4.42$, $SD = 1.58$) than participants in the negative evaluation condition ($M = 2.80$, $SD = 1.11$). The Dimension X Evaluation valence interaction was also significant, $F(1, 124) = 5.10$, $p = .03$, $\eta_p^2 = .04$. Simple main effect analyses revealed the predicted pattern: When the evaluation was positive, participants in the competence condition reported significantly more positive affect than participants in the morality condition ($p < .001$).

An ANOVA on negative affect also revealed main effects of Dimension, $F(1, 124) = 5.96$, $p = .02$, $\eta_p^2 = .05$, and Evaluation valence, $F(1, 124) = 20.61$, $p < .001$, $\eta_p^2 = .14$. Participants in the morality condition reported overall more negative affect ($M = 3.13$, $SD = 1.47$) than participants in the competence condition ($M = 2.55$, $SD = 1.22$), and participants in the negative evaluation condition reported overall more negative affect ($M = 3.34$, $SD = 1.28$) than participants in the positive evaluation condition ($M = 2.32$, $SD = 1.27$). Although the Dimension X Evaluation valence interaction was not significant for negative affect, $F(1, 124) = 0.42$, $p = .52$, $\eta_p^2 = .003$, simple main effect analyses revealed the predicted pattern: When the evaluation was negative, participants in the morality condition reported significantly more negative affect than participants in the competence condition ($p = .03$).

positive evaluation of one's morality made by others in a group triggers a less intense affective response than a positive evaluation of one's competence.

Experiment 2.2

The second experiment was conducted with two aims in mind. The first aim was to test the psychological consequences of the initial affective responses with respect to one's perceived ability to cope with the behavioral evaluation. The second aim was to examine whether group members can alleviate their negative affective response to a critical evaluation of their immorality when offered a new opportunity to display moral behavior.

Participants in this experiment first recalled critical evaluations of their immoral or incompetent behavior by others in a group (as in Experiment 2.1a) and were then offered an ostensible opportunity to restore their image by behaving morally or competently in a novel group. This procedure allowed us to examine whether group members can overcome their initial negative affective response when presented with a new opportunity to display moral behavior. Therefore, after recalling an evaluation of immoral (or incompetent) behavior, we introduced a joint task in a novel group to participants, which offered them an opportunity to display behavior indicating and affirming their image as a moral vs. competent group member. We manipulated evaluative dimension as a between-participants factor and added evaluative focus (recall vs. restore) as within-participants factor.

We expected to replicate the results of Experiment 2.1a, i.e., that recalling behavior evaluated as immoral by others in a group elicits more negative affect than a recalling incompetent behavior (*Hypothesis 1*). Furthermore, we expected the negative affective response as elicited by a critical evaluation of one's immoral behavior (vs. incompetent behavior) to decrease perceived coping abilities (*Hypothesis 3*). However, when offered a new opportunity to restore one's image in the group, we expect this pattern to disappear. Specifically, we predict a larger decrease in negative affect and a larger increase in positive affect after the prior criticism of one's morality rather than competence when offered a new opportunity to restore one's image as a moral (vs. competent) group member (*Hypothesis 4*).

Method

Participants and Design. Sixty-one undergraduate students (41 women, $M_{\text{age}} = 21.74$ years, $SD = 3.12$) participated and received either 6 Euros or course credits for their participation. We employed a 2(Dimension: Morality vs. Competence) X 2(Focus: Recall vs. Restore) mixed-design, with dimension as between-subjects factor and focus as within-subjects factor. Participants were randomly assigned to one of the two dimension conditions.

Procedure. Participants arrived in the laboratory and were seated in separate cubicles. The experiment consisted of two parts: The first was ostensibly about group values (similar to Experiments 2.1a and 2.1b), and the second part would involve solving management dilemmas in a group. We introduced the first part of the experiment by providing the same instructions as in Experiment 2.1a: Participants recalled own behavior evaluated as *immoral* (*incompetent*) by others in a group.⁴ Next, we measured affect, perceived coping ability, and additional variables, after which the second part of the experiment was introduced.

In the second part of the experiment, the cover story explained that we were interested in the way in which people solve management dilemmas in groups. We told participants that these dilemmas often require a trade-off between moral and competent considerations, and that we were specifically interested in either morality or competence (which always converged with the dimension of the recalled evaluation). We then explained that participants would be working in a group with two other participants to find agreement on the best solution for such dilemmas. We presented this interactive group task as an opportunity for participants to show their moral or competent behavior towards their group. We explicitly stated: “With this task you can show your *moral* (*competent*) behavior.” In anticipation of the group task participants completed the second questionnaire, again comprising the same dependent

⁴ 88.1% of participants described a situation in line with the intended manipulation, $\chi^2(1, N = 61) = 79.74, p < .001$. Participants indicated the following groups in which the evaluation took place: 52.46% work group, 9.84% family, 6.56% friends, 22.95% sports team, 3.28% other and 4.91% did not specify the group. Removing participants who failed to describe a situation conform condition from the subsequent analyses did not significantly change our results. We therefore included those participants in all analyses.

measures. After this, participants were fully debriefed, paid, and thanked for their participation.⁵

Measures. All dependent variables were measured on 7-point scales (1 = *completely disagree* to 7 = *completely agree*). The measures were assessed twice: once in the recall condition (phrased in the past tense; similar to Experiments 2.1a and 2.1b) and once in the restore condition (phrased in the present tense).

We included a total of 25 emotions in our questionnaire, by extending the Positive And Negative Affect Scales (PANAS; Watson & Clark, 1988) with several other emotions. We followed the same strategy as described in Experiments 1a and 1b: We conducted a Principal Component Analysis (varimax rotation) and selected the emotions that loaded on the first two factors to construct our affect scales. These 10 items explained 50.38% of the total variance in the recall condition, with Eigenvalues of 3.62 for the first factor (i.e., negative affect) and 1.42 for the second factor (i.e., positive affect). In the restore condition, the same items explained 51.13% of the total variance, with Eigenvalues of 3.48 for the first factor (i.e., positive affect) and 1.63 for the second factor (i.e., negative affect). Both scales consisted of five items (positive affect: “happy”, “interested”, “inspired”, “strong”, “proud”; Recall: $\alpha = .67$; Restore: $\alpha = .70$, and negative affect: “anxious”, “threatened”, “tense”, “nervous”, “guilty”; Recall: $\alpha = .75$; Restore: $\alpha = .71$).

Coping ability (Folkman et al., 1986) was measured with three items (“I felt I was able to solve this situation”, “I found it difficult to solve this situation” [reverse coded], “I felt insecure about solving this situation” [reverse coded], Recall: $\alpha = .77$; Restore: $\alpha = .81$).⁶ We again assessed group

⁵ In this study participants were attached to apparatus for measuring impedance cardiographic (ICG), electrocardiographic (EKG), and blood pressure signals. After the described procedure, participants engaged in an additional study in which we explored their cardiovascular responses. Analyses of those data are beyond the scope of the current paper.

⁶ To confirm that negative affect and perceived coping ability can be considered two separate constructs, we conducted a principal component analysis, using varimax rotation, of the eight items in both the recall and restore condition. The analysis yielded a 2-factor solution in both conditions. In the recall condition, the items explained 59.97% of the total variance, and Eigenvalues were 3.34 for the first factor (i.e., negative affect) and 1.45 for the second factor (i.e., perceived coping ability). In the restore condition, the items explained 56.85% of the total variance, and Eigenvalues were 2.36 for the first factor (i.e., negative affect) and 2.19 for the second factor (i.e., perceived coping ability), thus confirming the conceptual distinction between negative affect and perceived coping ability.

identification (Recall: $\alpha = .82$; Restore: $\alpha = .90$), personal self-esteem (Recall: $\alpha = .77$; Restore: $\alpha = .87$), and membership-esteem (Recall: $\alpha = .83$; Restore: $\alpha = .82$).

To check the effectiveness of the dimension manipulation, participants indicated, in the recall condition, the extent to which they described immoral and incompetent behavior. In the restore condition, participants indicated the extent to which the solutions to management dilemmas were aimed at morality and competence.

Results

Unless reported otherwise, the within-subject data were analyzed using repeated measures (RM) Analyses of Variance with focus as within-subject factor and dimension as between-subject factor. Data from the between-subject conditions were analyzed using Analyses of Variance with dimension as independent variable.

Checks. The manipulation of dimension was successful in both focus conditions. In the morality recall condition participants reported to a stronger extent that the described situation was about their immoral behavior ($M = 5.58$, $SD = 1.23$) than participants in the competence recall condition ($M = 4.33$, $SD = 1.88$), $F(1, 59) = 9.44$, $p < .01$, $\eta_p^2 = .14$. A similar pattern was found in the restore conditions: Participants in the morality restore condition reported to a greater extent that the aim of the management dilemmas was on morality ($M = 6.16$, $SD = 1.53$) than participants in the competence restore condition ($M = 4.10$, $SD = 1.40$), $F(1, 59) = 30.12$, $p < .001$, $\eta_p^2 = .34$.

Separate analyses for personal self-esteem, membership-esteem, and identification yielded main effects of focus: In the restore condition participants reported more personal self-esteem ($M = 5.71$, $SD = 1.02$) than in the recall condition ($M = 3.75$, $SD = 1.31$), $F(1, 59) = 158.10$, $p < .001$, $\eta_p^2 = .73$, and more membership-esteem ($M = 5.42$, $SD = 0.96$) than in the recall condition ($M = 4.02$, $SD = 1.49$), $F(1, 59) = 53.01$, $p < .001$, $\eta_p^2 = .47$. In the recall condition participants reported to identify more with their group ($M = 4.37$, $SD = 1.32$) than in the restore condition ($M = 3.58$, $SD = 1.50$), $F(1, 59) = 10.14$, $p < .01$, $\eta_p^2 = .15$, consistent with the use of preexisting groups in the recall condition and minimal groups (to which people tend to identify less) in

the restore condition. Importantly, the interaction with dimension was not significant for each of these variables (all F s < 2.5, p s > .1).

Affect. A repeated measures ANOVA with dimension as between-subject factor and focus and affect as within-subject factors yielded a significant Affect X Focus interaction, $F(1, 59) = 205.60, p < .001, \eta_p^2 = .78$. The predicted three-way-interaction among Affect, Focus, and Dimension was also significant, $F(1, 59) = 8.45, p = .005, \eta_p^2 = .12$. To disentangle these interaction patterns we conducted separate repeated measures ANOVAs for the recall and restore conditions.

Main effects of affect emerged in both the recall condition, $F(1, 59) = 61.22, p < .001, \eta_p^2 = .51$, and the restore condition, $F(1, 59) = 78.09, p < .001, \eta_p^2 = .57$. Overall, participants reported more negative affect ($M = 4.39, SD = 1.06$) than positive affect ($M = 2.72, SD = 0.92$) in the recall condition, whereas they reported more positive affect ($M = 4.44, SD = 0.86$) than negative affect ($M = 2.77, SD = 0.87$) in the restore condition.

More importantly, and in keeping with predictions and the results of Experiment 2.1a, the Affect X Dimension interaction was significant in the recall condition, $F(1, 59) = 4.37, p = .04, \eta_p^2 = .07$ (see Table 2.1). Participants reported more negative affect in the morality recall condition than in the competence recall condition, $F(1, 59) = 4.84, p = .03, \eta_p^2 = .08$. Dimension had no effect on positive affect in the recall condition, $F(1, 59) = 1.78, p = .19, \eta_p^2 = .03$. The Affect X Dimension interaction was not significant in the restore condition, $F(1, 59) = 1.50, p = .23, \eta_p^2 = .02$.

Table 2.1

Means and Standard Deviations of Affect and Perceived Coping Ability for the Dimension Conditions in each Focus Condition (Experiment 2.2)

	Recall behavior		Restore behavior	
	Morality	Competence	Morality	Competence
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Positive affect	2.57 _a (0.79)	2.88 _a (1.03)	4.53 _b (0.80)	4.35 _b (0.93)
Negative affect	4.68 _c (0.94)	4.10 _d (1.10)	2.63 _c (0.77)	2.91 _c (0.96)
Perceived coping ability	3.61 _i (1.29)	4.35 _j (1.48)	4.40 _j (1.40)	4.25 _j (1.20)

Note: Means with different subscripts per row and column (for positive and negative affect) differ reliably from each other ($p < .05$) following LSD post-hoc tests.

Change in affect. For presentational purposes, we computed difference scores for positive and negative affect by subtracting the average affect in the recall condition from the restore condition for both subscales. This way, we created a single indicator of change in positive and negative affective responses between the recall and restore conditions. A repeated measures ANOVA with the affect difference scores as within-subject factor and dimension as between-subject factor yielded a significant main effect of affect, $F(1, 59) = 205.60, p < .001, \eta_p^2 = .78$, as well as the predicted Affect X Dimension interaction, $F(1, 59) = 8.45, p = .005, \eta_p^2 = .12$.

Overall, the changes in positive affect ($M = 1.72, SD = 0.97$) and negative affect ($M = -1.62, SD = 1.25$) between the recall and restore conditions were significant, respectively $t(60) = 13.83, p < .001$ and $t(60) = -10.12, p < .001$. Simple main effect analyses showed that in the morality condition, the increase in positive affect ($M = 1.97, SD = 0.91$) and decrease in negative affect ($M = -2.04, SD = 0.98$) were significantly larger than the

increase in positive affect ($M = 1.47, SD = 0.99$) and decrease in negative affect ($M = -1.19, SD = 1.36$) in the competence condition, respectively $F(1, 59) = 4.14, p = .05, \eta_p^2 = .07$ for positive affect and $F(1, 59) = 8.00, p = .006, \eta_p^2 = .12$ for negative affect (see Figure 2.1).

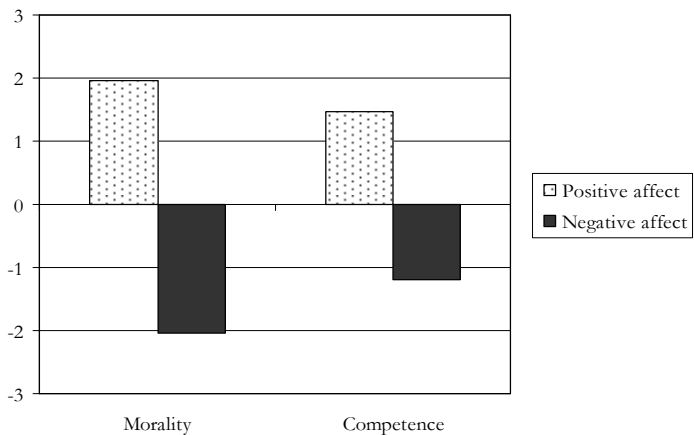


Figure 2.1
Changes in affective responses between the focus conditions as a function of evaluation dimension, Experiment 2.2. Displayed are the difference scores (restore minus recall; see Table 2.1 for the means) for positive and negative affect.

Perceived coping ability. A marginal significant Focus X Dimension interaction was revealed for perceived coping ability: $F(1, 59) = 3.74, p = .06, \eta_p^2 = .06$ (see Table 2.1). Analyses of the simple main effects demonstrated that participants in the morality recall condition reported significant lower perceived coping abilities than participants in the competence recall condition, $F(1, 59) = 4.35, p = .04, \eta_p^2 = .07$; the latter did not differ from participants' perceived coping abilities in both restore conditions.

Mediation. To examine whether the effect of dimension on perceived coping ability was mediated by affect, we conducted bootstrapping analyses (Preacher & Hayes, 2004), using the SPSS macro for simple mediation with 5000 bootstrap resamples. For the recall condition, coping ability was entered as dependent variable, with dimension as predictor and negative affect as proposed mediator.⁷

The bootstrap results showed that, in the recall condition, the indirect effect of dimension on perceived coping ability through negative affect was significant with a point estimate of -.27 and a 95% BCa CI of -.6447 to -.0322, indicating full mediation (see Figure 2.2). The higher level of reported negative affect in the morality recall condition, compared to the competence recall condition, led to decreased perceived coping ability.

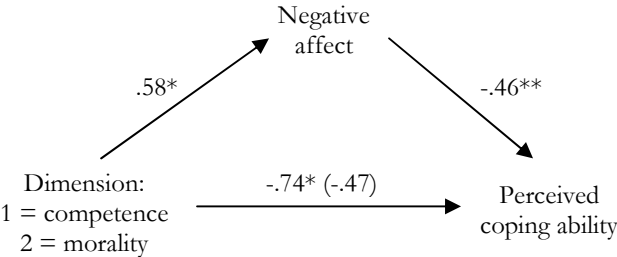


Figure 2.2
*Negative affect mediates the relationship between evaluation dimension and perceived coping ability in the recall condition, Experiment 2.2; * $p < .05$, ** $p < .01$*

⁷ Since we found no effect of dimension on positive affect in the recall condition, nor on positive and negative affect in the restore condition, positive affect was ruled out as potentially mediating the link between dimension and perceived coping ability.

Discussion

This experiment investigated 1) a psychological consequence of the affective responses to behavioral evaluations in terms of perceived coping ability, and 2) whether group members can overcome their initial negative affective response induced by a critical evaluation of one's immorality (vs. incompetence) when offered a new opportunity to behave morally in the group. We replicated the results of Experiment 2.1a by demonstrating that a prior critical evaluation of one's immoral behavior by others in a group elicits more negative affect than a critical evaluation of one's incompetent behavior (*Hypothesis 1*). We also showed that, as predicted in *Hypothesis 3*, a prior criticism of one's morality elicited more negative affect, which decreased perceived coping abilities, as compared to a prior criticism of one's competence. The opportunity to restore the critical evaluation induced similar levels of negative affect and perceived coping ability for moral and competent behavior, suggesting that such an opportunity enhances a focus on available resources rather than situational demands—this appraisal is not further affected by evaluative dimension.

When group members were offered a new opportunity to restore their morality or competence, the affective response pattern reversed. Overall, participants reported more positive affect than negative affect when offered the opportunity to restore their image after a critical evaluation; regardless of whether the opportunity concerned moral or competent behavior. In both dimension conditions, the opportunity to restore the critical evaluation induced a decrease in negative affect and an increase in positive affect, compared to considering prior criticism to one's morality or competence. However, the shifts in negative and positive affect were significantly larger when the opportunity concerned moral behavior rather than competent behavior (*Hypothesis 4*).

The results of Experiment 2.2 thus indicate that group members can overcome their negative affective response to a prior criticism of their morality. The presence of a new opportunity to restore their moral image in the group induces a decrease in negative affect, an increase in positive affect, and leads to similar coping ability perceptions as an opportunity to restore one's competence.

General discussion

The current research extends prior findings (Ellemers et al., 2008; Leach et al., 2007; Pagliaro et al., 2011), by showing how critical evaluations of one's moral (vs. competent) behavior by others in a group impact on group members' affective experience and coping abilities. In two experiments, we specifically assessed how intragroup evaluations of group members' behavior indicating their morality vs. competence affect their emotional responses and perceived coping ability. In both experiments, we were able to rule out that these effects are due to differences in (personal or collective) self-esteem or group identification resulting from the evaluations received.

Extending theory and prior research documenting the asymmetrical effects of positive vs. negative valence in evaluative judgments (e.g., Skowronski & Carlston, 1987), we observed differential effects of positive vs. negative evaluations on affective responses. That is, critical evaluations of one's *immoral* behavior rather than one's *incompetent* behavior elicit a negative affective response (Experiment 2.1a and 2.2), whereas critical evaluations of one's competence rather than one's morality elicit a positive affective response (Experiment 2.1b). This corroborates our reasoning that moral criticism has a more negative impact on group members than competence criticism, but does not generate more intense emotional responses overall.

Additionally, we demonstrated that the negative affective response to critical evaluations of one's prior immoral rather than incompetent behavior elicit coping abilities focusing on situational demands rather than available resources resulting in a decreased perceived ability to cope with the evaluation (Experiment 2.2). Yet, this aversive reaction can be alleviated when group members are presented with a new opportunity to behave morally (Experiment 2.2). Group members feel equally positive towards and able to cope with a new opportunity to behave morally as to behave competently (i.e., increased self-efficacy; Van 't Riet et al., 2008), thereby overcoming their initial negative affective response to prior criticisms of their morality.

Implications and future directions

Recent research established the importance of morality for individuals' personal identity (e.g., Monin & Jordan, 2009) as well as their social identity (e.g., Leach et al., 2007). A growing body of research is starting to uncover the

processes and consequences of morality for motivation (e.g., Bauman & Skitka, 2009; Ellemers et al., 2008; Jordan et al., 2011; Pagliaro et al., 2011). The current research connects to research on moral motivation by demonstrating the affective consequences and appraisals of morality and competence evaluations of group members' behavior. The literature on motivational strategies generally distinguishes between two basic strategies for self-regulation: The first aims at approaching positive outcomes, ideals and challenges; the second aims at avoiding negative outcomes, obligations and threats (e.g., Blascovich & Tomaka, 1996; Carver & Scheier, 1990; Higgins, 1997). Positive affect has been linked to an approach motivation, and negative affect to an avoidance motivation (e.g., Cacioppo, Gardner, & Berntson, 1999). This is relevant to our results because these suggest that evaluations of one's moral and competent behavior elicit different motivational strategies in group members. An interesting direction for future research might be to further examine whether the motivation towards attaining a moral identity elicits different self-regulatory processes and arousal regulation.

Determining whether and why group members become preoccupied with situational demands or focus on their available coping resources is relevant for the understanding of individual behavior in groups. A focus on difficulties primarily causes people to monitor their behavior, as they try to avoid being seen as immoral. This may not always be adaptive to improve the situation or their well-being, as it is likely to induce stress (Folkman et al., 1986), and to make them reluctant to speak up or show what they are worth for fear of doing something wrong. By contrast, a focus on opportunities to behave morally—emphasizing the individual's coping abilities—is more likely to invite creative attempts to behave in moral ways, as it challenges the individual to find new ways to display his/her morality to the group. Many groups attempt to monitor and shape the moral behavior of their members by emphasizing what they did wrong in the past. Our data suggest that this may not be the best way to encourage individuals to display moral behavior. Indeed, recent studies demonstrate the benefits of emphasizing the motivation to display moral behavior for group processes and intergroup relations (e.g., Does, Derks, & Ellemers, 2011; Janoff-Bulman, Sheikh, & Hepp, 2009). Future research might further examine how the adoption of motivational strategies to achieve moral

goals affects behavioral displays and which is more effective in establishing intragroup respect in existing or novel group contexts.

The current research also contributes to the understanding of group dynamics, as we shed light on how group members' evaluations (Levine & Moreland, 1994) of each other induce attempts to conform to the group's norms and to affirm the group's expectations of individual group members. We varied both the dimension and the valence of the behavior central to the evaluation process. Implicitly, this conveyed the group's norms by increasing the salience of discrepancies between the moral or competent behavior of the individual and the expectations of other group members. Yet, we did not examine the extent to which group members' behavior actually conforms to the induced group norm or the group's expected level of morality and competence. An interesting direction for future research might be to address more explicit norm violations and examine how these affect intragroup evaluations.

Conclusion

Group members' affective responses and perceived coping abilities towards intragroup evaluations are determined by the dimension of the evaluation outcome. A critical evaluation of one's competent, rather than one's moral, behavior induces a positive affective response. By contrast, a critical evaluation of one's *immoral* (vs. *incompetent*) behavior elicits a negative affective response, which in turn enhances the salience of situational difficulties rather than available resources, and decreases group members' perceived coping ability. Moral criticism thus impacts more negatively on group members than competence criticism. However, by increasing group members' perceptions of self-efficacy—offering a chance to display moral behavior—the initial negative affective response is alleviated, thereby shifting the focus to one's available resources and increased coping abilities. Group members can thus overcome their misery after a moral failure and become positively engaged towards an opportunity to restore their image as a moral group member.

Chapter 3

Threatened by the Immoral, Challenged by
the Incompetent

Psychophysiological Responses

This chapter is based on Van der Lee, R., Ellemers, N., & Scheepers, D. (2012b). Threatened by the immoral, challenged by the incompetent: Cardiovascular responses to intragroup morality vs. competence evaluations. *Manuscript under review*.

Morality judgments have important social implications: They not only provide social norms about what one should and should not do; they are also used to regulate the behavior of individuals in groups (De Waal, 1996; Ellemers & Van den Bos, 2012; Leach, Bilali, & Pagliaro, 2013). For example, moral guidelines indicating what is normative for the group impact upon behavioral choices of group members, and moral (more so than competence) evaluations determine group members' willingness to help a newcomer in the group (Ellemers, Pagliaro, Barreto, & Leach, 2008; Pagliaro, Brambilla, Sacchi, D'Angelo, & Ellemers, 2013). This suggests that moral disapproval of past behavior might be particularly useful as a way to regulate behavioral change. However, is this really the case? We propose that the opposite might actually be true and that moral disapproval can impede rather than foster behavioral change.

Why would moral disapproval provide an inefficient way to alter group members' behavior? We argue that the greater psychological impact of morality judgments may impede group members' perceived ability to *cope* with moral disapproval. This implies that the demands of coping with negative evaluations are increased when these pertain to morality (rather than competence) evaluations. As a result, we predict that negative morality evaluations are more threatening and may therefore be less efficient as a way to motivate group members to adapt their behavior.

The aim of the current research is to gain more insight in the motivational implications of negative morality vs. competence evaluations in group contexts. In two experiments we compare behavior indicative of morality to behavior indicative of competence, which are both key sources of esteem and success for groups and their members (e.g., Fiske, Cuddy, Glick, & Xu, 2002; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Leach, Ellemers, & Barreto, 2007). In addition, we investigate the social implications of morality evaluations by examining judgments of behavior of the *self* as a group member (Experiment 3.1) as well as judgments regarding the behavior of *another* ingroup member (Experiment 3.2). Given that the behavior of other ingroup members is self-relevant because this affects one's social identity, we expect similar effects of morality vs. competence evaluations on motivation, regardless of whether the judgment concerns one's own behavior or an ingroup member's behavior.

The motivational implications of morality and competence

People desire having a moral identity (Monin & Jordan, 2009) and strive to be (perceived as) moral (Jordan, Mullen, & Murnighan, 2011). The motivation to be seen as moral directly affects displays of moral behavior. That is, individuals engage in compensatory behaviors when their moral identity has been called into question (Sachdeva, Iliev, & Medin, 2009). For example, individuals who are reminded of past immoral actions report more prosocial intentions such as donating to charity (Jordan et al., 2011). This demonstrates that individuals whose behavior is negatively evaluated in terms of morality (e.g., through reminders of past immoral acts) increase their striving to act morally. As a consequence, it could be argued that moral disapproval of past behavior constitutes an effective way to motivate group members to change their behavior. However, despite the motivational power of salient moral transgressions, individuals can also feel bad as a result of them. For example, when group members recall a negative evaluation of their behavior in terms of morality (vs. competence), they show more negative affective responses and a decrease in their perceived ability to cope with the situation (Van der Lee, Ellemers, & Scheepers, 2012a). Thus, reminders of immoral acts on the one hand increase the *desire* to act morally, but on the other hand decrease the (perceived) *ability* to do so.

Challenge and threat as motivational states

The biopsychosocial model (BPSM; Blascovich & Mendes, 2000; Blascovich & Tomaka, 1996) describes motivational states during motivated performance situations (e.g., giving a speech, working on a group-decision task) along a bipolar continuum ranging from “challenge” to “threat”. According to the BPSM, appraisals of motivated performance situations in terms of their demands (e.g., uncertainty and required effort) and available resources to cope with these demands (e.g., knowledge and skills) result in a motivational state of challenge vs. threat. More specifically, when situational demands outweigh individual resources, a state of *threat* emerges. Conversely, when individual resources match or outweigh situational demands a state of *challenge* emerges.

Challenge and threat motivational states are marked by specific patterns of cardiovascular reactivity. First, task engagement and goal relevance (a fundamental characteristic of motivated performance) are indicated by an

increase in heart rate (HR) and a decrease in pre-ejection period (PEP; an index of left ventricular contractile force). Second, a combination of cardiac output (CO; the amount of blood in liters that is pumped through the heart per minute) and total peripheral resistance (TPR; the resistance—constriction vs. dilation—of blood flow through the arterial system) index challenge and threat: Challenge is marked by relatively high CO and low TPR, whereas threat is marked by relatively low CO and high TPR.

In the context of the BPSM, the motivational states of challenge and threat (and their cardiovascular correlates) have been related to specific cognitive and behavioral outcomes. For example, challenge has been shown to positively correlate with a range of cognitive and physical performance outcomes (Blascovich & Mendes, 2010; Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004; Seery, Weisbuch, Hetenyi, & Blascovich, 2010). Threat, by contrast, has been related to rigidity in conflict situations (De Wit, Scheepers, & Jehn, 2012) and may have negative health implications in the long run (Blascovich, 2008a).

We propose that differentiating between motivational states of challenge and threat provides a powerful tool to understand how group members deal with negative morality vs. competence evaluations. We argue that morality evaluations generally are more demanding than competence evaluations. First, morality evaluations are more important than competence evaluations for a positive evaluation of the self (Aquino & Reed, 2002) and the group (Leach et al., 2007). Second, negative comments about one's morality are perceived to be more diagnostic of the self (being seen as having more predictive value for future behavior) than negative comments about one's competence (Skowronski & Carlston, 1987). Finally, prior research has demonstrated that critical evaluations regarding morality result in more negative affect (Van der Lee et al., 2012a) and identity threat (Kouzakova, Ellemers, Harinck, & Scheepers, 2012) as compared to critical evaluations regarding competence. These are all factors that potentially increase perceptions of (required) effort, thereby enhancing the situational demand-appraisals (e.g., Blascovich, 2008b). As a consequence, we predict that negative morality rather than competence evaluations are more likely to induce a motivational state of threat instead of challenge. Considering the negative implications of threat in terms of cognitive and behavioral performance (e.g., Blascovich & Mendes, 2010; Blascovich et

al., 2004; Seery et al., 2010), morality evaluations might therefore not provide the most efficient route to establish behavioral change in group members.

The current research

In two studies, we expose group members to negative evaluations of moral vs. competent behavior by asking them to recall instances of such evaluations of their own prior behavior (Experiment 3.1) or by confronting them with such evaluations of an ingroup member's prior behavior (Experiment 3.2). In both studies, the evaluations were made in a salient group context. Across studies we measured group members' motivational states through cardiovascular markers of challenge and threat. By applying the BPSM of challenge and threat we provide novel insight in the motivational states of group members when coping with negative intragroup evaluations. We hypothesize that a negative evaluation of morality (vs. competence) induces a state of threat rather than challenge. We expect this pattern to occur regardless of whether the judgment targets own behavior or an ingroup member's behavior.

Experiment 3.1

In the first experiment, participants recalled a situation in which their behavior was evaluated as either immoral or incompetent by others in a group context. Then, in a novel group context created in the lab, a group task was introduced for which either morality or competence (depending on condition) was said to be the primary performance dimension. In anticipation of the task, participants ostensibly had a within-group communication opportunity (by means of a video circuit), where they presented their views on how to perform on the task. This was the motivated performance situation we focused on to assess cardiovascular indices of challenge and threat. We predicted that being reminded of own prior behavior evaluated by others in a group context as immoral (vs. incompetent) would induce a relative state of threat rather than challenge. We also examined whether recalling negative morality vs. competence evaluations would lead to differences in collective self-esteem. In addition, we measured the perceived stability of behavior displayed during the group task as an indicator of situational demand-appraisals. As outlined above, one of the reasons why (im)morality judgments might be rather threatening is

that they may be seen as more diagnostic of the self—and thus perceived to be more stable over time—than incompetence judgments (Skowronski & Carlston, 1987).

Method

Participants & design. Seventy-three undergraduate students (50 women, $M_{\text{age}} = 21.41$ years, $SD = 3.19$) participated in this experiment. They received 6 Euros or course credits for participation. Using a 1-factor (Dimension: Morality vs. Competence) between-subjects design, participants were randomly assigned to one of the two experimental conditions. Participation took about 45 minutes.

Procedure. Participants arrived in the laboratory, were seated in front of a computer equipped with a webcam, and attached to the apparatus for measuring cardiovascular responses (see below). To measure electrocardiographic (EKG) and impedance cardiographic (ICG) signals, four spot electrodes were placed on participants' upper and lower back and two on their chest. In addition, a blood pressure sensor was attached to the index finger of their non-dominant hand. We then took a 5-minute baseline measure of their cardiovascular responses.

Participants were told that the study was concerned with how people solve management dilemmas in groups. Participants (who were all referred to as “participant 2”) would be collaborating in a group with three other (fictitious) participants (indicated as participants “1”, “3”, and “4”) to discuss the role of *morality* [*competence*] in solving such dilemmas. Ostensibly in order to enhance the collaboration and performance on the task, participants were first asked to recall a prior situation in which they had behaved in a way that was evaluated as either *immoral* or *incompetent* (depending on condition) by others in a group context. The others in the group were allegedly asked to do the same. This served as our manipulation of evaluative dimension.

Participants then completed a short questionnaire (see below) and were presented with several example dilemmas, after which they delivered a speech in front of a webcam. During this speech task, participants presented their ideas about the role of *morality* [*competence*] in solving management dilemmas. The speeches recorded by each group member would allegedly be shown to the others in the group, with the purpose of forming an impression of each

other and facilitating collaboration during the group task. Participants were (ostensibly randomly) chosen to record their speech first. They could take up to three minutes for their speech. When participants finished their speech, which was the motivated performance situation we focused on regarding the cardiovascular indices of challenge and threat (e.g., Blascovich et al., 2004; Mendes, Blascovich, Hunter, Lickel, & Jost, 2007; Scheepers, De Wit, Ellemers, & Sassenberg, 2012), they reached the end of the study and were debriefed, paid, and thanked for their participation.

Self-report measures. All questions were answered on 7-point scales (1 = *completely disagree* to 7 = *completely agree*). To check the effectiveness of the manipulation, participants reported the extent to which the purpose of the group task was to behave morally or competently (“I am going to show my group members how moral I am” and “I am going to show my group members how competent I am”). We measured private collective self-esteem with four items (Luhtanen & Crocker, 1992; e.g., “I am glad to be a member of this group”; $\alpha = .67$). To assess demand-appraisals, we measured perceived *stability* of behavioral evaluations during the group task with two items (“I think my group members perceive my behavior as stable” and “I think my group members will not change their opinion about me, even if I would behave differently”, $r = .42$, $p < .001$).

Cardiovascular measures. Electrocardiographic signals (EKG), impedance-cardiographic signals (ICG), and blood pressure were continuously measured during the experiment using a Biopac MP150 system (Biopac Systems Inc., Goleta, CA). Electrocardiography was measured using an ECG100 module and a Lead I electrode configuration, from which heart rate (HR) is derived. For measuring ICG, the NICO100c module was used. It provides measures of baseline impedance (Z_0) and the rate of change in impedance (dZ/dt), which yields indices of cardiac performance (e.g., PEP and CO; see Sherwood et al., 1990).

The blood pressure monitor provided a measure of mean arterial pressure (MAP) which, in combination with CO, can be used to calculate TPR. Cardiovascular data was stored using *Acqknowledge* software (Biopac Systems, Goleta, CA) and manually scored using MATLAB software (The MathWorks,

Inc., Natick, MA) following standard guidelines (Sherwood et al, 1990; see also De Wit et al., 2012).

Results and Discussion

The data of five participants were removed from all analyses due to expressed suspicion about the cover story, resulting in 68 participants with usable self-reported data. Due to signal loss,⁸ we were left with usable cardiovascular data of 41 participants.

Checks. The manipulation of dimension was successful. A repeated-measures ANOVA yielded a significant interaction between dimension and the manipulation check items, $F(1, 66) = 7.43, p = .008, \eta_p^2 = .10$. Simple main effect analysis showed that participants in the morality condition indicated to a greater extent that their goal was to behave morally ($M = 5.26, SD = 1.12$) than competently ($M = 4.66, SD = 1.30$) during the group decision-making task, $F(1, 66) = 7.23, p = .009, \eta_p^2 = .10$. Although participants in the competence condition did not distinguish between the extent to which it was their goal to behave morally ($M = 4.97, SD = 1.33$) and competently ($M = 5.24, SD = 1.06$), $F(1, 66) = 1.41, p = .24, \eta_p^2 = .02$, they did indicate to a greater extent that their goal was to behave competently ($M = 5.24, SD = 1.06$) than did participants in the morality condition ($M = 4.66, SD = 1.30$), $F(1, 66) = 4.09, p = .047, \eta_p^2 = .06$. Thus, in the morality condition, morality was indeed perceived to be more important than competence. Although in the competence condition competence goals were not seen as significantly more important than morality goals (which supports the notion that morality is overall of great importance to individuals; e.g., Aquino & Reed, 2002), as intended—they were seen as more important than the competence goals in

⁸ Data collection took place in two separate waves. Due to blood pressure equipment failure during the first phase, a different blood pressure monitor was installed in our cardiovascular laboratory. For the first wave of participants, blood pressure was measured using a NIBP100a module (Biopac Systems Inc., Goleta, CA). For the second wave of participants, blood pressure was measured using a Nexfin monitor (BMEYE, Amsterdam, The Netherlands). To ensure the type of equipment did not affect our measures, we added this as a Factor in our design. Type of blood pressure equipment did not moderate the effect of Dimension on CV-responses (all F s < 1.01, p s > .3).

the morality condition. There were no differences between conditions in private collective self-esteem, $F(1, 66) = 1.32, p = .25$.

As anticipated, participants in the morality condition were more inclined to think that their behavior would be perceived as stable by their fellow ingroup members ($M = 4.68, SD = 1.09$) than participants in the competence condition ($M = 3.97, SD = 1.04$), $F(1, 66) = 7.66, p = .007, \eta_p^2 = .10$. Perceptions of pervasiveness arguably undermine the perceived feasibility of changing the group’s impression of one’s behavior, thereby increasing the perceived (required) effort resulting in higher demand-appraisals after a negative morality evaluation compared to a negative competence evaluation.

Cardiovascular reactivity

We computed mean scores for HR, PEP, CO and TPR for the last minute of the baseline and the first minute of the speech task. We then computed reactivity scores (Kamarck et al., 1992) by subtracting the baseline scores from the speech task scores (see Table 3.1). For each reactivity score, we transformed outliers (i.e., raw scores more than 3 *SDs* from the mean) to the most extreme score within 3 *SDs* above or below the mean.

Table 3.1
Means and Standard Errors of Cardiovascular Reactivity as a function of Evaluative Dimension in Experiment 3.1

	Morality	Competence
	<i>M (SEM)</i>	<i>M (SEM)</i>
Heart Rate	7.72 (1.69)	9.64 (1.72)
Pre-Ejection Period	-6.03 (3.62)	-9.36 (2.92)
Cardiac Output	0.07 (0.09)	0.33 (0.08)
Total Peripheral Resistance	282.68 (202.17)	-95.56 (178.62)

Task engagement. Overall, HR increased and PEP decreased significantly from zero, in both conditions, during the speech task, $t_s > 3.48$, $p_s < .001$, confirming sufficient overall task engagement and goal relevance. There were no differences between conditions in both HR and PEP ($F_s < 1$, $p_s > .44$).

Challenge and Threat. We calculated a single Threat – Challenge Index (i.e., TCI) using standardized z-scores of CO and TPR in the following formula: $ZTPR * -1 + ZCO * 1$ (e.g., Blascovich et al., 2004; Scheepers et al., 2012; Seery et al., 2010). Greater values indicate a relative tendency towards challenge, whereas lower values are indicative of a relative tendency towards threat. We analyzed TCI by means of an ANOVA with dimension as independent variable and included the baseline TCI values and PEP reactivity scores as covariates to control for differences in initial challenge and threat responses and engagement (e.g., Seery, Blascovich, Weisbuch, & Vick, 2004; Weisbuch-Remington, Mendes, Seery, Blascovich, 2005). As predicted, participants in the morality condition were relatively more threatened ($M = -0.72$, $SEM = 0.42$) than participants in the competence condition, who were relatively more challenged ($M = 0.35$, $SEM = 0.37$), $F(1, 37) = 4.17$, $p = 0.048$, $\eta_p^2 = .10$ (see Figure 3.1). Thus, being reminded of one's own behavior being evaluated as immoral by others in a group is relatively more threatening than one's own behavior being evaluated as incompetent.

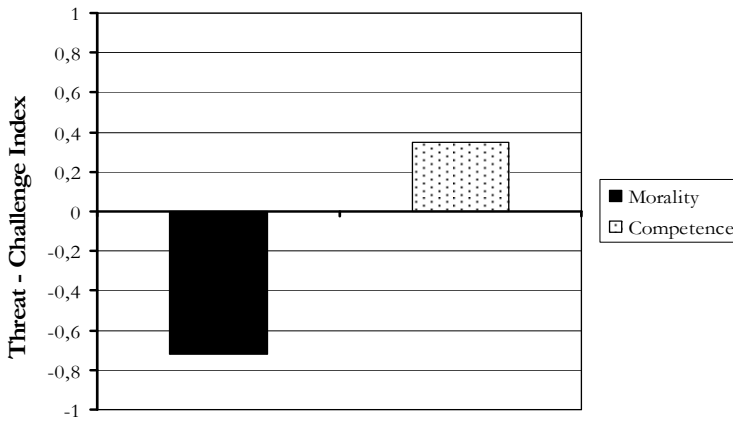


Figure 3.1

Threat – Challenge Index as a function of evaluative dimension of own prior behavior in a group context, Experiment 3.1. Higher scores indicate a relative tendency towards challenge; lower scores indicate a relative tendency towards threat.

Experiment 3.2

Whereas in Experiment 3.1 participants were exposed to negative evaluations of own prior behavior in a group context, in Experiment 3.2 participants were exposed to evaluations of prior immoral or incompetent behavior of another ingroup member. In order to increase the salience of the lack of morality or competence displayed by another ingroup member, we enhanced the contrast between group members' own behavior and the behavior of another group member. We did so by instructing group members to first recall a situation in which their own behavior was *positively* evaluated as moral or competent by others in a group context. Participants sent their behavioral description to others in the group via a chat circuit, and in turn received preprogrammed information allegedly indicating the behavioral descriptions provided by other group members. We varied the behavioral description of one of the ingroup members to convey that this group member had behaved in a way that was *negatively* evaluated as *immoral* or *incompetent*.

We assessed cardiovascular reactivity during the subsequent group task, and predicted that an ingroup member's behavior indicating immorality would induce more threat than an ingroup member's behavior indicating incompetence. In addition to measures of demand-appraisals (i.e., perceived stability of behavior) and collective self-esteem, in the second experiment we also assessed identification with the group to rule out the possibility that a negative (morality) evaluation of an ingroup member would lead participants to disengage from the group and the joint task.

Method

Participants and Design. Forty-nine undergraduate students (33 women, $M_{\text{age}} = 21.73$ years, $SD = 3.22$) participated in this experiment. They received 6 Euros or course credits for participation. Using a 1-factor (Dimension: Morality vs. Competence) between-subjects design, participants were randomly assigned to one of the two experimental conditions. Participation took about 45 minutes.

Procedure. The general procedure of the second experiment was similar to that of the first. Following the cover story of Experiment 3.1, we introduced the group task and assessed collective self-esteem and a pre-measure of group identification, as well as a baseline measure of cardiovascular responses. After participants (again referred to as “participant 2”) had provided descriptions of their own behavior that was positively evaluated as *moral* [*competent*] by others in a group context, they received preprogrammed behavioral descriptions of the others in their group. One of the group members (i.e., “participant 4”) allegedly had described *immoral* [*incompetent*] behavior, indicating being unable to recall an instance in which the group positively evaluated his/her moral or competent behavior and thus describing an instance in which s/he was confronted by others in the group with his/her *immoral* [*incompetent*] behavior.⁹ This served as our manipulation of the negative evaluation of an

⁹ The behavior was kept constant across conditions, but with different implications for the morality or competence of this ingroup member. The exact wording of the manipulation was as follows: “At my job as a member of a committee that organizes workshops, we also have to design flyers to promote the workshops. Designing the flyers always takes forever. One time I just went ahead and sent the flyer to the printer myself ...” In the morality condition the manipulation continued with “... without consulting the other committee members. I now have 400 flyers, but I

ingroup member's behavior in terms of morality or competence. Participants then completed a questionnaire measuring their identification with the group and the perceived stability of the behavior of participant 4. Next, they engaged in a speech task in which they presented their ideas about the role of *morality* [*competence*] in the upcoming group task, with the purpose of forming an impression of the others in the group and facilitating collaboration during the group task. This was the motivated performance situation that allowed us to assess cardiovascular indices of challenge and threat.

Measures. As a check of the effectiveness of the dimension manipulation, participants indicated whether the focus of the group task was: A. *moral* or B. *competent* behavior. We measured private collective self-esteem ($\alpha = .88$), group identification (Ellemers, Spears, & Doosje, 1999; four items; e.g., "I feel connected to the others in this group"; $\alpha = .92$), and demand-appraisals in terms of stability of behavior ("I think participant 4 will display similar behavior in the future"). Similar to the procedure described in Experiment 3.1, we took continuous cardiovascular measures of HR, PEP, CO, and TPR throughout the experiment.

Results and Discussion

Four participants reported suspicion about the cover story and their data were therefore excluded from analyses. This resulted in a sample of 45 participants. Due to technical errors we lost physiological data of an additional two participants, leaving 43 participants with usable cardiovascular data.

Checks. The manipulation of dimension was successful: In both conditions, 100% of participants indicated the correct dimension as the focus of the group task, $\chi^2(1, N = 43) = 43.00, p < .001$. As anticipated, participants in the morality condition indicated that they perceived the behavior of participant 4 to be somewhat more stable ($M = 5.09, SD = 1.34$) than participants in the competence condition ($M = 4.45, SD = 1.18$), $F(1, 41) = 3.07, p = .09, \eta_p^2 = .07$.

have lost there trust." In the competence condition the manipulation continued with "... without changing the date of the workshop. I now have 400 flyers, with the wrong date on it."

A marginally significant effect of dimension emerged on collective self-esteem, $F(1, 41) = 3.59$, $p = .065$, $\eta_p^2 = .08$; participants in the morality condition reported slightly higher private collective self-esteem ($M = 5.71$, $SD = 1.11$) than participants in the competence condition ($M = 5.04$, $SD = 1.20$). Including collective self-esteem as a covariate in the subsequent analyses did not alter the effect of dimension on our dependent measures, nor did it predict the dependent measures.

A repeated measures ANOVA with time of measurement (Time 1 and Time 2) as within-subject variable and dimension as between-subject variable on identification revealed a main effect of time of measurement: Group identification increased after the alleged group interaction (Time 1: $M = 3.31$, $SD = 1.46$; Time 2: $M = 4.48$, $SD = 1.34$), $F(1, 41) = 22.03$, $p < .001$, $\eta_p^2 = .35$. The interaction between time of measurement and dimension was not significant, $F(1, 41) = 1.60$, $p = .21$, $\eta_p^2 = .04$.

Cardiovascular reactivity.

Task engagement. In both conditions, HR increased and PEP decreased significantly from zero during the speech task, $ts > 2.78$, $ps < .01$, confirming task engagement and goal relevance (see Table 3.2). There were no differences between conditions in both HR and PEP ($F_s < 1$, $ps > .48$).

Table 3.2

Means and Standard Errors of Cardiovascular Reactivity as a function of Evaluative Dimension in Experiment 3.2

	Morality	Competence
	<i>M (SEM)</i>	<i>M (SEM)</i>
Heart Rate	7.54 (1.50)	5.84 (1.84)
Pre-Ejection Period	-6.96 (1.99)	-5.53 (1.99)
Cardiac Output	0.15 (0.05)	0.19 (0.05)
Total Peripheral Resistance	403.50 (255.74)	-318.72 (249.82)

Challenge and threat. An ANOVA on the Threat – Challenge Index, again with dimension as independent variable and baseline TCI values and PEP reactivity scores as covariates, revealed, as predicted, that participants in the morality condition showed a relative tendency towards threat ($M = -0.29$, $SEM = 0.29$), whereas participants in the competence condition showed a relative tendency towards challenge ($M = 0.37$, $SEM = 0.29$), $F(1, 39) = 4.94$, $p = 0.03$, $\eta_p^2 = .11$ (see Figure 3.2).

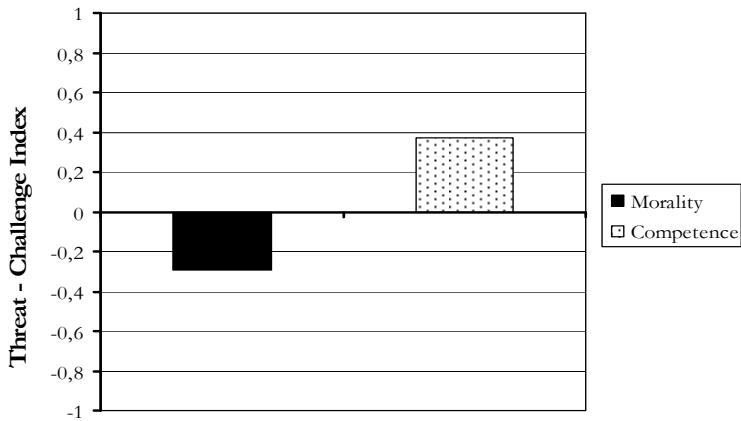


Figure 3.2
Threat – Challenge Index as a function of evaluative dimension of an ingroup member’s prior behavior, Experiment 3.2. Higher scores indicate a relative tendency towards challenge; lower scores indicate a relative tendency towards threat.

Thus, the evaluation of an ingroup member’s behavior as immoral (vs. incompetent) induces a motivational state of threat rather than challenge in other group members. Considering the impact of morality on individuals’ self-image and motivation (e.g., Aquino & Reed, 2002; Ellemers et al., 2008), a plausible response to the immorality of an ingroup member would be to disengage from the group task and disidentify with the group, especially when

group membership is relatively unimportant which can be the case with experimental groups like those created in the current study. Our data rule out this alternative explanation, as identification even increased during the course of the experiment (see also Doosje, Ellemers, & Spears, 1995), and private collective self-esteem was slightly raised in the morality condition. In addition, there were no differences between conditions in cardiovascular reactivity indicative of task engagement (increased HR, decreased PEP). Thus, participants remained attached to the group and engaged in the task when morality was made salient, even though collaborating with an ingroup member who previously displayed immoral behavior was motivationally threatening rather than challenging for them.

General Discussion

In two experiments we investigated how negative intragroup morality vs. competence evaluations affect the motivational states of individual group members. In Experiment 3.1, we demonstrated that own prior behavior evaluated as immoral (as compared to incompetent) by others in a group context is perceived as more pervasive (i.e., stable) and induces a relative state of threat rather than challenge. We found similar effects for negative evaluations of another ingroup member's behavior. In Experiment 3.2, another ingroup member's behavior evaluated as immoral (vs. incompetent) elicited a relative threat rather than challenge response in group members.

These results extend prior work and are in line with a social identity perspective on morality that argues for a group-based analysis of how morality regulates social behavior (Ellemers & Van den Bos, 2012). The current data support the notion that the relevance of morality judgments stems from their implications for group inclusion and acceptance (Leach et al., 2013). Extending previous research that revealed the impact of morality vs. competence ingroup norms on behavioral choices (e.g., Ellemers et al., 2008), we assessed how morality judgments of individual behavior in an intragroup setting induce specific motivational states. The present results support the notion that morality is of particular importance to group members. That is, in Experiment 3.2 we demonstrated how the behavior of someone important for one's identity (i.e., an ingroup member) affects the motivational state of the self as a group member. If the threat elicited by the mere presence of immoral ingroup

members would impact on personal identity concerns, this should have decreased the willingness to identify with the group, as a way to dissociate the self from the immoral individual. However, group identification was retained and improved, even when the presence of an immoral ingroup member constituted a source of threat. Future research might further distinguish between the different sources of identity threat, by comparing responses to the behavior of ingroup members to responses to the behavior of other individuals in an interpersonal context, or to responses to the behavior of outgroup members in an intergroup context.

By examining the cardiovascular indices of motivational states, the current research also provides further insight in the psychophysiological processes elicited by morality judgments. Both studies showed that reminders of immorality (vs. incompetence) in a group context are threatening rather than challenging, indicating that morality increases the salience of situational demands to the extent that they outweigh available resources. This notion is further supported by our observation that group members perceive immoral behavior to be more pervasive than incompetent behavior. The more pervasive the focal behavior is perceived to be, the more effort is needed to change other people's judgments, thereby increasing the situational demands. This has implications for the behavioral choices of group members and outcomes for the group. When group members experience threat rather than challenge, they become more rigid in their joint decision making (De Wit et al., 2012), implying that they tend to hold on to their initial viewpoints. Evaluations of immoral (vs. incompetent) behavior, which induce a state of threat rather than challenge, may consequently be less efficient in eliciting behavioral change, because threat tends to impede rather than foster attitudinal or behavioral adjustments.

Group members critically evaluate the behavior of their fellow ingroup members in an attempt to elicit desirable behaviors that reaffirm the positive social identity (e.g., Levine & Moreland, 1994). From the perspective of the group it might intuitively seem most effective to negatively evaluate their group members' behavior in terms of morality rather than competence in order to foster behavioral change. Considering the importance of morality for the individual (e.g., Aquino & Reed, 2002) and group members' motivation to adhere to moral (vs. competence) norms (Ellemers et al., 2008), this seems

highly plausible. Yet, as we have argued and shown in the current research, communicating moral disapproval of the behavior of individual group members might actually be a counter-efficient strategy to achieve behavioral change. Indeed, negative evaluations of group members' behavior in terms of morality (vs. competence) elicit a motivational state of threat rather than challenge. Moral disapproval thus does not provide an easy tool for a group to shape the behavior of its members. When the aim is to motivate group members towards behavioral change, using moral disapproval might backfire and actually be counterproductive.

Chapter 4

Who Gets to Join the Club?

Behavioral Responses

This chapter is based on Van der Lee, R., Ellemers, N., & Scheepers, D. (2013). Who gets to join the club? Responses to prospective group members depend on their morality rather than their competence. *Manuscript under review*.

Applying for a new job, enrolling at university, and moving to a new country are all examples involving an individual who seeks to join a new group, be it a company, school, or country. In all these cases, the individual is a prospective group member. Before being included or accepted by the group, prospective group members are often subjected to a selection procedure (i.e., assessments, background checks). Since groups are motivated to maintain a positive social identity (Tajfel & Turner, 1979), they evaluate the extent to which individuals seek inclusion and meet the group's standards (Ellemers & Jetten, 2013; Levine & Moreland, 1994). That is, groups evaluate the extent to which prospective members might contribute to or harm the group's positive social identity. As a consequence, prospective group members run the risk of being excluded or prevented from becoming a full member (e.g., not being hired, not being admitted, green card application being disapproved).

In the current research, we examine when and why prospective group members might be excluded from group membership. Specifically, we propose that group members' responses to prospective group members depend on how they can contribute to the group in terms of its standards of two central dimensions of social judgments, namely morality and competence (e.g., Fiske, Cuddy, Glick, & Xu, 2002; Leach, Ellemers, Barreto, 2007). Considering the importance of morality for individuals' and groups' identity (e.g., Aquino & Reed, 2002; Leach et al., 2007), we argue that responses to a prospective group member are particularly affected by the individual's morality. As will be outlined in more detail below, we propose that individuals who lack morality pose a threat to the positive social identity, and are therefore more likely to be excluded from the group than individuals whose competence does not meet the group's standards. Conversely, individuals who can contribute to the group's morality are more likely to be included and accepted as new group members than highly competent individuals who might "outsmart" others in the group. In three experiments, we aim to examine the validity of this reasoning and shed light on the predominant role of morality in the evaluation of and responses to prospective group members.

Morality vs. competence as sources for a positive social identity

According to Social Identity Theory (SIT; Tajfel & Turner, 1979), people strive towards a positive social identity, because they derive part of their self-esteem

from their group memberships. In principle, any domain can be used to establish a positive social identity. Up until recently, competence has been considered the primary dimension that determines the group's status in terms of success, both in outcomes and in resources (e.g., Bettencourt, Dorr, Charlton, Hume, 2001; Ellemers, 1993; Fiske et al., 2002; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). However, more recent work revealed that morality, rather than competence, may actually be the more important dimension for a positive evaluation of an ingroup (e.g., Leach et al., 2007). For instance, group members are likely to adhere to the moral norms of the group (Ellemers, Pagliaro, Barreto, & Leach, 2008) since they anticipate gaining more ingroup respect by doing so than from adherence to the group's competence norms (Pagliaro, Ellemers, & Barreto, 2011). Accordingly, in a field experiment among school teachers, the perceived morality of a prospective new manager, rather than his or her competence, was the primary determinant of group members' willingness to help the new manager adjust (Pagliaro, Brambilla, Sacchi, D'Angelo, & Ellemers, 2013).

Morality thus appears to be an important dimension for evaluations of the group as well as for its members, and has a particular potential to contribute to a positive social identity. When morality is lacking, however, this raises a potential threat to the positive social identity of the group. Indeed, information suggesting a lack of morality is considered to be highly diagnostic of individual dispositions and predictive of future behavior (Skowronski & Carlston, 1987). When the self is evaluated by the group as lacking in morality, this has a negative impact on individuals' affective responses and perceived coping abilities in their striving towards becoming a moral group member (Van der Lee, Ellemers, & Scheepers, 2012a). Similar threat experiences are induced when *another* group member is seen as lacking morality, while this is less likely when another group member lacks competence (Van der Lee, Ellemers, & Scheepers, 2012b). In sum, we argue that individuals displaying high morality have more potential to contribute to the group's positive social identity than highly competent individuals. Conversely, individuals showing a lack of morality pose a greater threat to the group's positive social identity than individuals who lack competence. Thus, we predict that the morality of prospective group members elicits more pronounced acceptance versus exclusion responses from the group than their competence.

Responses to prospective group members

As explained above, group members strive to achieve and are motivated to maintain a positive social identity of their group (Tajfel & Turner, 1979). In doing so, group members evaluate the extent to which group members can contribute to the group's goals and norms (Levine & Moreland, 1994; Marques, Abrams, Paez, & Martinez-Taboada, 1998; Moreland & Levine, 1982). This evaluation process is particularly relevant for individuals seeking inclusion in the group, as it provides the group with information about a potential contribution or threat to the positive social identity of the group (Ellemers & Jetten, 2013). The group's judgment of a prospective group member, reflected in the outcome of the evaluation process, should thus determine the group's responses towards him or her. When it seems that the prospective group member can contribute to the group's positive social identity, the group will tend to accept the individual, and show a willingness to socialize him or her by teaching appropriate behaviors and attitudes (Moreland & Levine, 1982). When, however, the prospective group member does not seem to contribute to the group's image or even threatens it, the individual is likely to elicit negative emotional and behavioral responses, conveying derogation and social exclusion (e.g., Marques & Paez, 1994; Moreland & Levine, 1982; Pinto, Marques, Levine, & Abrams, 2010; Williams, Forgas, & Von Hippel, 2005).

As indicated above, group members are generally inclined to evaluate prospective group members primarily on the domain of competence, especially when task performance is relevant (e.g., in educational or work settings). This is reflected in research in this domain to date. Such competence evaluations usually contain an assessment of—attitudes towards—success, for instance when the individual is seen to undermine the group's success (Abrams, Marques, Bown, & Henson, 2000; Pinto et al., 2010) or underperforms compared to the other group members (Marques & Yzerbyt, 1988). In some studies, the domain of evaluation is ambiguous, for instance when an individual displays deviant personality traits (e.g., Abrams et al., 2000; Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012; Marques, Abrams, & Serôdio, 2001).

Besides a focus on competence evaluations, the majority of studies investigating intragroup evaluations have focused on the impact of, and

responses to, group members who threaten the group's image because they could not live up to the group's performance expectations (i.e., negative deviants; the Black Sheep Effect; Marques, Yzerbyt, & Leyens, 1988). Some studies, however, also explored the impact of, and responses to, group members who are superior to the other group members (i.e., positive deviants; e.g., Abrams et al., 2000). To the extent that they deviate from what is typical for the group, individuals who are superior to other group members might—just like inferior individuals—challenge the group's cohesiveness in terms of shared standards among its members (Brown, 2000; Hornsey, 2008; Tajfel & Turner, 1979). Indeed, it has been argued that groups may also desire to exclude group members who positively deviate from the group because they reveal that other group members may be deficient or implicitly condemn the group's standards (Monin, Sawyer, & Marquez, 2008; Parks & Stone, 2010). In general, however, a superior individual has the potential to enhance the group's identity, because the positive evaluation of the individual might reflect positively on the evaluation of the group as a whole (Schmitt, Silvia, & Branscombe, 2000). Consequently, individuals who are superior to others in the group are often liked and praised (Hogg & Hardie, 1991).

Thus, whereas these recent studies have examined the different *directions* in which individuals can distinguish themselves from the group—i.e., through inferiority vs. superiority (e.g., Pinto et al., 2010), research to date has not systematically compared the impact of different evaluation *dimensions* on responses towards prospective group members. Because morality seems to be more important than competence for a positive social identity of the group (e.g., Leach et al., 2007), we propose that responses to prospective group members depend on the *dimension* of the evaluation. Specifically, we argue that positive or negative evaluations on the moral dimension elicit more pronounced responses from the group than positive or negative evaluations on the dimension of competence.

The current research

In the current research, we compare the group's responses to evaluations of prospective group members in the domain of competence with their responses to evaluations in the domain of morality. The central hypothesis is that morality evaluations of prospective group members elicit more pronounced

responses from the group than evaluations of competence. Deficient morality is perceived as highly diagnostic of the individual and predictive of future behavior (Martijn, Spears, Van der Pligt, & Jakobs, 1992; Skowronski & Carlston, 1987). We therefore predict that individuals who lack morality pose a threat to the positive social identity of the group, and consequently elicit negative responses such as derogation and are more likely to be excluded from group membership than individuals who lack competence. Conversely, because individuals who are morally superior have the potential to enhance the group's moral image, we anticipate that individuals who excel in morality arouse positive responses and are more likely to be accepted as new group members than individuals who excel in competence.

We examined these predictions in three experiments. In Experiment 4.1, we investigate responses towards prospective group members lacking morality or competence. In Experiment 4.2, we focus on responses towards prospective group members who are superior to the group in terms of morality or competence. Experiment 4.3 addresses responses to positive as well as negative evaluations of prospective group members in terms of morality and competence. In all three experiments, we assess responses towards prospective group members by examining group members' willingness to exclude or to socialize the prospective group members, and capture actual exclusion behavior. In addition to measuring (behavioral) responses to the prospective group member, we also measure how these individuals are perceived in the first place. More specifically, in Experiments 4.1 and 4.2, we examine the perceived fit of the prospective group member with the group; in Experiment 4.3, the prospective group member was explicitly rated on specific traits (arrogance, trustworthiness). Finally, in Experiments 4.1 and 4.2, we examine the extent to which the prospective group member arouses social identity threat, while in Experiment 4.3 we check how evaluations of the prospective group member impact on the position and motivation of other group members. Thus, in three experiments we examine group members' responses towards prospective group members who either lack or excel in terms of morality or competence.

Experiment 4.1:

Prospective group members lacking morality vs. competence

Participants in this experiment engaged with other (fictitious) participants in a collaborative task for which morality or competence—depending on condition—was said to be the main dimension of performance. In order to enhance a sense of common group value, we gave participants bogus feedback suggesting that the group members attach average and similar value to either morality or competence. By affirming group members' own prototypicality in terms of morality or competence, we strove to minimize their attention to and concern about their own position in the group. Next, while preparing for the collaborative task a prospective group member was introduced, who was said to attach less value to either morality or competence than the other group members. The prospective group member thus appeared to lack morality or competence compared to the group. We then assessed participants' perceptions of and responses towards the prospective group member. We predicted that an individual who attached little value to morality would arouse more social identity threat, and would consequently be more likely to be excluded from the group than an individual who attached little value to competence. Because an individual lacking morality is argued to pose a greater threat to the group's positive identity than an individual lacking competence, we also predicted that group members would perceive less fit (i.e., more differences) between the group and an individual lacking morality rather than competence.

Method

Participants and Design. Ninety-seven undergraduate students (92 women, $M_{\text{age}} = 19.38$ years, $SD = 3.04$) participated in this experiment. They received three Euros or course credits for participation. Using a 1-factor (Dimension: Immoral vs. Incompetent) between-subjects design, participants were randomly assigned to one of the two experimental conditions. Participation took approximately 30 minutes.

Procedure. Participants arrived at the laboratory and were seated in separate cubicles. The cover story indicated that the experimental session consisted of

three separate studies. The first was said to be about validating personality measures, the second about attitude formation, and the third about cooperation. In reality, the first study consisted of a bogus questionnaire later to be used to induce the manipulation, the second was an unrelated filler task, and the third contained the actual study. When starting the third study, participants—who were all referred to as “participant B”—were told that, since this study was about cooperation, they would be collaborating in a group with several other participants on a management dilemma task. At this point, two other (fictitious) participants—i.e., participants “A” and “C”—were also said to be ready to start the collaboration task.

The task involved solving dilemmas which often require a trade-off between moral and competent considerations. Participants were specifically asked to focus on either the moral or competent considerations, depending on the experimental condition. In order to enhance the collaboration, participants first received background information about their group members’ *morality* [*competence*]. At this point, participants were told that the questions that they answered in “Study 1” of this experimental session, supposedly to validate personality measures, actually measured the value people attach to either morality (i.e., honesty, trustworthiness) or competence (i.e., skills, intelligence). Allegedly based on their answers and reaction times, participants were furthermore told that we computed a score indicating the extent to which they value *morality* [*competence*]. A graph was shown that displayed the value participants and their group members attached to *morality* [*competence*]. Below the graph, the explicit conclusion was drawn that “on *morality* [*competence*] you score similar to your group members and you attach average value to *morality* [*competence*]. You are equally inclined to choose *moral* [*competent*] solutions and show *moral* [*competent*] behavior as your group members”.

Next, participants were given several example dilemmas to solve individually with the purpose of preparing them for the collaboration task. During this practice round, a popup screen appeared on participants’ computer screen informing them about a fourth (fictitious) participant—i.e., “participant D”—being ready to join their group. However, since participants were already in a group and received information about each other, they and their group members would first have the opportunity to discuss whether or not they wanted participant D to join their group for the collaboration task. In

order to do so, they would receive participant's D score on *morality* [*competence*], and then be presented with several questions which would help them to structure their thoughts about participant D.

To induce the manipulation, we again showed the graph which now also included the value that participant D attached to either morality or competence. Below the graph it was explicitly described that "participant D scores lower on *morality* [*competence*] than the other group members. S/he attaches less, and below average, value to *morality* [*competence*]. Participant D is therefore less inclined to choose *moral* [*competent*] solutions and to show *moral* [*competent*] behavior than the other group members". Participants were then presented with a questionnaire which comprised the dependent measures. After completion, a chat-service popped-up in which group members A, B and C could communicate and discuss the position of participant D. Participants were, ostensibly randomly, selected to be the first to sent a message to the other group members about whether and why they thought participant D could or could not join the group for the collaboration task. When participants had sent their message, they were told they had reached the end of the study. All participants were then fully debriefed, paid and thanked for their participation.

Measures

Unless reported otherwise, all items were presented on 7-point scales (1 = *completely disagree* to 7 = *completely agree*).

Checks. To assess the effectiveness of the manipulation, participants indicated the extent to which they perceived the prospective group member to be moral (3 items: "reliable", "sincere" and "honest", $\alpha = .93$) and competent (3 items: "intelligent", "competent" and "skilled", $\alpha = .76$; Leach et al., 2007). We also measured group identification and collective self-esteem to assess the extent to which the experimental groups were relevant to participants. Group identification was measured with four items (Ellemers, Spears, & Doosje, 1999; e.g., "I felt connected to the others in this group"; $\alpha = .78$). Private collective self-esteem was also measured with 4 items (Luhtanen & Crocker, 1992; e.g., "I feel good about this group"; $\alpha = .71$).

Perception of the prospective group member. We used a measure of intragroup differentiation (Marques et al., 1998) to assess how similar or different participants perceived the prospective group member to be from the group (1 = *very similar* to 9 = *very different*).

Social identity threat. Participants indicated the extent to which they perceived the prospective group member to be e.g., “threatening”, “offending”, “damaging” (8 items; $\alpha = .94$) to the group as a measure of social identity threat.

Responses towards the prospective group member. The tendency to exclude the prospective group member from the group was measured with eight items (e.g., “I do not want participant D to join this group”, $\alpha = .92$). Additionally, we included socializing responses towards the prospective group member (Pinto et al., 2010; e.g., “I will try to convince D to change the value s/he attaches to *morality* [*competence*], $\alpha = .83$).¹⁰

Exclusion-behavior. Via the chat-circuit, participants were asked to write a message to their group members stating whether and why they wanted to include or exclude the prospective group member from the collaboration task. We coded the statements on whether or not they communicated exclusion (1 = inclusion, 2 = exclusion) as a behavioral measure of exclusion.

Results

The data of ten participants were removed from all analyses due to expressed suspicion about the cover story, resulting in data of 87 participants in the final analyses. Unless reported otherwise all data were analyzed by means of Analyses of Variance with dimension as independent variable.

¹⁰ To confirm that the tendency to exclude and to socialize a prospective group member can be considered two separate response tendencies, we conducted a principal component analysis, using varimax rotation, on the 14 items. The analysis yielded a 2-component solution, which factor loadings explained 64.51% of the total variance. Eigenvalues were 5.75 for the first component (i.e., tendency to exclude) and 3.28 for the second component (i.e., tendency to socialize), thereby confirming the distinction between exclusion and socializing tendencies as responses towards prospective group members.

Checks. The manipulation of dimension was successful: Participants in the immoral condition indicated that they perceived the prospective group member to be less moral ($M = 3.63$, $SD = 1.07$) than participants in the incompetent condition ($M = 5.25$, $SD = 0.93$), $F(1, 85) = 56.95$, $p < .001$, $\eta_p^2 = .40$. Moreover, participants in the incompetent condition indicated to perceive the prospective group member to be less competent ($M = 4.10$, $SD = 0.68$) than participants in the immoral condition ($M = 5.00$, $SD = 0.69$), $F(1, 85) = 37.21$, $p < .001$, $\eta_p^2 = .30$.

For private collective self-esteem, a significant effect of dimension emerged, $F(1, 85) = 9.98$, $p = .002$, $\eta_p^2 = .10$. Participants in the immoral condition reported more private collective self-esteem ($M = 5.39$, $SD = 0.78$) than participants in the incompetent condition ($M = 4.89$, $SD = 0.72$), suggesting that individuals feel better about their group when it is a moral group rather than when it is a competent group. We found no differences in group identification ($F < 1$, $p = .63$) between the experimental conditions.

Perception of the prospective group member. Participants perceived more differences between the prospective group member who lacked morality and the group ($M = 6.56$, $SD = 1.52$) than between the prospective group member who lacked competence and the group ($M = 5.61$, $SD = 1.26$), $F(1, 85) = 9.99$, $p = .002$, $\eta_p^2 = .10$.

Social identity threat. As predicted, the prospective group member who lacked morality induced more social identity threat ($M = 3.13$, $SD = 1.14$) than the prospective group member who lacked competence ($M = 2.48$, $SD = 1.06$), $F(1, 85) = 7.55$, $p = .01$, $\eta_p^2 = .08$.

Responses to the prospective group member. Participants were more inclined to exclude the prospective group member who lacked morality ($M = 3.48$, $SD = 1.38$) than the prospective group member who lacked competence ($M = 2.79$, $SD = 1.19$), $F(1, 85) = 6.26$, $p = .01$, $\eta_p^2 = .07$. We found no differences between conditions in socializing responses, $F(1, 85) = 0.10$, $p = .75$, $\eta_p^2 = .001$.

Mediation. To examine whether the effect of dimension on the tendency to exclude the prospective group member was mediated by social identity threat, we conducted bootstrapping analyses (Preacher & Hayes, 2004), using the SPSS macro for simple mediation with 5000 bootstrap resamples. The tendency towards exclusion was entered as dependent variable, with dimension as predictor and social identity threat as mediator.

The bootstrap results showed that the indirect effect of dimension on the tendency towards exclusion through social identity threat was significant with a point estimate of .56 and a 95% BCa CI of 0.1481 to 0.9894, indicating full mediation (see Figure 4.1). The prospective group member lacking morality (vs. competence) elicited more social identity threat, which led to a greater tendency to exclude the prospective group member with a moral (vs. competent) deficiency.

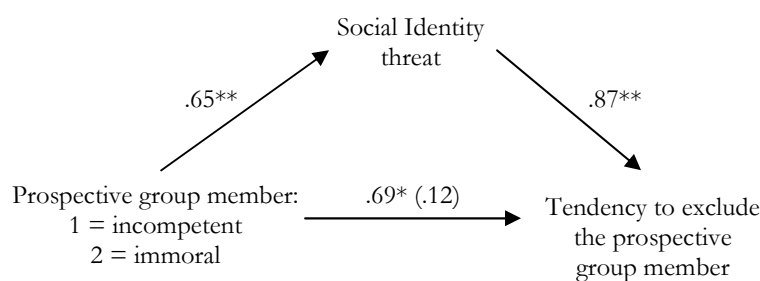


Figure 4.1

*Social identity threat mediates the relationship between the evaluation of the prospective group member and the tendency to exclude the prospective group member, Experiment 4.1; * $p < .05$, ** $p < .01$*

Exclusion-behavior. Five participants failed to make a statement about including or excluding the prospective group member in the task, resulting in 82 participants with behavioral data. We found no differences between conditions for exclusion-behavior, $\chi^2(1, N = 82) = 0.01, p = .94$. Overall, statements explicitly conveying exclusion were rare. In the immoral condition, 9.5% of participants communicated exclusion of the prospective group member, compared to 10.0% of participants in the incompetent condition. Exclusion-behavior was not correlated with the tendency to exclude the prospective group member, $r = .05, ns$.

Discussion

In this experiment, we examined how groups respond to prospective group members with a moral vs. competent deficiency. As predicted, we demonstrated that a prospective group member who lacks morality elicits more social identity threat and is therefore more likely to be excluded than a prospective group member who lacks competence. These results confirm the importance of morality for groups and individual group members (e.g., Aquino & Reed, 2002; Leach et al., 2007), and the perceived diagnosticity of information indicating a lack of morality for the overall assessment of the individual (Skowronski & Carlston, 1987). That is, the lack of morality of a prospective group member is likely to be perceived as a relatively unchangeable characteristic of the individual, and poses therefore a greater threat to the positive social identity than a less diagnostic prospective group member who lacks competence. In turn, this threat causes group members to respond more harshly towards the prospective group member lacking morality, as the mediation on the tendency to socially exclude the prospective group member shows. However, the behavioral measure we used—which consisted of written statements—revealed that participants rarely suggested that an inferior prospective group member should be excluded from the group, even though they did indicate on rating scales that this was what they preferred. Apparently, participants were reluctant to actually take the initiative to propose exclusion in a written statement, possibly because they perceived such a deliberate message (Hamilton & Mineo, 1998)—for which they could be held accountable—as unwarranted, given the context.

As we argued before, the importance of morality for a positive social identity of the group should not only result in more pronounced responses towards prospective group members who lack morality, but also towards prospective group members who excel in terms of morality. Whereas prospective group members lacking morality pose a threat to the positive social identity, we argue that highly moral prospective group members have the potential to enhance the positive social identity of the group. We therefore predict that a highly moral prospective group member is more likely to be included in the group than a highly competent prospective group member. We tested this prediction in the second experiment.

Experiment 4.2:

Prospective group members excelling in morality vs. competence

In this experiment, participants were confronted with a prospective group member who allegedly attached *more* value to morality or competence than the other group members (i.e., a highly moral or competent prospective group member). We again assessed participants' perceptions of, and responses towards, the prospective group member. We predicted that a highly moral prospective group member would induce less social identity threat, and would consequently be more likely to be included in the group than a highly competent prospective group member. In addition, we predicted that group members would perceive better fit (i.e., more similarities) between the group and a highly moral rather than competent individual.

Method

Participants & Design. Fifty-three undergraduate students (39 women, $M_{\text{age}} = 21.57$, $SD = 4.17$) participated in this experiment in return for three Euros or course credits. Using a 1-Factor (Dimension: Moral vs. Competent) between-subjects design, participants were randomly assigned to one of the two experimental conditions.

Procedure. The procedure was identical to Experiment 4.1, except for the direction of the manipulation. Participants were told that the prospective group member, participant D, scored higher on *morality* [*competence*] than the

other group members, and attached more, and above average, value to *morality* [*competence*]. Participant D was thus more inclined to choose *moral* [*competent*] solutions and to show *moral* [*competent*] behavior than the other group members. After the manipulation, the questionnaire comprising the dependent measures followed.

Measures. The questionnaire comprised similar measures and items as in Experiment 4.1. The checks consisted of a manipulation check of the prospective group member's perceived morality ($\alpha = .93$) and competence ($\alpha = .77$), group identification ($\alpha = .82$), and private collective self-esteem ($\alpha = .72$). Perceptions of the prospective group member were again assessed by means of perceived fit of the prospective group member with the group (1 = *very different* to 9 = *very similar*). We then measured social identity threat ($\alpha = .91$) and the tendency to exclude ($\alpha = .96$) and to socialize ($\alpha = .85$) the prospective group member.¹¹ Finally, we assessed exclusion-behavior in a simulated chat-circuit.

Results

Due to expressed suspicion about the cover story, we removed data of four participants from all analyses, resulting in usable data of 49 participants.

Checks. The manipulation of dimension was successful: Participants in the moral condition perceived the prospective group member to be more moral ($M = 5.67$, $SD = 0.89$) than participants in the competent condition ($M = 3.16$, $SD = 0.90$), $F(1, 47) = 95.52$, $p < .001$, $\eta_p^2 = .67$. Moreover, participants in the competent condition perceived the prospective group member to be more competent ($M = 5.53$, $SD = 0.69$) than participants in the moral condition ($M = 4.22$, $SD = 0.71$), $F(1, 47) = 42.75$, $p < .001$, $\eta_p^2 = .48$.

Differences between conditions also emerged for group identification, $F(1, 47) = 7.38$, $p = .01$, $\eta_p^2 = .14$. Participants in the moral condition

¹¹ A principal component analysis, using varimax rotation, confirmed the distinction between the tendency to exclude and to socialize a prospective group member. The analysis yielded a 2-component solution. The items explained 74.57% of the total variance, and Eigenvalues were 6.21 for the first component (i.e., tendency to exclude) and 3.48 for the second component (i.e., tendency to socialize).

identified more with the group ($M = 5.53$, $SD = 0.69$) than participants in the competent condition ($M = 5.53$, $SD = 0.69$). For private collective self-esteem, we found a marginally significant difference between conditions, $F(1, 47) = 3.83$, $p = .06$, $\eta_p^2 = .07$. Participants in the moral condition reported slightly more private collective self-esteem ($M = 5.37$, $SD = 0.76$) than participants in the competent condition ($M = 4.91$, $SD = 0.89$), in keeping with previous research showing that individuals feel better when they belong to a moral group rather than when they belong to a competent group.

Perception of the prospective group member. Participants perceived more similarities between the highly moral prospective group member and the group ($M = 4.77$, $SD = 1.63$) than between the highly competent prospective group member and the group ($M = 3.83$, $SD = 1.37$), $F(1, 47) = 4.73$, $p = .03$, $\eta_p^2 = .09$.

Social identity threat. As predicted, a highly moral prospective group member elicited less social identity threat ($M = 2.35$, $SD = 0.82$) than a highly competent prospective group member ($M = 3.06$, $SD = 1.28$), $F(1, 47) = 5.51$, $p = .02$, $\eta_p^2 = .10$.

Responses to the prospective group member. Participants reported to be less inclined to exclude a highly moral prospective group member ($M = 2.64$, $SD = 1.43$) than a highly competent prospective group member ($M = 3.53$, $SD = 1.69$), $F(1, 47) = 3.99$, $p = .05$, $\eta_p^2 = .08$. We found no differences between conditions in socializing responses, $F(1, 47) = 0.12$, $p = .73$, $\eta_p^2 = .003$.

Mediation. As in Experiment 4.1, we conducted bootstrapping analyses (Preacher & Hayes, 2004), with the tendency to exclude the prospective group member as dependent variable, dimension as predictor, and social identity threat as mediator. The bootstrap results showed that the indirect effect of dimension on the tendency to exclude the prospective group member through social identity threat was significant with a point estimate of $-.69$ and a 95% BCa CI of -1.4345 to -0.1053 , indicating full mediation (see Figure 4.2). A highly moral (vs. competent) prospective group member induced less social identity threat, which led to a decreased tendency to exclude the highly moral, rather than competent, prospective group member.

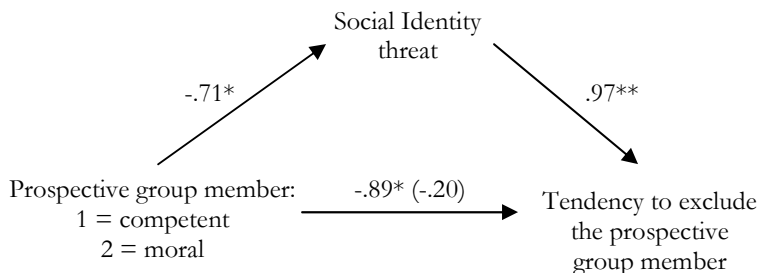


Figure 4.2

Social identity threat mediates the relationship between the evaluation of the prospective group member and the tendency to exclude the prospective group member, Experiment 4.2; $*p < .05$, $**p < .01$

Exclusion-behavior. One participant did not write a message, resulting in 48 participants with behavioral data. We found no reliable differences between conditions in exclusion-behavior, $\chi^2(1, N = 48) = 2.47, p = .12$. In the moral condition, 12% of participants communicated to exclude the prospective group member, compared to 30.4% of participants in the competent condition. Exclusion-behavior was significantly correlated with the tendency to exclude the prospective group member, $r = .88, p < .001$.

Discussion

As predicted, results confirmed that a prospective group member who excels in terms of morality is evaluated more positively, and elicits less social identity threat than a prospective group member who excels in terms of competence. As a consequence, group members are more inclined to accept and include a highly moral individual in the group than a highly competent individual. We reasoned that this is the case because highly moral individuals have the potential to contribute substantially to the positive social identity of the group. That is, morality is seen as more central and more important for the group's positive image than competence (Aquino & Reed, 2002; Leach et al., 2007). An individual who has the potential to contribute to or enhance the group's

morality is therefore more likely to be accepted by the group than an individual who outsmarts the group in terms of competence. Again, as found in Experiment 4.1, group members did not differ in the extent to which they proposed to exclude a highly moral and competent prospective group member. However, the observed pattern of exclusion behavior is in line with our prediction that group members are keener to include an individual who excels in terms of morality rather than competence.

Experiment 4.3:

The morality vs. competence of prospective group members

The aim of Experiment 4.3 was to replicate and extend the findings of Experiments 4.1 and 4.2 by examining responses towards prospective group members who either lack or excel in terms of morality or competence in a single design. We systematically varied the dimension (morality vs. competence) and direction (positive vs. negative) of the prospective group member's evaluation and examined perceptions of and responses towards the prospective group member. We included several additional measures in order to gain further insight in the impact of prospective group members on the group's responses. First, we assessed specific perceptions of prospective group members in terms of their perceived arrogance and trustworthiness, because these traits are relevant for interacting and cooperating with others who are either inferior or superior to the group. Second, we assessed whether prospective group members also affect group members' evaluation of their own membership and position in the group. Third, while in the first two experiments we measured exclusion behavior via chat messages; in the current experiment we measured exclusion behavior by means of video messages. Considering that written statements communicating exclusion were generally rare in the chat messages, we used a different behavioral measure in this experiment. That is, we included a speech task (by means of video messages), because spoken messages are arguably more ephemeral, or volatile, than sending written statements (Hamilton & Mineo, 1998), and might therefore more easily facilitate the communication of a negative message, such as one containing social exclusion.

As a final addition to the dependent variable side of our design, in the third experiment we also included cardiovascular measures of challenge and

threat to examine whether the evaluation of the prospective group member might impact upon group members' psychophysiological stress and coping responses. According to the biopsychosocial model of challenge and threat (BPSM; Blascovich & Tomaka, 1996), motivational states can range from "threat" to "challenge" on a bipolar continuum. These motivational states result from demand- (i.e., uncertainty, required effort) and resource- (i.e., knowledge, skills) appraisals in motivated performance situations. When situational demands outweigh individual resources, a state of *threat* emerges. Conversely, when individual resources match or outweigh situational demands a state of *challenge* emerges. These motivational states are in turn indicated by specific patterns of cardiovascular reactivity. In order to distinguish between challenge and threat, task engagement and goal relevance—as indicated by increased heart rate (HR) and decreased pre-ejection period (PEP; an index of left ventricular contractile force)—are required. Next, cardiac output (CO; the amount of blood in liters that is pumped through the heart per minute) and total peripheral resistance (TPR; the constriction vs. dilation of blood flow through the arterial system) distinguish between challenge and threat: Challenge is marked by relatively high CO and low TPR, whereas threat is marked by relatively low CO and high TPR. These measures can gain insight in group members' psychophysiological stress and coping responses to prospective group members who lack or excel in terms of morality or competence.

Method

Participants and Design. One-hundred and nine undergraduate students (78 women, $M_{\text{age}} = 25.06$ years, $SD = 8.13$) participated and received either 6 Euros or course credits for participation. We employed a 2(Dimension: Morality vs. Competence) X 2(Direction: Positive vs. Negative) between-subjects design. Participants were randomly assigned to one of the four experimental conditions. Participation took approximately 45 minutes.

Procedure. Participants arrived in the laboratory, were seated in front of a computer equipped with a webcam, and attached to the apparatus for measuring cardiovascular responses (see below). To measure electrocardiographic (EKG) and impedance cardiographic (ICG) signals, four spot electrodes were placed on participants' upper and lower back and two on

their chest. In addition, a blood pressure sensor was attached to the index finger of their non-dominant hand. We took a 5-minute baseline measure of their cardiovascular responses.

We then continued with explaining the general procedure and cover story, which were similar to that of the first and second experiment. Participant D, i.e., the prospective group member, was introduced as attaching *less [more]* value to *morality [competence]* than the other group members, depending on condition. Participants then completed a questionnaire, after which they engaged in a speech task. They delivered a speech in front of a webcam about whether and why they (did not) wanted participant D to join the group for the collaboration task. The speeches recorded by each group member would allegedly be shown to the others in the group, with the purpose of discussing whether and why participant D could or could not join the group for the collaboration task. Participants were (ostensibly randomly) chosen to record their speech first. They could take up to three minutes for their speech, during which we assessed their cardiovascular responses (e.g., Mendes, Blascovich, Hunter, Lickel, & Jost, 2007). When participants finished their speech, they reached the end of the study and were debriefed, paid, and thanked for their participation.

Measures

All dependent variables were measured on 7-point scales (1 = *completely disagree* to 7 = *completely agree*) and comprised exact similar items as used in the first two experiments, unless reported otherwise.

Checks. As a check of the effectiveness of our manipulations, we asked participants to indicate the prospective group member's perceived morality ($\alpha = .95$) and competence ($\alpha = .88$). Additionally, we again assessed group identification ($\alpha = .81$), and private collective self-esteem ($\alpha = .74$).

Perception of the prospective group member. To gain more insight in participants' perceptions of the prospective group member, we assessed their trust in the prospective group member and the perceived arrogance of the prospective group member. Trust was measured with five items adapted from The Specific Interpersonal Trust Scale (Johnson-George & Swap, 1982; e.g., "If we decided

to meet somewhere, I would be certain that participant D would be there”, $\alpha = .89$). Perceived arrogance was measured with 4 items (e.g., “I think participant D looks down on the other group members”; $\alpha = .80$).¹²

Evaluation of own membership. To assess participants’ evaluations of the impact of the prospective group member on their own group membership, we asked participants to indicate the extent to which they were concerned about their own position in the group (5 items; e.g., “Because of participant D’s values, I am worried about my own position in the group”; $\alpha = .86$).

Responses to the prospective group member. The tendencies to exclude ($\alpha = .87$) and to socialize ($\alpha = .75$) the prospective group member were again assessed. As an additional response, we included a measure of approach tendencies towards the prospective group member (4 items; e.g., “I would like to stay in touch with participant D”; $\alpha = .85$).¹³

Exclusion-behavior. We coded participants’ speeches on whether they explicitly stated that they wanted to exclude the prospective group member (1 = inclusion, 2 = exclusion) as a behavioral measure of exclusion.

¹² Similar to Experiments 4.1 and 4.2, we also included measures of differentiation and social identity threat ($\alpha = .86$). An ANOVA on differentiation only yielded a significant Dimension X Direction interaction, $F(1, 95) = 6.41, p = .01, \eta_p^2 = .06$. Simple main effect analyses showed that participants perceived more differences between the prospective group member who lacked morality and the group ($M = 6.72, SD = 1.43$) than between the prospective group member who lacked competence and the group ($M = 5.48, SD = 1.42$), $F(1, 48) = 9.48, p = .003, \eta_p^2 = .16$, thereby replicating the results of Experiment 4.1.

For social identity threat, only a main effect of direction emerged, $F(1, 95) = 11.13, p = .001, \eta_p^2 = .10$. Participants in the positive conditions reported more social identity threat than participants in the negative conditions. The Dimension X Direction interaction was not significant, $F(1, 95) = 0.20, p = .65, \eta_p^2 = .002$. Considering that participants already derogated the prospective group member in terms of perceived trustworthiness and arrogance (an opportunity that participants in Experiments 4.1 and 4.2 were not given), they might have already reduced the threat posed by the prospective group member (see Eidelman & Biernat, 2003). Nevertheless, in line with the results of Experiments 4.1 and 4.2, social identity threat correlated positively with the tendency to exclude the prospective group member, $r = .52, p < .001$.

¹³ To confirm that the tendency to exclude, to socialize, and to approach prospective group members can be considered three separate constructs, we conducted a principal component analysis, using varimax rotation, of the 18 items. The analysis yielded a 3-factor solution, and factor loadings explained 59.47% of the total variance. Eigenvalues were 6.22 for the first component (i.e., tendency to exclude), 2.78 for the second component (i.e., tendency to approach), and 1.70 for the third component (i.e., tendency to socialize), thereby confirming the distinction between the three response strategies towards prospective group members.

Cardiovascular reactivity. Electrocardiographic signals (EKG), impedance-cardiographic signals (ICG), and blood pressure were continuously measured during the experiment using a Biopac MP150 system (Biopac Systems Inc., Goleta, CA). Electrocardiography was measured using an ECG100 module and a Lead I electrode configuration. For measuring ICG the NICO100c module was used. Blood pressure was measured using a Nexfin monitor (BMEYE, Amsterdam, The Netherlands). Cardiovascular data was stored using *Acknowledge* software (Biopac Systems, Goleta, CA) and manually scored using MATLAB software (The MathWorks, Inc., Natick, MA) following standard guidelines. For an in depth description of the procedure, see also Sherwood et al., 1990; De Wit, Scheepers, & Jehn, 2013; Van der Lee et al., 2012b.

Results

The data of ten participants were removed from all analyses due to expressed suspicion about the cover story, resulting in 99 participants with usable self-reported data. Due to signal loss, we were left with usable cardiovascular data of 95 participants. Unless reported otherwise, all data were analyzed by means of Analyses of Variance with dimension and direction as independent variables.

Checks. To assess the effectiveness of our manipulations, we conducted Repeated Measures ANOVAs with the perceived morality and competence of the prospective group member as within-subject variable and dimension and direction as between-subject variables. The 3-way interaction was significant, $F(1, 95) = 158.47, p < .001, \eta_p^2 = .62$. Simple RM-ANOVAs revealed that, in the immoral condition, participants perceived the prospective group member to be less moral ($M = 3.32, SD = 1.21$) than competent ($M = 4.73, SD = 1.06$), $F(1, 24) = 25.23, p < .001, \eta_p^2 = .51$. In the moral condition, the prospective group member was perceived to be more moral ($M = 5.49, SD = 1.14$) than competent ($M = 3.79, SD = 0.60$), $F(1, 24) = 39.86, p < .001, \eta_p^2 = .62$. A similar pattern was found for the competence conditions. In the incompetent condition, the prospective group member was perceived to be less competent ($M = 4.32, SD = 0.69$) than moral ($M = 5.52, SD = 0.74$), $F(1, 24) = 47.09, p < .001, \eta_p^2 = .66$, while in the competent condition the prospective group

member was perceived to be more competent ($M = 5.45$, $SD = 0.81$) than moral ($M = 3.43$, $SD = 0.93$), $F(1, 23) = 57.13$, $p < .001$, $\eta_p^2 = .71$. We found no differences between experimental conditions on group identification and private collective self-esteem (all F s < 1 , p s $> .46$).

Perception of the prospective group member. For perceived trustworthiness of the prospective group member only the Dimension X Direction interaction emerged, $F(1, 95) = 40.39$, $p < .001$, $\eta_p^2 = .30$. Simple main effect analyses showed that participants reported to least trust the prospective group member who lacked morality ($p < .001$; See Table 4.1). The Dimension X Direction interaction also emerged for perceived arrogance of the prospective group member, $F(1, 95) = 10.35$, $p = .002$, $\eta_p^2 = .10$. Simple main effect analyses revealed that the prospective group member who lacked morality is perceived to be more arrogant than the prospective group member who lacked competence (see Table 4.1). In addition, a marginally significant main effect of direction emerged for perceived arrogance, $F(1, 95) = 3.01$, $p = .09$, $\eta_p^2 = .03$. Participants in the positive conditions tended to perceive the prospective group member to be more arrogant ($M = 3.21$, $SD = 1.17$) than participants in the negative conditions ($M = 2.86$, $SD = 0.91$). Thus, in line with predictions and the results of Experiment 4.1, group members evaluated an individual lacking morality more negatively than they evaluated an individual lacking competence.

Evaluation of own membership. The Dimension X Direction interaction emerged for evaluation of one's own group membership, $F(1, 95) = 4.37$, $p = .04$, $\eta_p^2 = .04$. Analyses of the simple main effects revealed that participants reported to be the least concerned about their own position in the group when the prospective group member lacked morality (see Table 4.1).

Responses to the prospective group member. The Dimension X Direction interaction was significant for the tendency to exclude the prospective group member, $F(1, 95) = 4.99$, $p = .03$, $\eta_p^2 = .05$; the main effects of dimension, $F(1, 95) = 3.97$, $p = .05$, $\eta_p^2 = .04$, and direction, $F(1, 95) = 7.15$, $p = .01$, $\eta_p^2 = .07$, were also significant. Simple main effect analyses revealed that the tendency towards exclusion was greater for the prospective group member who lacked morality

than the prospective group member who lacked competence, $F(1, 48) = 9.52$, $p = .003$, $\eta_p^2 = .16$ (see Table 4.1 for the relevant means).

For the tendency to socialize the prospective group member, only main effects of dimension and direction emerged. Overall, participants in the positive conditions reported a greater tendency to socialize the prospective group member ($M = 3.23$, $SD = 0.81$) than participants in the negative conditions ($M = 2.80$, $SD = 0.99$), $F(1, 95) = 5.92$, $p = .02$, $\eta_p^2 = .10$. Participants reported a greater tendency to socialize the prospective group member who was evaluated on his/her competence ($M = 3.23$, $SD = 0.90$) rather than morality ($M = 2.80$, $SD = 0.91$), $F(1, 95) = 5.92$, $p = .02$, $\eta_p^2 = .06$. The Dimension X Direction interaction was not significant, $F(1, 95) = 0.23$, $p = .63$, $\eta_p^2 = .002$.

For approach tendencies towards the prospective group member, again main effects of dimension and direction emerged. Overall, participants in the negative conditions reported more approach tendencies towards the prospective group member ($M = 4.52$, $SD = 1.06$) than participants in the positive conditions ($M = 3.88$, $SD = 0.95$), $F(1, 95) = 10.63$, $p = .002$, $\eta_p^2 = .10$. Participants reported more approach tendencies towards the prospective group member who was evaluated on the competence dimension ($M = 4.44$, $SD = 0.92$) rather than on morality ($M = 3.97$, $SD = 1.12$), $F(1, 95) = 5.56$, $p = .02$, $\eta_p^2 = .05$. The Dimension X Direction interaction was again not significant, $F(1, 95) = 0.53$, $p = .47$, $\eta_p^2 = .006$. Thus, individuals who are evaluated in terms of competence tend to be socialized and approached compared to individuals who are evaluated in terms of morality. Importantly, and in keeping with predictions and the results of Experiment 4.1, individuals lacking morality rather than competence tend to be excluded from the group.

Table 4.1

Means and Standard Deviations of Evaluations of and Responses towards Prospective Group Members (Experiment 4.3)

	Prospective group member lacking morality	Prospective group member lacking competence	Prospective group member excelling in morality	Prospective group member excelling in competence
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)
Trust in the prospective group member	3.88 _a (1.04)	5.14 _b (0.73)	5.13 _b (1.01)	4.05 _a (0.85)
Perceived arrogance of the prospective group member	3.17 _{ac} (0.68)	2.56 _b (1.02)	2.87 _{ab} (1.24)	3.56 _c (1.00)
Concern about own membership	2.88 _a (1.30)	3.56 _b (0.81)	3.39 _{ab} (1.36)	3.10 _{ab} (1.07)
Tendency to exclude the prospective group member	3.28 _a (1.34)	2.37 _b (0.61)	3.37 _a (1.08)	3.43 _a (1.11)

Note: Means with different subscripts per row differ reliably from each other ($p < .05$) following LSD post-hoc tests.

Exclusion-behavior. Two participants did not provide a speech, resulting in 97 participants with behavioral data. Exclusion-behavior differed as a function of condition, $\chi^2(3, N = 97) = 11.26, p = .01$. In the negative conditions, 20% of participants communicated to exclude the prospective group member who lacked morality, whereas 0% of participants stated to exclude the prospective group member who lacked competence. In the positive conditions, 37.5% of participants communicated to exclude the prospective group member who

excelled in morality, whereas 16.7% of participants stated to exclude the prospective group member who excelled in competence. Exclusion-behavior was significantly correlated with the tendency to exclude the prospective group member, $r = .70, p < .001$.

Cardiovascular reactivity. We computed mean scores for HR, PEP, CO and TPR for the last minute of the baseline and the first minute of the speech task. We then computed reactivity scores (Kamarck et al., 1992) by subtracting the baseline scores from the speech task scores (see Table 4.2). For each reactivity score, we transformed outliers (i.e., raw scores more than 3 *SDs* from the mean) to the most extreme score within 3 *SDs* above or below the mean.

Task engagement. Overall, HR increased, $t_s > 4, p_s < .001$, and PEP decreased, $t_s > -3, p_s < .001$, significantly from zero during the speech task in all the different conditions, confirming sufficient task engagement and goal relevance. There were no differences between conditions in both HR and PEP (all $F_s < 2, p_s > .20$).

Challenge and Threat. We calculated a single Threat – Challenge Index (i.e., TCI) using standardized z-scores of CO and TPR in the following formula: $ZTPR * -1 + ZCO * 1$ (e.g., Blascovich, Seery, Mugridge, Norris, & Weisbuch, 2004; Scheepers, De Wit, Ellemers, & Sassenberg, 2012; Seery, Weisbuch, Hetenyi, & Blascovich, 2010). Greater values indicate a relative tendency towards challenge, whereas lower values are indicative of a relative tendency towards threat. An ANOVA on TCI revealed no reliable differences between conditions, $F_s < 1, p_s > .46$.

Additional analyses demonstrated that TCI correlated negatively with exclusion-behavior when the prospective group member lacked morality, $r = -.40, p < .01$, and positively when the prospective group member excelled in morality, $r = .50, p < .001$. This implies that those who communicated to exclude the prospective group member who lacked morality experienced threat rather than challenge, whereas those who communicated to accept the highly moral prospective group experienced challenge rather than threat. TCI was not correlated with exclusion-behavior when the prospective group member excelled in competence, $r = .04, ns$. Because participants did not communicate

to exclude the prospective group member who lacked competence, no correlation with TCI could be computed.

Table 4.2
Means and Standard Errors of Cardiovascular Reactivity as a function of Evaluation Dimension and Direction of Prospective Group Members (Experiment 4.3)

	Prospective group member lacking morality	Prospective group member lacking competence	Prospective group member excelling in morality	Prospective group member excelling in competence
	<i>M</i> (<i>SEM</i>)	<i>M</i> (<i>SEM</i>)	<i>M</i> (<i>SEM</i>)	<i>M</i> (<i>SEM</i>)
Heart Rate	9.95 (1.84)	12.03 (1.84)	10.62 (2.01)	11.67 (1.88)
Pre-Ejection Period	-13.44 (2.96)	-15.94 (2.96)	-10.02 (3.23)	-11.47 (3.02)
Cardiac Output	0.25 (0.07)	0.32 (0.07)	0.25 (0.07)	0.28 (0.07)
Total Peripheral Resistance	110.88 (179.44)	-195.92 (179.44)	87.66 (195.79)	183.44 (183.14)
Threat-Challenge Index	-0.14 (0.35)	0.39 (0.35)	-0.14 (0.39)	-0.14 (0.36)

Discussion

In this experiment, we directly compared the impact of individuals who lack or excel in terms of morality and competence on group members' responses. The most pronounced responses towards prospective group members appear when the prospective group member undermines the group's standards of morality rather than competence. That is, a prospective group member who lacks morality is perceived to be more arrogant and less trustworthy than a prospective group member who lacks competence. In addition, group members are more inclined to exclude an individual who lacks morality than an individual who lacks competence. In fact, the behavioral measure of exclusion demonstrated that none of the group members communicated exclusion of a prospective group member due to a lack of competence.

In line with the findings regarding exclusion responses, group members indicated to be less concerned about their own position in the group in the presence of a prospective group member who lacks morality rather than competence. Considering that group members are more inclined to exclude, and actually communicate to exclude individuals lacking in morality rather than competence, there is no immediate need to be concerned about one's own position in the group; the chance that the individual who lacks morality will join the group and become a new group member is after all fairly small. It is much more likely, however, that the individual who lacks competence will join the group, raising more uncertainty for one's own position.

Surprisingly, we observed no differences in the tendency to exclude highly moral vs. competent prospective group members, as might be expected based on the results of Experiment 4.2. In fact, participants were more inclined to exclude a prospective group member who excels in morality rather than competence, and did this as often as they intended to exclude a prospective group member who lacks morality. This implies that prospective group members who either exceed or do not live up to the group's standards generally run the risk of being excluded, because they arguably threaten the group's positive image (e.g., Hornsey, 2008). The exception, however, are individuals who lack competence. Considering that incompetence is not perceived to be diagnostic of individual dispositions (Skowronski & Carlston, 1987), nor reveals a deficiency of the group as outperformers potentially do,

individuals who lack competence do not threaten the positive social identity of the group and are therefore most likely to be accepted by the group.

More inclusive responses towards prospective group members, in terms of socialization and approach tendencies, are more pronounced for prospective group members who are evaluated on the competence dimension than for those evaluated on their morality. This occurs regardless of whether they positively or negatively distinguished themselves from the group, which implies that the direction of the evaluation is, as predicted, particularly relevant when prospective group members are evaluated in terms of their morality. Because of the centrality of morality for the group's positive social identity (e.g., Leach et al., 2007), group members apparently decide to include or exclude a prospective group member predominantly on whether s/he can contribute to the group's moral standards or is a potential threat to the group's morality. When prospective group members are evaluated in terms of their competence, the group is more likely to respond with more inclusive strategies, such as socialization and approach tendencies. Interestingly, group members are more inclined to socialize a prospective group member who exceeds the group's standards, whereas they are more inclined to approach a prospective group member who does not live up to the group's standards. Considering that a prospective group member who is superior to the other group members has the potential to benefit the group as a whole, socializing, or attempts towards conformity, seems generally the preferred response. However, individuals who exceed the group's standards might also increase the salience of a group's deficiency or threaten the group's cohesion. From this perspective, a prospective group member who is inferior to the group poses no such threat to the image of the other group members, which makes approach tendencies more straightforward.

As for the measures of cardiovascular reactivity, we found significant task engagement as well as goal relevance (as indicated by increased HR and decreased PEP) in all conditions. That is, prospective group members are motivationally engaging and relevant for the group, regardless of whether they are evaluated in terms of morality or competence. We did not find reliable differences between challenge and threat motivational states as a function of our manipulations. This is in line with previous research that was unable to differentiate between cardiovascular states of threat and challenge in response

to an ingroup deviant (Frings et al., 2012). As has been argued, the balance between situational demands and personal resources is relatively equal in dealing with a group member who exceeds or does not live up to the group's standards. For example, the desire to protect the group's positive social identity (i.e., a resource) might be tempered due to the uncertainty that a prospective group member raises (i.e., a demand). Although we were unable to distinguish between group members' challenge and threat motivational states, in the correlational data we did observe associations between indicators of challenge and threat and exclusion behavior. Group members that tend to exclude a prospective group member who lacks morality experience threat rather than challenge, whereas those that tend to accept a prospective group member who excels in morality experience challenge rather than threat. These findings corroborate our reasoning that prospective group members lacking morality are more likely to be excluded from the group, because they pose a threat to the positive social identity. Conversely, group members are keen (e.g., challenged) to include a highly moral prospective group member, because s/he has the potential to contribute to the positive social identity of the group.

General discussion

In three experiments, we examined how group members respond to a prospective group member who is evaluated on the dimension of morality or competence. Our general hypothesis was that the morality of prospective group members leads to more pronounced responses from the group than the competence of prospective group members. Accordingly, our results consistently demonstrate that perceptions of a prospective group member who lacks morality are more negative than perceptions of a prospective group member who lacks competence. Furthermore, a prospective group member who lacks morality rather than competence elicits more social identity threat and is consequently more likely to be excluded from the group (Experiments 4.1 and 4.3). This is in line with previous research demonstrating that information indicating a lack of morality is highly diagnostic of the individual's dispositions (e.g., Skowronski & Carlston, 1987), and explains why a prospective group member who lacks morality poses a serious threat to the group's positive social identity.

Furthermore, our results demonstrate that prospective group members who can contribute to the group in terms of morality rather than competence are perceived more positively and are more likely to be accepted by and included in the group (Experiment 4.2). The results of Experiment 4.3, however, did not replicate these findings, and showed that group members tend to exclude highly moral and competent prospective group members as often as they tend to exclude a prospective group member who lacks morality. A possible explanation for these inconsistent findings is that whereas individuals who exceed the group's standards have the potential to enhance the group's positive social identity, they might also undermine the group's cohesiveness and increase the salience of a group's deficiency (e.g., Hornsey, 2008; Schmitt et al., 2000; Tajfel & Turner, 1979). As a consequence, individuals who are superior to other group members are often met with negative responses such as derogation and social exclusion (Monin et al., 2008; Parks & Stone, 2010). Future research might shed more light on factors determining when individuals who are superior to other group members enhance the group's positive image versus when they threaten the group's cohesiveness.

In all three studies, we compared exclusion responses to socializing responses, a more inclusive strategy in dealing with individuals who exceed or undermine the group's standards (e.g., Levine & Kerr, 2007; Pinto et al., 2010). In Experiment 4.3, we demonstrated that overall group members are more inclined to socialize a prospective group member who is evaluated on the dimension of competence rather than morality. This is not further moderated by the direction of the evaluation, and is in line with the lack of differences between the negative and positive morality and competence evaluations on socializing responses in Experiments 4.1 and 4.2. These findings support our general notion that the direction of the evaluation is particularly relevant for inclusion and exclusion responses to prospective group members who are evaluated in terms of morality. Considering the importance of morality for the group's positive social identity (e.g., Leach et al., 2007), the stakes of accepting a prospective group member who is evaluated in terms of morality are higher. Consequently, including or excluding an individual who lacks or excels in morality has more impact on group members' responses than the inclusion or

exclusion of an individual who underperforms or outperforms the group in terms of competence.

In the current research we focused exclusively on responses towards prospective group members. Groups might, however, respond differently towards individuals with different statuses, such as full group members or marginal group members (Ellemers & Jetten, 2013; Moreland & Levine, 1982; Pinto et al., 2010). To illustrate, prospective group members do not yet contribute to the positive social identity of the group, but are assessed in terms of their potential contribution to the group's image. Full group members, however, are perceived to be the most representative members of the group and hence their behavior has a strong impact on the group's image (Levine & Moreland, 1994; Pinto et al., 2010). A prospective group member is thus likely to elicit different responses than a full group member. Whereas a full group member who lacks morality might elicit more social identity threat than a prospective group member who lacks morality, excluding a full group member might be more difficult than excluding a prospective group member. Future research could continue examining responses to group members of different statuses, as well as its motivational underpinnings (e.g., Mendes et al., 2007; Mendes, Major, McCoy, & Blascovich, 2008; Frings et al., 2012).

The current research is further relevant for research on intragroup processes and in particular for research on—responses to—intragroup deviance and acceptance of marginal group members (e.g., Ellemers & Jetten, 2013). In three experiments, we demonstrated that responses to prospective group members depend on both the dimension on which they are evaluated, as well as on whether the individual compares positively or negatively to the group. Whereas previous research examined responses to individuals who are superior (i.e., positive deviants) or inferior (i.e., negative deviants) compared to the group (e.g., Abrams et al., 2000), the current research is the first to demonstrate that these effects are qualified by the dimension on which individuals are evaluated. That is, a group responds differently to prospective group members who are evaluated on their morality vs. competence. These results are in line with the growing body of research that demonstrates that morality is in fact more important for the positive image of the group than competence (e.g., Leach et al., 2007). The present research is the first to systematically investigate how the morality of prospective group members

impact on intragroup processes, thereby bridging the literature on moral psychology and intragroup processes.

Conclusion

Groups can exclude prospective group members for various reasons, such as deviating attitudes, performances, and personality traits. In the current research, we demonstrate that the dimension on which a prospective group member is evaluated affects the group's acceptance versus exclusion responses. The results of three experiments reveal that a prospective group member with deficient morality induces more social identity threat, and is consequently more likely to be excluded from the group than a prospective group member who is deficient in terms of competence. Conversely, the group is more likely to accept a prospective group member who can contribute to the group's morality than an individual who can contribute to the group's competence. Overall, morality evaluations of prospective group members elicit more pronounced responses from the group than evaluations in terms of competence. Thus, morality—more so than competence—appears to be an important dimension on which groups determine who is, and who is not, allowed to join the club.

Chapter 5

General Discussion

Moral motivation refers to the motivational force that morality judgments exert on individuals. The aim of the current dissertation was to examine how moral motivation operates within groups. Groups evaluate the behavior of individual group members in the extent to which it contributes to goal attainment—that is, the extent in which individual group members act in line with the groups’ standards and as such validate the group’s positive social identity (Doosje, Ellemers, & Spears, 1995; Levine & Moreland, 1994; Marques, Abrams, & Serôdio, 1998; Moreland & Levine, 1982). Intragroup evaluations thus provide a group with valuable insights in the legitimacy of the positive social identity, and help to elicit desirable behaviors from individual group members. Because individuals care deeply about how the group evaluates them, these evaluations affect their motivational responses in validating the group’s positive social identity (e.g., Branscombe, Spears, Ellemers, & Doosje, 2002). The research described in the current dissertation examined the impact of morality judgments on group members’ motivational responses, and compared these to the impact of competence judgments, the latter which up until recently were considered to be the primary driving force behind motivated behavior in groups (e.g., Fiske, Cuddy, Glick, & Xu, 2002; Ellemers, 1993).

Taking on a social identity approach, which explains what drives individuals as members of social groups (e.g., Hornsey, 2008; Postmes, Haslam, & Swaab, 2005), I investigated intragroup evaluations from three different group perspectives: In Chapter 2, I focused on evaluations of group members’ own prior behavior; in Chapter 3, I addressed evaluations of another group member’s behavior; and in Chapter 4, I examined evaluations of prospective group members. In the experiments described in these chapters, I distinguished between different types of motivational responses, namely affective, cognitive, psychophysiological, and behavioral responses. Considering the importance of morality for individuals and groups (e.g., Aquino & Reed, 2002; Leach, Ellemers, & Barreto, 2007), the central hypothesis was that intragroup morality judgments generally impact more strongly on group members’ motivational responses than competence judgments. In the next section, I will summarize the main research findings.

Overview of the main findings

The central hypothesis tested in the current dissertation was that morality judgments have a more pronounced impact on group members' motivational responses than competence judgments. In Chapter 2, I found that this prediction was supported for negative, but not for positive, morality judgments. In Experiments 2.1a and 2.2, group members recalled a situation in which their own prior behavior was evaluated by the group as either immoral or incompetent, after which affective and cognitive responses were assessed. The results revealed that group members reported more negative affect after their prior behavior was evaluated as immoral compared to incompetent, and this mediated their cognitive responses in terms of perceived coping abilities. That is, negative morality judgments elicited more negative affect which in turn induced lower perceived coping abilities, as compared to negative competence judgments. In Experiment 2.2, I replicated these effects, but this time group members were additionally given an opportunity to restore their image in the group. Results showed that after one's prior behavior was evaluated as immoral, the opportunity to restore one's image as a moral group member alleviated the negative affective responses and increased perceived coping abilities. Thus, although judgments of immorality evoke immediate negative affective and cognitive motivational responses in group members, these responses can be overcome when they get the chance to restore their image as a moral group member.

To further investigate the impact of negative morality judgments of group members' own prior behavior on their motivational responses, I examined their psychophysiological responses. In Experiment 3.1 of Chapter 3, group members first recalled own prior behavior that was evaluated as either immoral or incompetent by the group, similar to the manipulations described in Chapter 2. Next, they worked on a group task with several other (fictitious) group members. The primary performance dimension was said to be either morality or competence. Group members could thus display moral or competent behavior in an attempt to restore their image as a moral or competent group member. Following the Biopsychosocial model (BPSM) of challenge and threat (Blascovich & Tomaka, 1996), I assessed group members' cardiovascular responses during the group task. Results revealed that, as

predicted, negative morality judgments induced a state of threat rather than challenge.

In line with the notion that intragroup morality judgments have implications for group members' social identity, I reasoned that negative morality judgments of *another* group member's behavior would arouse motivational responses similar to negative morality judgments of own behavior. To test this idea, in Experiment 3.2 group members were exposed to another group member's prior behavior that was evaluated as either immoral or incompetent. In a similar group task as employed in Experiment 3.1, I again assessed group members' cardiovascular responses which revealed a similar pattern of cardiovascular reactivity as found in Experiment 3.1: Group members showed a relative threat rather than challenge response after being exposed to negative moral (vs. competence) judgments about another group member's behavior.

In Experiment 4.3 of Chapter 4, I followed up on this and employed yet another group perspective to intragroup evaluations: Group members' psychophysiological responses to *prospective* group members. The results revealed that considering the credentials of prospective group members, who were judged in terms of morality or competence, is motivationally engaging and relevant for the group, yet this did not invoke a clear pattern of challenge or threat responses. I will consider a possible explanation for this observation in the next section. Taken together, Chapters 3 and 4 provide support for the impact of intragroup evaluations on group members' psychophysiological responses. Intragroup judgments of immorality and incompetence—regardless of whether they target the self, another group member, or a prospective group member—arouse cardiovascular responses that indicate task engagement and goal relevance. Overall, intragroup judgments are thus engaging and relevant for the group, and imply a psychophysiological readiness to act on the judgment. More specifically, negative *morality* judgments of group members' own as well as another group member's behavior are more pronounced than those of a prospective group member, and induce a psychophysiological pattern indicative of threat rather than challenge.

Demand/ resource appraisals of becoming a moral group member

Interpreting the results of Chapters 2 and 3 in terms of situational demands and available personal resources (i.e., perceived coping ability), there are apparent inconsistencies between group members' cognitive and psychophysiological responses. For example, the results of Experiment 2.2 show that group members' perceived coping abilities increase after reminders of prior negative morality judgments in the prospect of a chance for restoration. This indicates that the prospect of an opportunity in which individuals can restore their image as a moral group member causes a shift in their perceived coping abilities. Whereas a reminder of one's prior behavior judged as immoral elicits the perception that the demands outweigh the available resources, considering an upcoming opportunity to restore one's image triggers the perception that there might be sufficient resources available to meet the situational demands. However, the results of Experiment 3.1 demonstrate that providing group members with an actual opportunity to restore their moral image (again after recalling behavior that was previously evaluated as immoral), elicits a psychophysiological pattern indicative of threat rather than challenge. This suggests that the demands of the actual image restoration are perceived to outweigh the resources that group members had available for doing so. Thus, at the cognitive level an anticipated opportunity to restore one's image as a moral group member led to a perceived balance in demand/resource appraisals, whereas actually engaging in such restoration activity led the situational demands to be perceived as to outweigh available resources, as deduced from cardiovascular markers indicative of threat rather than challenge.

There are several possible explanations that might account for the apparent discrepancy between group members' cognitive and psychophysiological responses in terms of demand/ resource appraisals. The first concerns the timing of measurement. Whereas the cognitive responses are measured in *anticipation* of the image restoration, the psychophysiological responses are measured *during* the actual image restoration itself. It may well be that in anticipation of the group task in which group members would get the opportunity to restore their image as a moral group member, they feel able and secure enough to do it, resulting in the perception that there are sufficient resources available to deal with the situational demands. However, when

actually being in the process of image restoration, the uncertainty regarding the ability to accomplish this goal and the anticipated consequences of failing the attempt, arguably become increasingly salient, resulting in heightened attention to the situational demands. In other words, when actually attempting to restore one's image as a moral group member, reflecting on the consequences of failing in terms of the diagnosticity of immorality (e.g., Skowronski & Carlston, 1987), could plausibly have overruled the anticipated ability to do so.

A second explanation for the discrepancy in group members' cognitive and psychophysiological responses concerns the level of analysis. Cognitive demand/resource appraisals are measured at the conscious self-report level, whereas the psychophysiological demand/resource appraisals are measured at an implicit cardiovascular level. Whereas cognitive appraisals presume a deliberate assessment of situational demands in relation to available personal resources (Lazarus & Folkman, 1991), the appraisal process can also be unconscious and based on affective cues (e.g., Blascovich & Mendes, 2000; Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001). Hence, the (deliberate) assessment of demands and resources resulting in cognitive appraisals might be different from the (implicit) assessment resulting in psychophysiological motivational states of challenge and threat. Although earlier work on the BPSM and intrapersonal processes documented correlations between cognitive appraisals and cardiovascular responses, more recent work on intergroup interactions acknowledges the difficulty of correlating self-reports with implicit cardiovascular processes (e.g., Mendes, Blascovich, Lickel, & Hunter, 2002; Tomaka, Blascovich, Kelsey, & Leitten, 1993). Self-reports are susceptible to self-presentational motives and demand characteristics, which are particularly relevant in situations of image restoration where individuals' dispositions and abilities are questioned. Individuals' deliberate cognitive appraisals of the demands and resources are thus likely to be affected by such self-presentational motives, and might plausibly account for the discrepancy with their implicit psychophysiological responses.

A third possible reason for the seeming discrepancy between group members' cognitive and psychophysiological responses in terms of demand/resource appraisals concerns a theoretical explanation of the psychological meaning of the goal of image restoration. According to Blascovich (2008b), when trying to achieve a superordinate goal (i.e., restore

one's image as a moral group member), individuals might need to approach several subordinate goals (i.e., show moral behavior in a group task). As long as the superordinate goal is desirable, individuals will approach undesirable, or threatening, subordinate goals. Although in the current research I did not control for the hierarchical order (i.e., superordinate vs. subordinate) of group members' goals during the tasks, is it plausible that the nature of the tasks following the intragroup evaluations induced respectively a superordinate or subordinate goal in group members. For instance, considering the importance of morality for individuals' identity (e.g., Aquino & Reed, 2002; Leach et al., 2007), the superordinate goal of becoming a moral group member (i.e., anticipating image restoration; Experiment 2.2) could increase its desirability, and consequently be less demanding (e.g., less uncertainty that this is what one needs to do). However, the increased desirability of becoming a moral group member could have made the subordinate goal of showing moral behavior (i.e., actual image restoration; Experiment 3.1) more demanding, and therefore more threatening (e.g., more required effort to accomplish the task). The anticipation of reaching the higher order goal of being a moral group member might therefore be perceived as less demanding than actually behaving morally in a group task.

The lack of a clear distinction between the motivational states of threat and challenge in individuals' responses to prospective group members (Experiment 4.3, Chapter 4) could also be interpreted in terms of a demand/resource balance. That is, the balance between demands and resources appeared to be relatively similar in dealing with a prospective group member who is different from the group, regardless of whether this individual lacked or excelled in morality or competence. The high uncertainty of the situation itself—insufficient information about the prospective group member as well as the group task ahead—increased the demands of the situation to the extent that they outweighed group members' resources to protect the group's positive social identity, irrespective of the evaluative domain. If this is the case, then conditions that alter group members' demand/resource appraisals should result in a clear distinguishable challenge or threat pattern. Indeed, it has been shown that increasing group members' knowledge about the situation (i.e., a personal resource) can result in subsequent challenge when interacting with an

ingroup deviant (i.e., a situational demand; Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012).

Overall, the demands of situations in which group members need to protect their positive social identity, in relation to the personal resources they have available to cope with these situational demands, seem to underlie a range of group members' motivational responses. To illustrate, morality judgments of group members' own prior behavior, an ingroup member's behavior, and a prospective group member increase the uncertainty of the situation, and affect group members' assessment of their abilities in coping with the judgments; these result in different cognitive and psychophysiological responses.

Behavioral responses towards prospective group members

In examining group members' behavioral responses to intragroup morality judgments, the experiments reported in Chapter 4 employed another perspective to intragroup evaluations. In Experiment 4.1 and 4.3, group members were confronted with a prospective group member who, compared to the group, lacked morality or competence. That is, the prospective group member was said to attach less value to morality or competence, and consequently be less likely to display moral or competent behavior. Because group members anticipated a group task in which morality or competence was the primary performance domain, they were given the opportunity to discuss with the other (fictitious) group members whether or not they wanted the prospective group member to join their group for the group task. By means of a questionnaire they supposedly could structure their thoughts and form an opinion about the prospective group member. Via chat simulation (Experiment 4.1) or video circuit (Experiment 4.3) they next allegedly sent messages to their group members explaining why they did or did not want the prospective group member to join the group for the group task. Results revealed that a prospective group member who lacked morality, compared to a prospective group member who lacked competence, was derogated more and aroused more social identity threat. Consequently, group members were more inclined to exclude a prospective group member who lacked morality than a prospective group member who lacked competence. Again, these results support the central hypothesis that negative judgments about morality impact more strongly on group members' motivational responses than negative

competence judgments; this is also evident from behavioral responses towards a prospective group member.

Interestingly though, the prospective group member did not yet contribute to the positive social identity of the group, and yet aroused social identity threat. Merely considering an individual with a moral deficiency as a prospective group member is a potential threat for the positive social identity, and therefore group members are motivated to distance themselves from such individuals. This distancing seems to occur at two levels: The psychological as well as the physical level. First, group members *psychologically* distance themselves from an individual who lacks morality by perceiving a greater difference between the individual and the group. Second, group members *physically* distance themselves from an individual who lacks morality by socially excluding that individual from upcoming group activities.

Judgments of immorality versus morality

As indicated before, the general hypothesis was that morality judgments would have a more pronounced impact on group members' motivational responses than similar competence judgments. The results discussed so far support this notion, but specifically examined responses to *negative* morality judgments. In several experiments I also examined the impact of *positive* morality judgments. In Experiment 2.1b for example, group members reflected on their own prior behavior that was evaluated as being either moral or competent. Afterwards I assessed their affective responses. The results demonstrated that judgments of competence elicit more positive affect than judgments of morality. If morality judgments, regardless of their valence, would always elicit stronger motivational responses than competence judgments, then such judgments would have elicited also more positive affect. Although this is not what our results revealed, they are in line with research demonstrating the asymmetrical valence effects of morality and competence judgments. Whereas positive information about competence is regarded as more diagnostic of individual dispositions than positive information about morality (e.g., Martijn, Spears, Van der Pligt, & Jakobs, 1992; Reeder & Spores, 1983; Skowronski & Carlston, 1987), it is comprehensible that judgments of competence elicit stronger positive affective responses than judgments of morality.

In addition, in Experiment 4.2 group members were confronted with a prospective group member who ostensibly distinguished him-/herself positively from the other group members in the domain of morality or competence. That is, the prospective group member allegedly attached more value to morality or to competence, and was therefore more likely to display moral or competent behavior than the other group members. Similar to Experiment 4.1, group members were then given a questionnaire that supposedly helped them to structure their thoughts about the prospective group member, after which they had the opportunity to discuss whether or not to include the prospective group member in the group. Results revealed that group members experienced less social identity threat in the presence of a highly moral rather than a highly competent prospective group member, and were consequently more willing to include the highly moral prospective group member. These results are thus also in accordance with prior research demonstrating the impact of positive information about competence in terms of its perceived diagnosticity for the individuals' dispositions (e.g., Skowronski & Carlston, 1987), because a highly competent individual is perceived as more threatening for the group than a highly moral individual.

Taken together, the results of two experiments (Experiments 2.1b and 4.2) directly rule out the possibility that morality judgments always impact more strongly or more negatively on group members' motivational responses. In fact, it seems that the motivational force of morality judgments mainly pertains to *immorality*. Judgments of immorality are shown to elicit strong negative motivational responses in group members. More specifically, judgments of immorality elicit negative affect, lowered perceived coping abilities, a cardiovascular pattern indicative of threat rather than challenge, and a greater inclination towards social exclusion. Next, I will discuss the implications and limitations of the experiments reported in this dissertation, and provide directions for future research that emerge from the current research.

Implications for moral psychology

Research over the past decade has established the importance of morality for individuals' personal identity (Aquino & Reed, 2002; Monin & Jordan, 2009) and social identity (Leach et al., 2007). Recent research has also begun to

explore the implications of moral motivation (e.g., Bauman & Skitka, 2009). Morality judgments have been linked to the regulation of behavior at the both the individual and the group level. For example, morality judgments affect individual goal striving (Jordan, Mullen, & Murnighan, 2011; Sachdeva, Iliev, & Medin, 2009), and group members' motivation to adhere to the group's norms (Ellemers, Pagliaro, Barreto, & Leach, 2008; Pagliaro, Ellemers, & Barreto, 2011). Surprisingly, however, very little is known about how morality regulates the behavior of individuals *within* groups. The research reported in the current dissertation thus contributes to the growing body of literature that documents the implications of moral motivation. In doing so, I adopted a social identity approach and focused on intragroup processes, thereby aiming to fill the void between behavior regulation at the interpersonal and intergroup level. In this dissertation, I examined how morality judgments regulate the behavior of individuals within groups.

As discussed above, the results of the experiments reported in this dissertation provide support for the central hypothesis that morality judgments impact on group members' motivational responses, and that this is particularly true for *negative* morality judgments. These findings are in line with prior theorizing and research that report asymmetrical valence effects of morality and competence. That is, whereas positive information about competence is perceived to be more diagnostic of individual dispositions than positive information about morality; negative information about morality is perceived to be more diagnostic of individual dispositions, but also as more stable, and therefore to be of greater predictive value for future behavior than negative information about competence (Martijn et al., 1992; Reeder & Spores, 1983; Skowronski & Carlston, 1987). Not surprisingly then, the research in this dissertation demonstrated that particularly judgments of group members' immorality impact strongly on their motivational responses.

These effects, however, emerged in the face of salient prior moral transgressions. That is, in the experiments reported here, group members recalled their own prior behavior that was evaluated by the group as immoral (Chapters 2 and 3), were exposed to the prior immoral behavior of an ingroup member (Chapter 3), or were confronted with a prospective group member who lacked morality (Chapter 4). In all these experiments, there were thus either direct recollections of moral transgressions present, or those were

indirectly implicated by the manipulations. The explicit or implicit salience of moral transgressions, considering the diagnosticity of negative information about morality, might (partially) account for the impact of judgments of immorality on group members' motivational responses. In other words, group members' pronounced negative motivational responses to judgments of immorality might be partially induced, or enhanced, because they coincided with reminders of moral transgressions. In order to fully understand the motivational power of morality, the impact of morality judgments should also be examined without salient prior moral transgressions. Indeed, there is recent research that suggests there are benefits to emphasizing the motivation to display moral behavior (e.g., morality judgments about future behavior) for group processes and intergroup relations (e.g., Does, Derks, & Ellemers, 2011; Janoff-Bulman, Sheikh, & Hepp, 2009). This implies that morality judgments, when not coincided with moral transgressions, can also impact positively on the motivated responses of individuals in groups. Framing a goal as moral thus appears to have implications for behavior regulation in groups. Future research should continue to explore the motivational force of morality and morality judgments, also in the absence of prior moral transgressions.

Related to this point, it would be interesting to gain insight in the extremity of moral vs. competent behaviors and transgressions. As the results of the experiments described in Chapters 2 and 3 of this dissertation indicate, judgments of immorality (i.e., moral deficiency) impact more negatively on group members' motivational responses than judgments of incompetence. Yet, with the present data I cannot rule out that this is because immoral behaviors are (perceived as) more extreme than incompetent behaviors. Indirect support against this possible alternative explanation comes from the experiments reported in Chapter 4, which show that prospective group members with a moral deficiency are condemned more than prospective group members with a competence deficiency. If immoral versus incompetent behaviors that are equal in their (perceived) extremity impact differently on group members' motivational responses, for example because they are more likely to be attributed internally than externally (e.g., Skowronski & Carlston, 1987), this would provide further support for the notion that morality judgments operate as a unique motivational force. Future research can thus systematically vary or

control the extremity of moral and competence transgressions to further our understanding of the motivational power of morality.

Consistent across all experiments reported in this dissertation, morality was operationalized at the trait level. As outlined before, individuals engage in trait inferences to evaluate and predict future behaviors. Moral traits, such as trustworthiness, honesty, and sincerity (Leach et al., 2007), give rise to behavioral expectations and therefore provide an appropriate level of analysis in examining the social implications of morality judgments in terms of group members' motivational responses. However, considering the abstract nature of morality, varying from that which is "good" and "right" to virtues such as "no harm" (e.g., Aquino & Reed, 2002; Haidt & Graham, 2007), it is plausible that merely activating the concept of morality automatically triggers a higher order goal than the more concrete notion of success as indicated by competence. Indeed, competence seems to be more specific to certain aspects of the self (e.g., excellence in academia is not related to excellence in sports), whereas morality seems to easily spill over to different aspects of the self (e.g., honesty on the job implies honesty in the game). Although the conceptualizations of morality and competence were kept constant within and between experiments, based on these data I cannot rule out the possibility that merely mentioning morality activated a higher order goal (i.e., beyond the trait level) for group members than mentioning competence. That is, morality judgments might automatically activate the superordinate goal of being a moral group member (e.g., being trustworthy), whereas competence judgments might merely activate the subordinate goal of being a competent group member (e.g., performing well on a specific task). Activation of such a superordinate goal, considering its importance for individuals' identity, could have increased the situational demands, thereby eliciting more pronounced negative motivational responses (e.g., Blascovich, 2008b). This suggests that morality judgments are in general more demanding than competence judgments, because they represent a more desirable, superordinate goal for group members. Note, however, that depending on the specific situation (e.g., the nature of the task, such as anticipating image restoration vs. actual image restoration), the hierarchical order of the goal and consequently the demands of dealing with morality judgments can vary. In general, however, these will be higher than the demands of dealing with competence judgments. Future research might

systematically vary the hierarchical order of group members' moral and competence identity goals (i.e., superordinate vs. subordinate), for example by stressing the importance of the specific task at hand, to gain further insight in the processes on which moral motivation operates.

Additionally, it would be fruitful to gain insight in the content of group members' moral behavior. In other words, it would be interesting to examine *which* behaviors group members judge to be immoral and consequently as threatening to the positive social identity of the group. In examining group members' motivational responses, I compared morality judgments of behavior in terms of, e.g., trustworthiness, to the more obvious competence judgments of task performance and success. Although morality was defined as trustworthiness, honesty, and sincerity, and group members were instructed to recall behavior that was judged in these terms, the specific nature of (im)moral behaviors remains unclear. In the research described in this dissertation, the focus was on the social implications of morality judgments in terms of group members' motivational responses, not on the content of morality judgments per se. Nonetheless, it would be interesting to gain insight in what exactly group members perceive to be (im)moral acts. A content analysis of group members' descriptions of moral and competent behaviors could provide a valuable source of information for this purpose.

Implications for group processes

The research in the current dissertation also contributes to our understanding of intragroup processes and group dynamics. Whereas competence has long been considered as the primary domain on which groups and group members are evaluated, because it provides an indication of the group's and individual's status (e.g., Ellemers, 1993; Fiske et al., 2002), the current research demonstrates the importance of morality judgments for intragroup processes. Specifically, in multiple experiments I demonstrated the unique motivational force of morality judgments on a range of responses, relative to the impact of competence judgments. The results of these experiments thus indicate that it is important for research on intragroup processes to take the evaluative domain into account when judging group members. Whereas the focus of the current dissertation was on group members' motivational responses, the domains of intragroup evaluations might prove important for other group processes and

phenomena, such as task performances, monetary outcomes, leadership, membership status, cooperation, and norm compliance, to name but a few. For example, in light of the current financial crisis, recent morality judgments of bankers seem to affect their status and monetary rewards, which arguably used to be primarily determined by judgments about their competence. Future research should continue to examine the impact of morality judgments on different group dynamics and relations.

The centrality of group members' demand/ resource appraisals for their motivational responses (e.g., cognitive and psychophysiological) is of particular importance for our understanding of behavior regulation within groups. Greater situational demands increase the salience of situational difficulties, in terms of, for example, level of uncertainty, required effort, and perceived danger, which most likely causes a vigilant approach to goal striving. Consequently, this might render group members particularly sensitive to failures and avoid taking risks (e.g., Higgins, 1998), which might result in less adaptive behavioral changes and induce stress (Blascovich, 2008a; Folkman, Lazarus, Gruen, & DeLongis, 1986). Considering that intragroup evaluations aim to protect the positive social identity and help to elicit desirable behaviors from group members (Moreland & Levine, 1982), evaluations that increase the situational demands might be counter-effective because group members become primarily concerned with the fear of doing something wrong. This might manifest itself in, for example, helplessness, domain disengagement, and withdrawal. On the other hand, when group members perceive that they possess sufficient resources to meet the demands of the intragroup evaluation, for example when they have enough knowledge to solve the situation, they might be more willing to speak up or be creative in their attempts to validate the group's positive social identity. This might in turn be beneficial for the group as a whole. Future research should continue examining how group members' demand/ resource appraisals affect their motivational responses.

In examining group members' motivational responses, I argued that these were aimed at validating the positive social identity of the group. Intragroup evaluations give group members insight in the extent to which this goal is attained, and communicate whether their, as well as other group members', behavior is in line with the group's standards. The intragroup evaluations, as operationalized in the experiments reported in this dissertation,

implicitly created group norms about the group's expected level of morality and competence in order to validate the positive social identity. The intragroup evaluations thus indicated discrepancies between the behavior of the majority of the group members (i.e., normative behavior) and one individual (e.g., the self as group member, another group member, a prospective group member). Yet, in none of the experiments were the group's norms regarding morality or competence explicitly formulated or communicated. In this regard, the current research only indirectly assessed group members' motivational responses to the group's moral or competence norms.

Despite this more implicit approach to group norms, it is important to note that the research reported in this dissertation showed consistent results. The results demonstrate the robust nature of the central notion that intragroup morality judgments impact on group members' motivational responses, in particular because group members displayed these motivational responses in experimentally created groups. That is, the groups in which group members arguably strived to validate their positive social identity had no meaning outside the laboratory. This maximized experimental control over the intragroup evaluations, since it ruled out the possibility of confounds with personal history or prior encounters between group members, or transgressions other than the ones made salient by the manipulations. Nevertheless, it would be interesting to examine how actual violations of moral norms affect intragroup interactions and impact on group members with a shared history. For example, individuals might find it more difficult to exclude an immoral fellow group member with whom they share a long history than would be the case with a group member in an experimental group whom they never met, because of other identity protection concerns (see Hornsey, De Bruijn, Creed, Allen, Ariyanto, & Svensson, 2005; Van Leeuwen, Van den Bosch, Castano, & Hopman, 2010).

In preexisting groups, group members also tend to vary in their membership status. That is, individual group members can for example be full prototypical members, marginal members, new members, or deviant members. In the current research, and partially due to the use of experimental groups, the status of group members was kept constant within experiments. In the experiments described in Chapter 2 and 3, individuals were all considered to be full and equal members of the group. In Chapter 4, I distinguished between

full members and prospective group members. Membership status, however, is important for group members because it indicates how much respect they receive from the group and consequently legitimizes the positive social identity of the group (e.g., Branscombe et al., 2002). Not surprisingly, adherence to the group's norms is particularly important for full group members, because these are the most representative members of the group (e.g., Levine & Moreland, 1994). Consequently, the impact of morality judgments on group members' motivational responses might vary as a function of their membership status. Prospective group members, for example, might be more easily excluded than full members, and marginal members presumably arouse less psychophysiological engagement than full members, because they are less relevant for the positive social identity (for a discussion see also Ellemers & Jetten, 2013; Moreland & Levine, 1982; Pinto, Marques, Levine, & Abrams, 2010). An interesting direction for future research would thus be to examine how the morality judgments of group members who differ in their membership status impact on the motivational underpinnings of intragroup dynamics.

Conclusion

Morality is of particular importance to people; they want to be considered moral and want to belong to moral groups. The research described in this dissertation adopted a social identity approach to morality—by building on the premise that a social identity can motivate individual group members—and examined the impact of morality judgments on group members' motivational responses. Groups evaluate, or judge, the behavior of individual group members, which can help to elicit desired behaviors aimed at validating the group's positive social identity. The experiments reported in this dissertation examined the utilization of morality judgments in establishing this, and compared those to competence judgments. Results systematically demonstrated the motivational force of morality within groups. This moral motivation, however, seems to be primarily driven by group members' concerns for immorality. Judgments of immorality elicit a range of motivational responses that mobilize group members in their pursuit of being a moral group member.

References

- Abrams, D., Marques, J. M., Bown, N., & Henson, M. (2000). Pro-norm and anti-norm deviance within and between groups. *Journal of Personality and Social Psychology*, 78, 906-912. doi:10.1037/0022-3514.78.5.906
- Aquino, K., & Reed, A., II. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423-1440. doi:10.1037//0022-3514.83.6.1423
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3, 193-209.
- Bauman, C. W., & Skitka, L. J. (2009). In the mind of the perceiver: Psychological implications of moral conviction. In D. M. Bartels, C. W. Bauman, L. J. Skitka & D. L. Medin (Eds.), *Moral Judgment and Decision Making* (Vol. 50, pp. 339-362). San Diego, CA: Elsevier Academic Press. doi:10.1016/S0079-421(08)00411-8
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323-370. doi:10.1037//1089-2680.5.4.323
- Bettencourt, B. A., Dorr, N., Charlton, K., & Hume, D. L. (2001). Status differences in in-group bias: A meta-analytic examination of the effects of status stability, status legitimacy, and group permeability. *Psychological Bulletin*, 127, 520-542. doi:10.1037//0033-2909.127.4.520
- Blascovich, J. (2008a). Challenge, threat, and health. In: J. Y. Shah, & W. L. Gardner (Eds.), *Handbook of Motivation Science* (pp. 481-493). New York: Guilford Press.
- Blascovich, J. (2008b). Challenge and threat. In: A. J. Elliot (Ed.), *Handbook of Approach and Avoidance Motivation* (pp. 431-445). New York: Psychology Press.
- Blascovich, J., & Mendes, W. B. (2000). Challenge and threat appraisals: The role of affective cues. In J. Forgas (Ed.), *Feeling and Thinking: The Role of Affect in Social Cognition* (pp. 59-82). Paris: Cambridge University Press.
- Blascovich, J., & Mendes, W. B. (2010). Social psychophysiology and embodiment. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *The Handbook of Social Psychology* (5th edition, pp. 194-227). New York: John Wiley & Sons Inc.
- Blascovich, J., Mendes, W. B., Hunter, S. B., Lickel, B., & Kowai-Bell, N. (2001). Perceiver threat in social interactions with stigmatized others.

- Journal of Personality and Social Psychology*, 80, 253-267. doi:10.1037//0022-3514.80.2.253
- Blascovich, J., Seery, M. D., Mugridge, C. A., Norris, R. K., & Weisbuch, M. (2004). Predicting athletic performance from cardiovascular indexes of challenge and threat. *Journal of Experimental Social Psychology*, 40, 683-688. doi:10.1016/j.jesp.2003.10.007
- Blascovich, J., & Tomaka, J. (1996). The biopsychosocial model of arousal regulation. In: M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 28, pp. 1-51). San Diego: Academic Press. doi:10.1016/S0065-2601(08)60235-X
- Brambilla, M., Rusconi, P., Sacchi, S., & Cherubini, P. (2011). Looking for honesty: The primary role of morality (vs. sociability and competence) in information gathering. *European Journal of Social Psychology*, 41, 135-143. doi:10.1002/ejsp.744
- Brambilla, M., Sacchi, S., Rusconi, P., Cherubini, P., & Yzerbyt, V. Y. (2011). You want to give a good impression? Be honest! Moral traits dominate group impression formation. *British Journal of Social Psychology*, 51, 149-166. doi:10.1111/j.2044-8309.2010.02011.x
- Branscombe, N. R., Spears, R., Ellemers, N., & Doosje, B. (2002). Intragroup and intergroup evaluation effects on group behavior. *Personality and Social Psychology Bulletin*, 28, 744-753. doi:10.1177/0146167202289004
- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology*, 30, 745-778. doi:10.1002/1099-0992(200011/12)
- Cacioppo, J. T., Gardner, W. L., & Berntson, G. G. (1999). The affect system has parallel and integrative processing components: Form follows function. *Journal of Personality and Social Psychology*, 76, 839-855. doi:10.1037/0022-3514.76.5.839
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review*, 97, 19-35. doi:10.1037/0033-295X.97.1.19
- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin*, 26, 741-751. doi:10.1177/0146167200268008

- Cleveland, C., Blascovich, J., Gangi, C., & Finez, L. (2011). When good teammates are bad: Physiological threat on recently-formed teams. *Small Group Research*, 42, 3–31. doi:10.1177/1046496410386245
- Cottrell, C., Neuberg, S., & Li, N. (2007). What do people desire in others? A sociofunctional perspective on the importance of different valued characteristics. *Journal of Personality and Social Psychology*, 92, 208–231. doi:10.1037/0022-3514.92.2.208
- Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared virtue: The convergence of valued human strengths across culture and history. *Review of General Psychology*, 9, 209–213. doi:10.1037/1089-2680.9.3.203
- De Waal, F. (1996). *Good natured: The origins of right and wrong in humans and other animals*. Cambridge: Harvard University Press.
- De Wit, F. R. C., Scheepers, D., & Jehn, K. E. (2012). Cardiovascular reactivity and resistance to opposing viewpoints during intragroup conflict. *Psychophysiology*, 49, 1691-1699. doi:10.1111/j.1469-8986.2012.01456.x
- Does, S., Derks, B., & Ellemers, N. (2011). Thou shalt not discriminate: How emphasizing moral ideals rather than obligations increases Whites' support for social equality. *Journal of Experimental Social Psychology*, 47, 562-571. doi:10.1016/j.jesp.2010.12.024
- Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived variability as a function of group status and identification. *Journal of Experimental Social Psychology*, 31, 410-436. doi:10.1006/jesp.1995.1018
- Eidelman, S., & Biernat, M. (2003). Derogating black sheep: Individual or group protection? *Journal of Experimental Social Psychology*, 39, 602-609. doi:10.1016/S0022-1031(03)00042-8
- Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, 290-292. doi:10.1126/science.1089134
- Ellemers, N. (1993). The influence of socio-structural variables on identity management strategies. *European Review of Social Psychology*, 4, 27-57. doi:10.1080/14792779343000013
- Ellemers, N. (2012). The group self. *Science*, 336, 848-852. doi:10.1126/science.1220987

- Ellemers, N., & Jetten, J. (2013). The many ways to be marginal in a group. *Personality and Social Psychology Review*, 17, 3-21. doi:10.1177/1088868312453086
- Ellemers, N., Pagliaro, S., Barreto, M., & Leach, C. W. (2008). Is it better to be moral than smart? The effects of morality and competence norms on the decision to work at group status improvement. *Journal of Personality and Social Psychology*, 95, 1397-1410. doi:10.1037/a0012628
- Ellemers, N., Spears, R., & Doosje, B. (1999). *Social Identity: Context, commitment, content*. Oxford, England: Blackwell.
- Ellemers, N., & Van den Bos, K. (2012). Morality in groups: On the social-regulatory functions of right and wrong. *Social and Personality Psychology Compass*, 6, 878-889. doi:10.1111/spc3.12001
- Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of Personality and Social Psychology*, 38, 889- 906. doi:10.1037/0022-3514.38.6.889
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902. doi:10.1037/0022-3514.82.6.878
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54, 466-475. doi:10.1037/0022-3514.54.3.466
- Folkman, S., Lazarus, R. S., Gruen, R. J., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, 50, 571-579. doi:10.1037/0022-3514.50.3.571
- Frings, D., Hurst, J., Cleveland, C., Blascovich, J., & Abrams, D. (2012). Challenge, threat, and subjective group dynamics: Reactions to normative and deviant group members. *Group Dynamics: Theory, Research, and Practice*, 16, 105-121. doi:10.1037/a0027504
- Gable, P.A., & Harmon-Jones, E. (2010). The blues broaden, but the nasty narrows: Attentional consequences of negative affects low and high in motivational intensity. *Psychological Science*, 21, 211-215. doi:10.1177/0956797609359622

- Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. *Psychological Science*, 20, 393–398. doi:10.1111/j.1467-9280.2009.02306.x
- Good, A., & Abraham, C. (2007). Measuring defensive responses to threatening messages: A meta-analysis of measures. *Health Psychology Review*, 1, 208–229. doi:10.1080/17437190802280889
- 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, 366–385. doi:10.1037/a0021847.
- Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in Cognitive Sciences*, 6, 517–523. doi:10.1016/S1364-6613(02)02011-9
- Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44, 389–400. doi:10.1016/j.neuron.2004.09.027
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293, 2105–2108. doi:10.1126/science.1062872
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834. doi:10.1037//0033-295X.108.4.814
- Haidt, J. (2008). Morality. *Perspectives on Psychological Science*, 3, 65–72. doi:10.1111/j.1745-6916.2008.00063.x
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20, 98–116. doi:10.1007/s11211-007-0034-z
- Haidt, J., & Kesebir, S. (2010). Morality. In S. T. Fiske, D. Gilbert & G. Lindzey (Eds.), *Handbook of Social Psychology*, 5th Edition (pp. 797–832). Hoboken: Wiley.
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65, 613–628. doi:10.1037/0022-3514.65.4.613
- Hamilton, M. A., & Mineo, P. J. (1998). A framework for understanding equivocation. *Journal of Language and Social Psychology*, 17, 3–35. doi:10.1177/0261927X980171001

- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280-1300. doi:10.1037//0003-066X.52.12.1280
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In: M. P. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 30, pp. 1-46). San Diego: Academic Press.
- Hogg, M. A., & Hardie, E. A. (1991). Social attraction, personal attraction, and self-categorization: A field study. *Personality and Social Psychology Bulletin*, 17, 175-180. doi:10.1177/014616729101700209
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2, 204-222. doi:10.1111/j.1751-9004.2007.00066.x
- Hornsey, M. J., De Bruijn, P., Creed, J., Allen, J., Ariyanto, A., & Svensson, A. (2005). Keeping it in-house: How audience affects responses to group criticism. *European Journal of Social Psychology*, 35, 291-312. doi:10.1002/ejsp.246
- Janoff-Bulman, R. & Carnes, N. C. (in press). Surveying the moral landscape: Moral motives and group-based moralities. *Personality and Social Psychology Review*. doi:10.1177/1088868313480274
- Janoff-Bulman, R., Sheikh, S., & Hepp, S. (2009). Proscriptive versus prescriptive morality: Two faces of moral regulation. *Journal of Personality and Social Psychology*, 96, 521-537. doi:10.1037/a0013779
- Johnson-George, C., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology*, 43, 1306-1317. doi:10.1037/0022-3514.43.6.1306
- Jordan, J., Mullen, E., & Murnighan, J. K. (2011). Striving for the moral self: The effects of recalling past moral actions on future moral behavior. *Personality and Social Psychology Bulletin*, 37, 701-713. doi:10.1177/0146167211400208
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89, 899-913. doi:10.1037/0022-3514.89.6.899
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist*, 39, 341-350.

- Kamarck, T. W., Jennings, J. R., Debski, T. T., Glickmanweiss, E., Johnson, P. S., Eddy, M. J., & Manuck, S. B. (1992). Reliable measures of behaviorally-evoked cardiovascular reactivity from a pc-based test battery – results from student and community samples. *Psychophysiology*, *29*, 17-18. doi:10.1111/j.1469-8986.1992.tb02006.xs
- Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of Socialization Theory and Research* (pp. 347-480). Chicago: Rand McNally.
- Kouchaki, M. (2001). Vicarious moral licensing: The influence of others' past moral actions on moral behavior. *Journal of Personality and Social Psychology*, *101*, 702-715. doi:10.1037/a0024552
- Kouzakova, M., Ellemers, N., Harinck, F., & Scheepers, D. (2012). The implications of value conflict: How disagreement on values affects self-involvement and perceived common ground. *Personality and Social Psychology Bulletin*, *38*, 798-807. doi:10.1177/0146167211436320
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lazarus, R., & Folkman, S. (1991). The concept of coping. In A. Monat & R. S. Lazarus (Eds.), *Stress and coping: An anthology* (3rd ed., pp. 189-206). New York: Columbia University Press.
- Leach, C. W., Bilali, R., & Pagliaro, S. (2013). Group and morality. In: J. A. Simpson & J. F. Dovidio (Eds.), *The Handbook of Personality and Social Psychology, Vol. 2: Interpersonal Relationships and Group Processes*. Washington: American Psychological Association.
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: The importance of morality (vs. competence and sociability) in the positive evaluation of in-groups. *Journal of Personality and Social Psychology*, *93*, 234-249. doi:10.1037/0022-3514.93.2.234
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, *68*, 518-530. doi:10.1037/0022-3514.68.3.518
- Lee, Y.-T., & Ottati, V. (1995). Perceived in-group homogeneity as a function of group membership salience and stereotype threat. *Personality and Social Psychology Bulletin*, *21*, 610-619. doi:10.1177/0146167295216007

- Leventhal, H. (1970). Findings and theory in the study of fear communications. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 5, pp. 119–187). New York: Academic Press.
- Levine, J. M., & Kerr, N. L. (2007). Inclusion and exclusion: Implications for group processes. In A. E. Kruglanski & E. T. Higgins (Eds.), *Social Psychology: Handbook of Basic Principles* (2nd ed., pp. 759-784). New York: Guilford Press.
- Levine, J. M., & Moreland, R. L. (1994). Group socialization: Theory and research. *European Review of Social Psychology*, 5, 305-336. doi:10.1080/14792779543000093
- Locke, E. A., & Latham, G. P. (1990). Work motivation and satisfaction: Light at the end of the tunnel. *Psychological Science*, 1, 240-246.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717. doi:10.1037/0003-066X.57.9.705
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale – self-evaluation of ones social identity. *Personality and Social Psychology Bulletin*, 18, 302-318. doi:10.1177/0146167292183006
- Marques, J. M., Abrams, D., Paez, D., & Martinez-Taboada, C. (1998). The role of categorization and in-group norms in judgments of group and their members. *Journal of Personality and Social Psychology*, 75, 976-988. doi:10.1037/0022-3514.75.4.976
- Marques, J. M., Abrams, D., & Serôdio, R. G. (2001). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are undermined. *Journal of Personality and Social Psychology*, 81, 436-447. doi:10.1037/0022-3514.81.3.436
- Marques, J. M., & Paez, D. (1994). The ‘black sheep effect’: Social categorization, rejection of ingroup deviates, and perception of group variability. *European Review of Social Psychology*, 5, 37-68. doi:10.1080/14792779543000011
- Marques, J. M., & Yzerbyt, V. Y. (1988). The black sheep effect: Judgmental extremity towards ingroup members in inter- and intra-group situations. *European Journal of Social Psychology*, 18, 287-292.

- Marques, J. M., Yzerbyt, V. Y., & Leyens, J.-P. (1988). The black sheep effect: judgmental extremity towards ingroup members as a function of group identification. *European Journal of Social Psychology*, 18, 1-16.
- Martijn, C., Spears, R., Van der Pligt, J., & Jakobs, E. (1992). Negativity and positivity effects in person perception and inference: Ability versus morality. *European Journal of Social Psychology*, 22, 453-463.
- Mendes, W. B., Blascovich, J., Hunter, S. B., Lickel, B., & Jost, J. T. (2007). Threatened by the unexpected: Physiological Responses during social interactions with expectancy-violating partners. *Journal of Personality and Social Psychology*, 92, 698-716. doi:10.1037/0022-3514.92.4.698
- Mendes, W. B., Blascovich, J., Lickel, B., & Hunter, S. (2002). Challenge and threat during social interactions with White and Black men. *Personality and Social Psychology Bulletin*, 28, 939-952. doi:10.1177/014616720202800707
- Mendes, W. B., Blascovich, J., Major, B., & Seery, M. (2001). Challenge and threat responses during downward and upward social comparisons. *European Journal of Social Psychology*, 31, 477-497. doi:10.1002/ejsp.80
- Mendes, W. B., Major, B., McCoy, S., & Blascovich, J. (2008). How attributional ambiguity shapes physiological and emotional responses to social rejection and acceptance. *Journal of Personality and Social Psychology*, 94, 278-291. doi:10.1037/0022-3514.94.2.278
- Monin, B., & Jordan, A. H. (2009). Dynamic moral identity: A social psychological perspective. In D. Narvaez & D. Lapsley (Eds.), *Personality, Identity, and Character: Explorations in Moral Psychology* (pp. 341-354). Cambridge: University Press.
- Monin, B., Sawyer, P. J., & Marquez, M. J. (2008). The rejection of moral rebels: Resenting those who do the right thing. *Journal of Personality and Social Psychology*, 95, 76-93. doi:10.1037/0022-3514.95.1.76
- Moreland, R. L., & Levine, J. M. (1982). Socialization in small-groups: Temporal changes in individual-group relations. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 15, pp. 137-192). New York: Academic Press.
- Ouwerkerk, J. W., & Ellemers, N. (2002). The benefits of being disadvantaged: Performance-related circumstances and consequences of intergroup comparisons. *European Journal of Social Psychology*, 32, 73-91. doi:10.1002/ejsp.62

- Pagliaro, S., Brambilla, M., Sacchi, S., D'Angelo, M., & Ellemers, N. (*in press*). Initial impressions determine behaviours: Morality predicts the willingness to help newcomers. *Journal of Business Ethics*. doi:10.1007/s10551-012-1508-y
- Pagliaro, S., Ellemers, N., & Barreto, M. (2011). Sharing moral values: Anticipated ingroup respect as a determinant of adherence to morality-based (but not competence-based) group norms. *Personality and Social Psychology Bulletin*, 37, 1117-1129. doi:10.1177/0146167211406906
- Parks, C. D., & Stone, A. B. (2010). The desire to expel unselfish members from the group. *Journal of Personality and Social Psychology*, 99, 303-310. doi:10.1037/a0018403
- Pinder, C. C. (1998). *Work Motivation in Organizational Behavior*. Upper Saddle River: Prentice Hall.
- Pinto, I. R., Marques, J. M., Levine, J. M., & Abrams, D. (2010). Membership status and subjective group dynamics: Who triggers the black sheep effect? *Journal of Personality and Social Psychology*, 99, 107-119. doi:10.1037/a0018187
- Postmes, T., Haslam, S. A., & Swaab, R. I. (2005). Social influence in small groups: An interactive model of social identity formation. *European Review of Social Psychology*, 16, 1-42. doi:10.1080/10463280440000062
- 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, 717-731. doi:10.3758/BF03206553
- Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review*, 118, 57-75. doi:10.1037/a0021867
- Reeder, G. D., & Spores, J. M. (1983). The attribution of morality. *Journal of Personality and Social Psychology*, 44, 736-745. doi:10.1037/0022-3514.44.4.736
- Reynolds, S. J. (2008). Moral attentiveness: Who pays attention to the moral aspects of life? *Journal of Applied Psychology*, 93, 1027-1041. doi:10.1037/0021-9010.93.5.1027
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.

- Ruiter, R. A. C., Abraham, C., & Kok, G. (2001). Scary warnings and rational precautions: A review of the psychology of fear appeal. *Psychology and Health, 16*, 613-630. doi:10.1080/08870440108405863
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39*, 1161-1178. doi:10.1037/h0077714
- Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science, 20*, 523-528. doi:10.1111/j.1467-9280.2009.02326.x
- Scheepers, D., De Wit, F., Ellemers, N., & Sassenberg, K. (2012). Social power makes the heart work more efficiently: Evidence from cardiovascular markers of challenge and threat. *Journal of Experimental Social Psychology, 48*, 371-374. doi:10.1016/j.jesp.2011.06.014
- Schmitt, M. T., Silvia, P. J., & Branscombe, N. R. (2000). The intersection of self-evaluation maintenance and social identity theories: Intragroup judgment in interpersonal and intergroup contexts. *Personality and Social Psychology Bulletin, 26*, 1598-1608. doi:10.1177/01461672002612013
- Schwartz, S. H. (1992). Universals 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.
- Seery, M. D., Blascovich, J., Weisbuch, M., & Vick, S. B. (2004). The relationship between self-esteem level, self-esteem stability, and cardiovascular reactions to performance feedback. *Journal of Personality and Social Psychology, 87*, 133-145. doi:10.1037/0022-3514.87.1.133
- Seery, M. D., Weisbuch, M., Hetenyi, M. A., & Blascovich, J. (2010). Cardiovascular measures independently predict performance in a university course. *Psychophysiology, 47*, 535-539. doi:10.1111/j.1469-8986.2009.00945.x
- Sherwood, A., Allen, M. T., Fahrenberg, J., Kelsey, R. M., Lovallo, W. R., & van Dooren, L. J. P. (1990). Methodological guidelines for impedance cardiography. *Psychophysiology, 27*, 1-23. doi:10.1111/j.1469-8986.1990.tb02171.x
- Skitka, L. J. (2003). Of different minds: An accessible identity model of justice reasoning. *Personality and Social Psychology Review, 7*, 286-297. doi:10.1207/S15327957PSPR0704_02

- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88, 895-917. doi:10.1037/0022-3514.88.6.895
- Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52, 689-699. doi:10.1037//0022-3514.52.4.689
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-47). Monterey: Brooks/Cole.
- Tomaka, J., Blascovich, J., Kelsey, R. M., & Leitten, C. L. (1993). Subjective, physiological, and behavioral effects of threat and challenge appraisal. *Journal of Personality and Social Psychology*, 65, 248-260. doi:10.1037/0022-3514.65.2.248
- Turner, J. C. (1991). *Social influence*. Milton Keynes, UK: Open University Press.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford: Blackwell.
- Tyler, T. R., & Blader, S. L. (2003). The Group engagement model: Procedural justice, social identity, and cooperative behavior. *Personality and Social Psychology Review*, 7, 349-361. doi:10.1207/S15327957PSPR0704_07
- Van der Lee, R., Ellemers, N., & Scheepers, D. (2012a). Moral misery and competent contentment: The role of affect in group members' perceived coping ability with morality vs. competence evaluations. *Under review*.
- Van der Lee, R., Ellemers, N., & Scheepers, D. (2012b). Threatened by the immoral, challenged by the incompetent: Cardiovascular responses to intragroup morality vs. competence evaluations. *Under Review*.
- Van der Lee, R., Ellemers, N., & Scheepers, D. (2013). Who gets to join the club? Responses to prospective group members depend on their morality rather than their competence. *Under Review*.
- Van Leeuwen, F., Park, J. H., & Penton-Voak, I. S. (2012). Another fundamental social category? Spontaneous categorization of people who uphold or violate moral norms. *Journal of Experimental Social Psychology*, 48, 1385-1388. doi:10.1016/j.jesp.2012.06.004

- Van Leeuwen, E., Van den Bosch, M., Castano, A., & Hopman, P. (2010). Dealing with deviants: The effectiveness of rejection, denial, and apologies on protecting the public image of a group. *European Journal of Social Psychology*, 40, 282-299. doi:10.1002/ejsp.622
- Van 't Riet, J., Ruiter, R. A. C., Werrij, M. Q., & De Vries, H. (2008). The influence of self-efficacy on the effects of framed health messages. *European Journal of Social Psychology*, 38, 800-809. doi:10.1002/ejsp.496
- Vick, S. B., Seery, M. D., Blascovich, J., & Weisbuch, M. (2008). The effect of gender stereotype activation on challenge and threat motivational states. *Journal of Experimental Social Psychology*, 44, 624-630. doi:10.1016/j.jesp.2007.02.007
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070. doi:10.1037/0022-3514.54.6.1063
- Weisbuch-Remington, M., Mendes, W. B., Seery, M. D., & Blascovich, J. (2005). The nonconscious influence of religious symbols in motivated performance situations. *Personality and Social Psychology Bulletin*, 31, 1203-1216. doi:10.1177/0146167205274448
- Williams, K.D., Forgas, J.P., & von Hippel, W. (Eds.). (2005). *The social outcast: Ostracism, social exclusion, rejection, and bullying*. New York: Psychology Press.
- Wojciszke, B. (1994). Multiple meanings of behavior: Construing actions in terms of competence or morality. *Journal of Personality and Social Psychology*, 67, 222-232. doi:10.1037//0022-3514.67.2.222
- Wojciszke, B. (2005). Affective concomitants of information on morality and competence. *European Psychologist*, 10, 60-70. doi:10.1027/1016-9040.10.1.60

Summary

Morality is of particular importance to people: People want to be considered moral and want to belong to moral groups. Consequently, morality judgments have the potential to motivate individuals to behave in ways that are considered to be 'good'. In the current dissertation, I adopted a social identity approach by building on the premise that a social identity can motivate individuals as members of a social group. Specifically, I examined the impact of intragroup morality judgments on group members' motivational responses, and compared those to competence judgments as an alternative domain of evaluation.

In three empirical chapters, I investigated the impact of morality (vs. competence) judgments from different perspectives, namely judgments of 1) group member's *own* prior behavior, 2) *another* group member's behavior, as well as 3) the behavior of a *prospective* group member. In addition, I examined different types of motivational responses: Affective, cognitive, psychophysiological, and behavioral. The central hypothesis was that intragroup morality judgments generally impact more strongly on group members' motivational responses than competence judgments.

In Chapter 2, I examined the impact of the group's morality and competence judgments about group members' own prior behavior, and focussed specifically on their affective and cognitive responses. The results of three experiments demonstrated that group members experience more negative affect, which in turn lowered their perceived coping ability after their prior behavior was evaluated as immoral rather than incompetent. However, when additionally given the opportunity to restore their image as a moral group member, the negative affective response was alleviated and perceived coping abilities were increased. In addition, I was able to rule out that morality judgments generate more intense affective responses overall, because being

evaluated as competent by others in a group elicits more positive affect than being evaluated as moral.

In Chapter 3, I examined how morality and competence judgments of group members' own prior behavior, as well as of another group member's prior behavior, impact on their psychophysiological responses. In two experiments, I demonstrated that negative judgments of morality (vs. competence) elicit a cardiovascular pattern indicative of threat rather than challenge in group members. This pattern occurred regardless of whether the judgment concerned own prior behavior or the prior behavior of another ingroup member. Intragroup judgments of immorality thus elicit a relative threat rather than challenge response in group members.

In Chapter 4, I examined how morality and competence judgments of prospective group members impact on the behavioral responses towards these prospective members. The results of three experiments demonstrated that prospective group members who are judged to be immoral rather than incompetent are more likely to be excluded from the group, because they impose a threat to the social identity. Conversely, group members are keener to include a prospective group member who is judged to be moral rather than competent. The morality of prospective group members thus elicits more pronounced behavioral responses from group members than their competence.

In sum, the research reported in this dissertation demonstrated that the motivational force of morality largely pertains to immorality. Judgments of immorality are shown to elicit a range of motivational responses in group members, such as negative affect, lowered perceived coping abilities, a cardiovascular pattern indicative of threat rather than challenge, and a greater inclination towards social exclusion. Morality judgments—generally more so than competence judgments—impact on group members' striving to be a 'good' group member. Taken together, the current dissertation advances our understanding of the many ways in which morality judgments impact on motivation within groups.

Summary

in Dutch

Moraliteit is van groot belang voor mensen: Ze willen moreel gevonden worden en willen bij morele groepen horen. Moraliteitsoordelen hebben derhalve het vermogen om mensen te motiveren om ‘goed’ gedrag te vertonen. In de huidige dissertatie neem ik een sociale identiteitsbenadering aan, door voort te bouwen op de veronderstelling dat een sociale identiteit individuen—als leden van sociale groepen—kan motiveren. Ik heb onderzocht hoe groepsoordelen over moraliteit (i.e., betrouwbaarheid, eerlijkheid, oprechtheid) de motivationele reacties van groepsleden beïnvloeden. Ik heb dit steeds vergeleken met oordelen over competentie (i.e., vaardigheden, succes) als een alternatief evaluatief domein.

In drie empirische hoofdstukken staat beschreven hoe ik de invloed van moraliteits- (vs. competentie-) oordelen heb onderzocht. Ik heb dit vanuit verschillende perspectieven bekeken, namelijk oordelen over 1) het *eigen* gedrag van groepsleden, 2) het gedrag van een *ander* groepslid, en 3) het gedrag van een *potentieel* groepslid. Daarbij heb ik verschillende soorten motivationele reacties onderzocht: Affectief, cognitief, psychofysiologisch, en gedragsmatig. De centrale voorspelling was dat groepsoordelen over moraliteit over het algemeen meer invloed hebben op de motivationele reacties van groepsleden dan oordelen over competentie.

In Hoofdstuk 2 beschrijf ik drie experimenten waarin ik heb gekeken naar groepsoordelen over het eigen gedrag in termen van moraliteit of competentie. Ik heb me daarbij specifiek gericht op de affectieve en cognitieve reacties op deze groepsoordelen. De resultaten toonden aan dat onderzoeksdeelnemers meer negatieve emoties ervoeren, met als gevolg daarvan dat ze zichzelf niet goed in staat achtten om hiermee om te gaan, wanneer hun gedrag door andere groepsleden was beoordeeld als immoreel. Dit was minder het geval wanneer hun gedrag werd beoordeeld als

incompetent. Wanneer deelnemers vervolgens echter de kans kregen om hun reputatie als moreel groepslid te herstellen werd de negatieve emotionele reactie verlicht en nam de mate waarin ze zichzelf in staat achtten om hiermee om te gaan toe. Op basis van de resultaten kon ik vervolgens ook uitsluiten dat morele oordelen altijd sterkere emotionele reacties oproepen. Deelnemers aan het onderzoek ervoeren namelijk meer positieve emoties wanneer hun gedrag beoordeeld werd als competent dan wanneer het werd beoordeeld als moreel.

In Hoofdstuk 3 heb ik me gericht op de psychofysiologische reacties van groepsleden. Ik maakte een onderscheid tussen cardiovasculaire patronen die indicatief zijn voor negatieve bedreiging versus positieve uitdaging. Hierbij onderzocht ik niet alleen de invloed van moraliteits- en competentie-oordelen over het eigen gedrag, maar ook reacties op oordelen over het gedrag van een ander groepslid. De resultaten van twee experimenten toonden aan dat negatieve oordelen in termen van moraliteit (vs. competentie) een cardiovasculair patroon induceren dat indicatief is voor negatieve bedreiging (in plaats van positieve uitdaging). Dit zelfde patroon werd gevonden ongeacht of het moraliteitsoordeel betrekking had op het eigen gedrag of op het gedrag van een ander groepslid. Groepsoordelen in termen van immoraliteit ontlokken dus een relatieve bedreigsreactie in groepsleden, in plaats van hen positief uit te dagen.

In hoofdstuk 4 richt ik me op de bereidheid een potentieel nieuw groepslid in de groep op te nemen. Ik beschrijf drie experimenten waarin ik heb onderzocht hoe de moraliteits- en competentie-oordelen over een potentieel groepslid de gedragsmatige reacties van andere groepsleden beïnvloeden. De resultaten toonden aan dat groepsleden geneigd zijn om een potentieel groepslid dat is beoordeeld als immoreel buiten te sluiten, omdat deze een bedreiging vormt voor de positieve sociale identiteit. De neiging om een potentieel groepslid buiten te sluiten is minder groot als deze is beoordeeld als incompetent. Groepsleden zijn daarentegen meer geneigd om een potentieel groepslid in de groep op te nemen wanneer deze is beoordeeld als moreel in plaats van competent. De moraliteit van potentiële groepsleden leidt dus tot meer uitgesproken gedragsmatige reacties dan hun competentie.

Alles bij elkaar toont het onderzoek dat beschreven is in deze dissertatie aan dat de motivationele kracht van moraliteit met name betrekking heeft op immoraliteit. Oordelen in termen van immoraliteit roepen een verscheidenheid

aan motivationele reacties op in groepsleden, waaronder negatieve emoties, een verlaagde inschatting van de eigen mogelijkheden om ermee om te gaan, een cardiovasculair patroon dat indicatief is voor negatieve bedreiging in plaats van positieve uitdaging, en een grotere geneigdheid tot sociale exclusie. Moraliteitsoordelen hebben over het algemeen dus een grotere invloed dan competentie-oordelen op het streven van groepsleden om een positieve sociale identiteit te verwerven door zelf een 'goed' groepslid te zijn of geassocieerd te worden met een groep waarin anderen 'goed' zijn. Hiermee geeft het onderzoek dat in deze dissertatie wordt beschreven inzicht in de verschillende manieren waarop moraliteitsoordelen de motivatie van groepsleden beïnvloeden.

Curriculum Vitae

Romy van der Lee (Hilversum, 1984) attended high school at the Alberdingk Thijm College, Hilversum, The Netherlands. In 2002, she started studying psychology at VU University Amsterdam. She graduated (*cum laude*) from the two-year Research Master's program in Social Psychology in 2007. During her Master's, she visited the lab of Prof. Dr. Kipling D. Williams at Purdue University, Lafayette, US. In 2008, after a year of teaching at VU University Amsterdam, she started her Ph.D. project with Prof. Dr. Naomi Ellemers and Dr. Daan Scheepers at Leiden University. As of summer 2013, Romy will work as a postdoctoral scholar funded by The Netherlands Organization for Scientific Research (NWO).

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