Third-party anger and being moved:

An appraisal approach to moral emotions

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"Fear alerts us to dangers, surprise registers novelty, and disgust helps us avoid potential sources of contamination. Many of these functions unite us with simpler creatures, and are, in that sense, among our more primitive or ancient psychological capacities. But emotions also play a role in the most sophisticated aspects of human mental life: they play a role in forming enduring social bonds to individuals and large groups, they give us pleasure in the arts, and they make fundamental contributions to human morality."

Jesse Prinz (2009, p. 519)

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Abstract

Moral and immoral behavior can elicit strong emotions. For instance, people can get outraged when they witness unfair behavior (i.e., they experience third-party anger) and they can be intensely moved and overwhelmed by exceptional helpfulness (i.e., they experience feelings of being moved). Using these feelings of third-party anger and being moved as examples, this dissertation set out to clarify how morality and emotions are related. Specifically, the role of outcomes and norms for emotional reactions and behavioral consequences were investigated within six empirical studies. Results indicate that third-party anger and feelings of being moved are counterparts: whereas witnessing behavior that violates norms (e.g., unfairness or disrespect) elicits anger, witnessing behavior that surpasses norms (e.g., exceptional helpfulness or outstanding achievement) elicits feelings of being moved. These emotional episodes seem to be highly relevant for social life as they were associated with punishment decisions, voting intentions and voluntary work. Explaining the elicitation of these emotions was improved when expanding established appraisal assessment methods. Taken together, these findings provide a framework for applying appraisal research to moral emotions and contribute to identifying links between moral principles and emotions. In addition, they point to practical implications concerning anger-induction through the media and the role of being moved in persuasion processes.

Zusammenfassung

Moralisches und unmoralisches Verhalten kann mit starken Emotionen verbunden sein. Beispielsweise kann das Beobachten einer Ungerechtigkeit echte Empörung auslösen (d. h. third-party anger). Außergewöhnliche Hilfsbereitschaft dagegen kann zu Gefühlen des Bewegtseins und der Überwältigung führen (d. h. being moved). Am Beispiel dieser Emotionen beleuchtet die vorliegende Dissertation wie Moral und Emotionen zusammenhängen. Dafür wurde die Rolle von Konsequenzen und Normen für emotionale Reaktionen und damit verbundene Verhaltensweisen anhand von sechs empirischen Studien untersucht. Die Ergebnisse zeigen, dass Gefühle des Bewegtseins das positive Pendent zu Ärger darstellen. Während Ärger durch Normverletzungen ausgelöst wird (z. B. Ungerechtigkeit oder Respektlosigkeit), werden Gefühle des Bewegtseins durch das Beobachten positiver Normabweichungen ausgelöst (z. B. ungewöhnliche Hilfsbereitschaft oder außergewöhnliche Leistung). Diese emotionalen Episoden scheinen wesentlich für ein soziales Zusammenleben zu sein, da sie mit Bestrafungsentscheidungen, politischen Wahlentscheidungen und ehrenamtlicher Arbeit verbunden waren. Wie diese Emotionen ausgelöst werden konnte wesentlich besser erklärt werden, wenn bestehende Methoden zur Erfassung von Appraisals (d. h. subjektiven Bewertungen) erweitert wurden. Zusammengenommen zeigen diese Befunde auf, wie Appraisaltheorien auf moralische Emotionen angewendet werden können und tragen dazu bei, Verbindungen zwischen moralischen Grundsätzen und Emotionen zu identifizieren. Sie weisen außerdem auf praktische Implikationen hin, wie der Auslösung von Ärger durch Medien und der Rolle von Gefühlen des Bewegtseins in Überzeugungsprozessen.

List of Original Manuscripts

MANUSCRIPT 1. "What elicits third-party anger? The effects of norm violations and others' outcome on anger and compassion" by Helen Landmann and Ursula Hess (Manuscript published in Cognition and Emotion)

MANUSCRIPT 2. "Testing moral foundation theory: Are specific moral emotions elicited by specific moral transgressions?" by Helen Landmann and Ursula Hess (Manuscript submitted for publication to the Journal of Moral Education)

MANUSCRIPT 3. "Being moved by virtue, success and music. The role of surpassing internal standards" by Helen Landmann, Florian Cova and Ursula Hess (Manuscript submitted for publication to The Journal of Positive Psychology)

Preface

Although people can be selfish, pure self-interest cannot explain human behavior well. For instance, 6.73 billion Euro were donated for charity in Germany in 2015 (DZI, 2016) and every 10th person volunteered to help refugees (Ahrens, 2016). Although these pro-social behaviors can satisfy egoistic motives like social reputation, the concept of moral concerns helps to explain such pro-social acts (e.g., Batson & Shaw, 1991; Fehr & Gächter, 2002; Haidt, 2007; Singer & Steinbeis, 2009). Thus, in addition to self-interest, moral concerns seem to guide our judgment and behavior.

How people derive their moral judgments and what motivates them to act accordingly has been the target of philosophical disputes and psychological research for decades. The role of emotions is one controversy within that debate (e.g., Greene et al., 2008; Haidt, 2001; Huebner, Dwyer & Hauser, 2009; Prinz, 2006). This dispute has often been led back to the moral philosophy of Kant and Hume. In his *theory on pure reason*, Immanuel Kant describes emotions as disruptive factor for moral reasoning whereas David Hume claims that *moral sentiments* (or emotions) are necessary for morally proper behavior (for a comparison of the two approaches see Denis, 2008). Current research widely acknowledges that both – moral reasoning and moral emotions – influence moral judgement and behavior (e.g., Greene et al., 2008; Haidt, 2001; Huebner, Dwyer & Hauser, 2009; Prinz, 2006). However, scholars disagree about the elicitors and behavioral consequences of these emotions. For instance, some argue that norm violations are more closely associated with emotions than the situation's consequences (e.g. Greene et al., 2008), whereas others empathize the importance of consequences that involve others' suffering for emotions like compassion (e.g., Nussbaum, 2001). In addition, researchers disagree about whether specific moral principles are rooted in specific emotional systems (e.g., Haidt & Joseph, 2004) or not (e.g., Cameron, Lindquist & Gray, 2015). To identify these links between emotion and morality is crucial to understand why people sometimes restrain their self-interest, which makes social life possible.

This dissertation set out to clarify how emotion and morality are related using two emotions as examples: third-party anger and being moved. People can get outraged when they witness unfair behavior that affects others, i.e. they experience third-party anger, (e.g., Batson et al., 2007; Montada & Schneider,

1989) and people can be overwhelmed when they witness exceptional helpfulness, i.e. they experience feelings of being moved (e.g., Cova & Deonna, 2014; Menninghaus, 2015). These emotions are experienced by third-parties who witness an interaction between others without being directly affected by the situation themselves. That is, they are not harmed by the unfairness and they do not profit from the help. Yet, they experience strong emotions. As for moral emotions in general, scholars disagree about elicitors and consequences of these emotions (e.g., Batson et al., 2007; Cova & Deonna, 2014; Menninghaus, 2015; Montada & Schneider, 1989). This dissertation investigates third-party anger and being moved and thereby contributes to the question how morality and emotions are related.

In the following sections, I therefore provide an overview of research on third-party anger and feelings of being moved. I use an appraisal approach to explain how these emotions are elicited and thereby provide a framework for applying appraisal theories to so-called moral emotions. Deducted from this framework, I present my research questions about the elicitation and consequences of third-party anger and being moved. The empirical part of this dissertation summarizes six studies reported in three manuscripts, which investigated these questions. Based on an integration of results, I discuss theoretical, methodological and practical implications.

Moral Emotions

Moral judgement and morally relevant behavior sometimes involve strong emotions such as compassion or guilt. These emotional reactions can be considered moral emotions. According to Haidt (2008), "moral systems are interlocking sets of […] mechanisms that work together to suppress or regulate selfishness and make social life possible" (p. 70). In line with this definition of morality, moral emotions can be defined by their elicitors: An emotion can be considered as moral, when it is elicited by events that affect others' well-being or moral norms but not by pure self-interest (Haidt, 2003). According to this definition, compassion and guilt are prototypical examples for moral emotions as these emotions are elicited when someone else suffers – but not the emoter him- or herself. However, other emotions can also be moral to the extent they are elicited by events that affect others' well-being or moral norms (Haidt, 2003). From this view, third-party anger and feelings of being moved can be seen as moral emotions as well.

Third-party Anger

People can get angry when they witness bullying (Gross & Levenson, 1995) or when they learn about child labor (Cronin, Reysen, & Branscombe, 2012). In these situations, the person who experiences anger (i.e., the emoter) is not directly involved in the situation but witnesses an interaction between at least two other parties (i.e., the perpetrator and the victim). Therefore, these emotional episodes can be referred to as third-party anger, i.e. anger that third-parties experience, when they witness an injustice that affects others (Landmann & Hess, 2016a). In these situations, negative consequences for the self play only a minor role. Others' well-being and/or moral norms seem to be more important. Therefore, third-party anger can be seen as a moral emotion.

Third-party anger, although differently labelled,[1] has been intensely studied because of the huge impact this emotion has on behavior. For instance, third-party anger is associated with collective action (e.g., Van Zomeren, Spears, Fischer & Leach, 2004), with punishment in economic games (e.g., Fehr & Gächter, 2002) and with supporting violent actions in social conflict (e.g., Halperin, 2013). Thus, third-party anger is highly relevant for social life. What exactly elicits this form of anger, however, is not clear.

Being Moved

A similar argument can be made for feelings of being moved. Being moved is considered a specific emotion that is associated with chills (i.e., shivers and goose bumps) and tears in the eyes (Cova & Deonna, 2014; Menninghaus et al., 2015). People can be moved by social situations such as weddings, friendship or exceptional helpfulness (Menninghaus et al., 2015). For being moved by exceptional helpfulness, others' outcome and moral norms seem to be much more relevant than self-interest. Thus, being moved can be seen as a moral emotion as well.

Although being moved is a relatively new concept within psychological research, the societal influence of this emotion might be strong. That is, being moved by a situation that positively portrays a personal value[2] should reinforce attachment to the respective value and therefore facilitate actions, which are in accordance with this value (Cova & Deonna, 2014). In line with this, being moved by exceptional helpfulness facilitates helping behavior (Schnall, Roper & Fessler, 2010) and charitable donations (Freeman, Aquino & McFarran, 2009; Thomson & Siegel, 2013) and it reduces prejudice (Lai, Haidt & Nosek, 2014). Thus, feelings of being moved can have a huge impact on social life. How these feelings are elicited, however, is not clear.

In sum, third-party anger and being moved are moral emotions, which are highly relevant for social life. This dissertation investigates how these emotions are elicited using an appraisal approach to moral emotions.

Appraisals of Moral Emotions

According to appraisal theories, emotions are grounded in appraisals (Scherer, 1999). These appraisals are "a person's subjective evaluation [...] of the personal significance of a situation, object or event on a number of dimensions or criteria" (Scherer, 1999, p. 637). Emotions are "elicited and differentiated" on the basis of these appraisals (Scherer, 1999, p. 637). In other words, appraisals relate situational features to personal concerns and thus determine the emotion felt. For instance, fear is elicited when a situation is appraised as potentially harmful for oneself and joy is elicited when a situation is appraised as beneficial for own interests (Scherer, 1999). These appraisals map on five dimensions – *novelty, intrinsic pleasantness, goal-conduciveness, coping-potential* and *compatibility with standards* – which are acknowledged by most appraisal theorists though differently labelled (see Ellsworth & Scherer, 2003).

Scholars have made several attempts to link appraisal theories to moral emotions (e.g., Hareli & Parkinson, 2008; Nussbaum, 2001; Omdahl, 1995; Smith, 1993).[3] These links are outlined in the following section and schematically depicted in Figure 1. Specifically, two appraisal dimensions might be particularly relevant for moral emotions – goal-conduciveness and compatibility with internal standards.

Internal Standard Appraisals

Appraisals of compatibility with internal standards address whether a behavior is compatible with own values (Scherer, 2001). For instance, when someone does not follow a fair procedure or when someone's intentions are incompatible with own values, people typically appraise this incompatible with their internal standards. The relevance of these appraisals for moral emotions is widely acknowledged (see Hareli & Parkinson, 2008). They have been linked to anger (Montada & Schneider, 1989) and to feelings of being moved (Menninghaus, 2015). In the following, these appraisals of compatibility with internal standards are referred to by the term internal standard appraisals. These internal standard appraisals explain why people respond emotionally to norm violations.

Outcome Appraisals

Appraisals of goal-conduciveness address the evaluation of negative outcomes or goal blockage (Scherer, 2001). These appraisals typically address the emoter's goals or well-being (Scherer, 2001). However, scholars have introduced additional processes that might account for the evaluation of others' outcomes. Specifically, the emoter might take the perspective of another person and appraise the situation as if they were in their place (i.e., *perspective-taking,*[4] Omdahl, 1995). Alternatively, the emoter might treat others' well-being as a personal goal (i.e., *eudaimonistic judgment,*[5] Nussbaum, 2001). Lastly, the emoter might identify with a group and appraise the situation on the group's behalf (i.e., *group-based appraisals,*[6] Smith, 1993). These appraisals of others' outcome have been linked to several moral emotions including compassion (Nussbaum, 2001) and anger (Batson et al., 2007). In the following, these appraisals of goal-conduciveness are referred to by the term outcome appraisals. These outcome appraisals explain why people respond emotionally to situations that affect others' well-being.

Figure 1. Appraisals of Moral Emotions
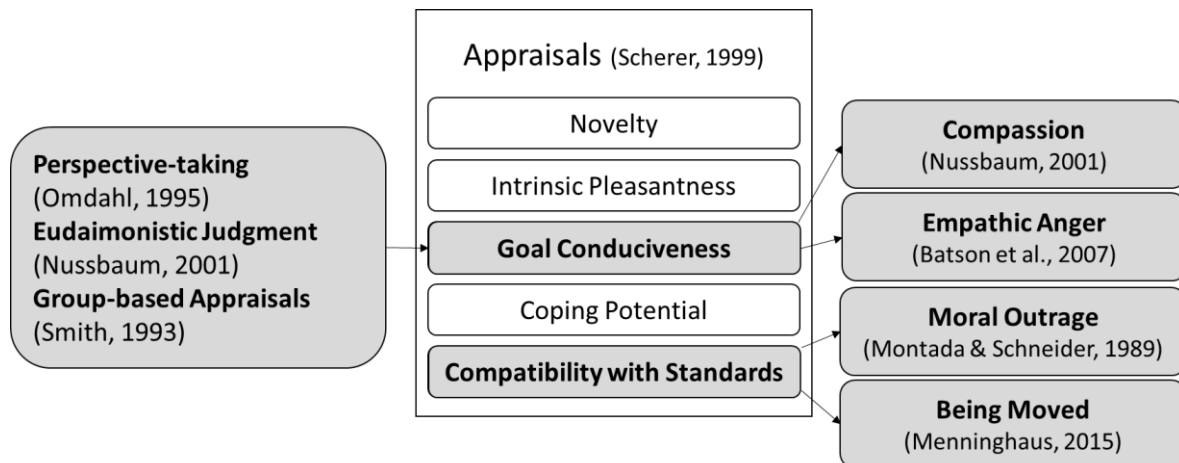
Note. The Figure shows how moral emotions and appraisal theories might be related. Appraisal dimensions based on Scherer's appraisal theory of emotions (box in the middle), additional appraisal processes (left side) and exemplified moral emotions (right side) are depicted.

In sum, two appraisal dimensions can be identified, which are particularly relevant for moral emotions: Moral emotions can be elicited by internal standard appraisals (e.g., unfairness) or by outcome appraisals (e.g., others' suffering). However, when considering third-party anger and being moved it appears that this appraisal approach to moral emotions is not specific enough.

For instance, scholars disagree about the elicitation of third-party anger. Some argue that third-party anger is elicited by norm violations (i.e., *moral outrage*, Montada & Scheider, 1989) whereas others claim that we empathize with others and feel their frustration (i.e., *empathic anger*, Batson et al., 2007). As shown in Figure 1, the model of moral outrage implies that appraisals of compatibility with internal standards (internal standard appraisals) elicit third-party anger, whereas the model of empathic anger implies that appraisals of goal-conduciveness (outcome appraisals) explain the elicitation of third-party anger (Landmann & Hess, 2016a). The question of whether third-party anger is better understood as moral outrage or empathic anger was addressed in Manuscript 1.

Other approaches to third-party anger are even more specific. According to moral foundation theory (Haidt & Joseph, 2004; Haidt & Graham, 2007), distinct types of moral standards exist. For instance, norm violations could address violations of fairness standards (e.g., cheating) or violations of purity standards (e.g., promiscuity). Each norm violation might elicit a specific emotion (Haidt & Joseph, 2004; 2008). For instance, fairness violations might elicit anger whereas purity violations elicit disgust. Thus, for third-party anger it might not only matter whether a norm is violated but also which norm this is. This question was addressed in Manuscript 2.

Approaches to feelings of being moved challenge appraisal theories of emotion as well. Scholars agree that being moved is highly contingent on values (Cova & Deonna, 2014; Menninghaus et al., 2015). That is, a situation can only be moving if it is particularly relevant to the person's values such as weddings or the birth of a child (Cova & Deonna, 2014; Menninghaus et al., 2015). As internal standard appraisals address the situation's relevance for personal values, these appraisals might elicit feelings of being moved (Menninghaus et al., 2015). Appraisal research focuses on negative deviations from such internal standards (Scherer, 2001). However, feelings of being moved might be associated with positive deviations from standards (Landmann, Cova & Hess, 2016). Thus,

appraisals of surpassing standards might elicit feelings of being moved. The content of these appraisals of surpassing standards, however, is not clear. Being moved might be elicited by pro-social standards only (Menninghaus et al., 2015) or by any standard that is particularly relevant for the emoter (Cova & Deonna, 2014). These questions about the elicitation of being moved were addressed in Manuscript 3.

In sum, appraisal theories provide a framework for investigating how third-party anger and being moved are elicited. On this basis, research questions about the content of outcome and internal standard appraisals and their relevance for specific emotions can be identified.

Research Questions

The objective of this dissertation was to clarify how morality and emotions are related using third-party anger and feelings of being moved as examples. As outlined above, specific research questions about the elicitation of these emotions can be derived from appraisal theories of emotion. Whether these processes are behaviorally relevant was investigated in addition. Particularly, research questions about cooperation and punishment (Manuscript 1), voting intentions (Manuscript 2) and voluntary work (Manuscript 3) were specified.

1) Is third-party anger explained by moral outrage or by empathic anger? (Manuscript 1)

    a. Is third-party anger elicited by norm violations, others' negative outcomes or a combination of both?

    b. Which appraisals explain the elicitation of third-party anger?

    c. Does third-party anger lead to cooperation and/or punishment?

2) Are specific moral principles associated with specific emotions? (Manuscript 2)

    a. Do emotional reactions depend on the type of moral transgression?

    b. Are links between moral transgressions and specific moral emotions in line with moral foundation theory?

    c. Are moral foundations associated with voting intentions?

3) Are feelings of being moved elicited by surpassing internal standards? (Manuscript 3)

    a. Are feelings of being moved limited to pro-social situations?

    b. Are feelings of being moved elicited by appraisals about surpassing internal standards?

    c. Are feelings of being moved predicted by a match between individual and situational values?

    d. Are feelings of being moved related to voluntary work?

Summary of Empirical Studies

These research questions were addressed in six studies presented in three manuscripts. All studies investigated self-reported emotional reactions to specific stimuli. As shown in Table 1, these stimuli varied in terms of compatibility with norms, others' outcomes and/or the eliciting context. Specifically, independent influences of norm violations and others' outcome on third-party anger and compassion (Manuscript 1), specific associations between different types of norm violations and moral emotions (Manuscript 2) and effects of positive norm deviations on feelings of being moved (Manuscript 3) were investigated.

Table 1. Overview of empirical studies

	Design	Emotions
Manuscript 1		
Study 1	Norm violation (mild vs. severe) x Others' outcome (mild vs. severe)	Anger Compassion
Study 2	Norm violation (mild vs. severe) x Others' outcome (mild vs. severe) x Context (investment vs. pharmaceutical)	Anger Compassion
Manuscript 2		
Study 1	Norm violation (care vs. fairness vs. authority vs. loyalty vs. purity)	Anger Rage Compassion Disgust Resentment Contempt
Manuscript 3		
Study 1	Stories (pro-social vs. neutral) Music (sublime vs. repetitive)	Being Moved Elevation Joy
Study 2	Context (relationships vs. success vs. humor)	Being Moved Elevation Mirth
Study 3	Deviation from Norms (positive vs. negative) x Context (pro-social vs. pro-environmental vs. sports) x Volunteer Group (pro-environmental vs. sports)	Being Moved Joy Anger Sadness

Manuscript 1

What elicits third-party anger? The effects of norm violations and others'

outcome on anger and compassion

The first manuscript investigates how third-party anger is elicited. Specifically, we tested (a) whether anger is elicited by norm violations, others' negative outcome or a combination of both, (b) whether the elicitation of anger is mediated by appraisals and (c) whether third-party anger leads to cooperation and/or punishment.

For this, participants ($N = 138$) indicated their feelings and appraisals in response to a newspaper article. The article described a couple, who was advised by a banking assistant and invested money. Others' outcome and moral violation were varied between subjects. The couple either lost money (severe negative outcome) or they did not lose any money in the end (mild negative outcome). The banking assistant was either honest (mild moral violation) or concealed the risk of the investment (severe moral violation). Third-party anger was affected by the moral violation only. Others' outcome, although relevant for compassion, did not affect anger. These effects were mediated by internal standard appraisals and by outcome appraisals, respectively.

In the second study ($N = 89$), we aimed to replicate these findings for the described investment context as well as for a different context - pharmaceutical research. As in the first study, anger was strongly affected by the moral violation but not (or less so) by others' outcome. In addition, third-party anger was associated with altruistic punishment. That is, anger predicted the extent to which participants were willing to sacrifice own resources in order to reduce the perpetrator's resources.

In sum, third-party anger depended primarily on norm violations whereas compassion was highly contingent on others' outcomes. This form of anger was predicted by internal standard appraisals and associated with punishment decisions. Thus, anger and punishment resulted from norm violations alone, independent of the harm done.

Manuscript 2

Testing moral foundation theory: Are specific moral emotions elicited by specific moral transgressions?

In the second manuscript, we addressed the question whether (a) emotional reactions depend on the type of moral transgression, (b) whether links between moral transgressions and specific moral emotions are in line with moral foundation theory (Haidt & Joseph, 2004; 2007) and (c) whether moral foundations are associated with voting intention.

Specifically, we investigated emotional reactions to violations of care, fairness, authority, loyalty or purity. Therefore, participants ($N = 195$) indicated their emotional reactions in response to short vignettes. Emotional reactions differed according to the type of moral violation. However, the morality-emotion links supported moral foundation theory only partly. For instance, moral foundation theory predicts care-compassion, fairness-anger and purity-disgust links (Haidt & Joseph, 2004; 2007). In line with the theory, disgust was particularly strong for purity violations and compassion was particularly strong for violations of care. However, anger was strongly elicited by all moral violations except for purity violations.

How much participants valued these moral foundations was associated with their voting intention. Specifically, participants who preferred Christian Democrats ("CDU") or Social Democrats ("SPD") valued the moral foundations authority, loyalty and purity more than those participants who preferred the Green Party ("Bündnis 90/Die Grünen") or the Left Party ("Die Linke") whereas no differences emerged for the moral foundations care and fairness. This replicates previous studies, which show that US-Americans' political orientation and moral concerns are related (Graham et al., 2009, 2011), it demonstrates how these findings might be applied for the German political system and it strengthens the claim that moral foundations are behaviorally relevant.

In sum, the type of norm violation differentiated between emotional reactions. However, the links between moral violations and moral emotions were only partially in line with moral foundation theory.

Manuscript 3

Being moved by virtue, success and music. The role of surpassing internal

standards

In the third manuscript, we addressed the question how feelings of being moved are elicited. Specifically, we investigated (a) whether feelings of being moved are limited to pro-social situations, (b) whether appraisals of exceeding internal standards mediate the elicitation of being moved, (c) whether a match between individual and situational values predicts feelings of being moved and (d) whether feelings of being moved are associated with voluntary work.

The first study was designed to test whether feelings of being moved are limited to pro-social situations. Therefore, participants ($N = 58$) responded to pro-social texts and music. Participants were similarly moved by pro-social texts and by specific music but less so in respective control conditions. These feelings of being moved (i.e., moved, overwhelmed, and stirred) were associated with goose bumps, tears in the eyes and a warm feeling in the chest. This shows that feelings of being moved are not limited to pro-social situations but can be strongly elicited by music as well.

The second study was designed to identify appraisals that explain how feelings of being moved are elicited. For this, participants ($N = 109$) responded to videos that portray relationships (e.g. family, friends), to videos that portray success (e.g. in sports or career) or to humoristic videos. Participants were moved by relationships and success but not by humor. The elicitation of being moved was mediated by appraisals of surpassing pro-social or achievement standards. In addition, an interaction between eliciting context and values was found. People who strongly identified with moral values were particularly moved by relationships but these moral values did not affect how intensely people were moved by success. This again shows that being moved is not limited to pro-social situations or to pro-social values. The common feature of moving situations was behavior that surpassed internal standards.

The third study was designed to investigate how feelings of being moved are related to volunteering. Therefore, participants ($N = 190$) who worked voluntarily in a pro-environmental organization or in sports clubs indicated their

feelings and appraisals in response to newspaper articles. The articles described situations, which varied in norm deviation (positive vs. negative) and context (social vs. environment vs. sports). Positive norm deviations elicited feelings of being moved and as in Study 2, this elicitation was mediated by appraisals of exceeding internal standards. In addition, eliciting context and volunteer context interacted. That is, pro-environmental volunteers were more moved than sports volunteers in the environmental context, although both groups were similarly moved in the other contexts. In other words, a match between individual values (manifested in voluntary work) and the value portrayed in the situation predicted feelings of being moved.

In sum, participants were moved by behavior that surpassed internal standards such as pro-social acts or outstanding success but not by situations without that constraint such as humor or norm violations. Thus, feelings of being moved were not limited to pro-social situations. However, they were elicited by appraisals about surpassing internal standards and they were particularly strong when individual and situational values matched.

Discussion

This dissertation set out to clarify how morality and emotions are related. Specifically, we investigated consequences for others and deviations from norms as factors related to morality and third-party anger and feelings of being moved as moral emotions. In what follows, I will integrate the results of these investigations and discuss their implications in regard to third-party anger and being moved but also concerning different theoretical approaches that link morality and emotion.

Third-party Anger

The present research sheds light on the question why people respond with anger when they witness norm violations that affect others. Previous research had already shown that this type of anger, which we label third-party anger, is closely related to norm violations (e.g., Kals & Russell, 2001; Cronin et al., 2012; Nelissen & Zeelenberg, 2009). It was, however, not clear, whether these norm violations alone can elicit anger and whether anger depends on the type of norm violation.

The first part of this question was addressed in Manuscript 1. Situations of third-party anger normally contain a norm violation (e.g., cheating) and a negative outcome for others (e.g., losing money). Hence, norm violations and others' negative outcomes are normally confounded – in real world as well as in research (e.g., Cronin et al., 2012; Gross & Levenson, 1995; Kals & Russell, 2001). This opened the door for speculations about whether moral outrage (i.e., anger elicited by pure norm violations) even exists (e.g., O'Mara et al., 2011). The present research demonstrates that third-party anger can be elicited by pure norm violations independent of others' outcome. This indicates that moral outrage exists: People can get angry by witnessing a moral violation independent of the harm done.

The model of empathic anger (i.e., anger elicited by others' negative outcomes, Batson et al., 2007), by contrast, was not supported. People did not get angry by a cared for other's suffering alone. Feeling compassion for the victim, although considered as precondition for empathic anger by Batson et al. (2007), was not sufficient to elicit empathic anger. This indicates that the preconditions for empathic anger need to be reconsidered. Other factors like a particularly close relation to or identification with the victim are needed in addition.

This divergence of anger and compassion was replicated in Manuscript 2. In this study, anger emerged with compassion (e.g., in response to care violations) but also without compassion (e.g., in response to fairness violations). In addition, this study showed that anger is not limited to the moral principle of fairness – a link that has been variously affirmed (e.g. Cronin et al., 2012; Kals & Russell, 2001; Montada & Schneider, 1989). Rather, anger was strongly elicited by violations of care, fairness, authority and loyalty. Only violations of purity elicited little anger. Thus, anger can be elicited by several norm violations.

Concerning action-tendencies of third-party anger, the present research shows that even anger elicited by pure norm violations can be associated with altruistic punishment (see Manuscript 1). This replicates previous research that links anger with punishment (e.g., Fehr & Gächter, 2002; Nelissen & Zeelenberg, 2009) but expands these findings by showing that anger elicited by pure norm violations can be related to punishment as well. Thus, third-party anger can motivate people to act selflessly. This selflessness, however, might be used to punish those who are responsible for the norm violation. This contradicts the assumption that pure norm violations elicit noble feelings, which do not lead to aggression (Batson et al., 2007). Instead, the present results suggest that even if the anger is completely justified it can lead to destructive actions.

Taken together, third-party anger can be elicited by pure norm violations, independent of the harm done. These norm violations are not limited to unfairness. Rather, they include authority and loyalty violations as well. Violation of such norms can result in anger and punishment.

Being Moved

The present research also sheds light on the question what moves and overwhelms people. Previous research has shown that people are moved by exceptional helpfulness or critical life events like weddings (e.g. Menninghaus et al., 2015). However, it was not clear what exactly elicits this emotion.

The present research identifies one common feature of moving situations: behavior that surpass internal standards. That is, people were moved by behavior that exceeds an internal standard such as exceptional helpfulness, outstanding success and achievement in different contexts but not by behavior without that

constraint such as humor or norm violations (Manuscript 3). In addition, people were moved to the extent they appraised these behaviors as exceeding an internal standard (Manuscript 3, Study 2 & 3). Further, a match between individual and situational values predicted feelings of being moved. Specifically, people who strongly identified with moral values were particularly moved by relationships (Manuscript 3, Study 2) and people with strong pro-environmental values were particularly moved by pro-environmental action (Manuscript 3, Study 3). Thus, being moved is not an automatic reaction to specific stimuli but can be explained by appraisals. The common feature of moving situations seems to be an exceptional positive behavior that touches personal values.

The present research also indicates that feelings of being moved are not limited to pro-social situations. That is, feelings of being moved can be elicited by pro-social actions but also by non-prosocial stimuli such as music or outstanding achievement. These findings contradict the claim that feelings of being moved are limited to pro-social situations (Menninghaus et al., 2015). Their association with internal standard appraisals and their association with different values, however, is compatible with the claim that being moved is elicited by a personally relevant value that is perceived as standing out (Cova & Deonna, 2014). Thus, the present research contributes to understand how diverse the eliciting contexts for feelings of being moved can be.

In particular, the present findings indicate that being moved sometimes functions as a moral emotion (i.e., when elicited by exceptional helpfulness or relationships) but it can also be a non-moral emotion (i.e., when elicited by success or music). Interestingly, this holds for most moral emotions. For instance, anger can be a moral emotion when elicited by injustices that affect others but also a non-moral emotion when elicited by personal frustration (Haidt, 2003). Thus, an emotion is not in general moral or non-moral. The extent to which an emotion can be considered as moral strongly depends on the eliciting context.

In addition, the findings concerning feelings of being moved suggest to combine different lines of research. That is, although the stimuli in Manuscript 3 were previously used to elicit *moral elevation* (e.g., Haidt, 2000), *admiration* (e.g., Algoe & Haidt, 2009) or *musical chills* (e.g., Goldstein, 1980), they elicited strong feelings of being moved. This indicates that moral elevation, admiration and

musical chills are experienced similarly. Thus, these emotions might describe different facets of the same emotion – being moved.

Taken together, the concept of being moved might be highly present in everyday life. People are moved by music, exceptional helpfulness and by outstanding success. The elicitation of these feelings can be explained by appraisals that relate situational features to own values. Thus, being moved might be the counterpart of third-party anger. Whereas one is elicited by standard violations the other is elicited by surpassing standards.

Appraisal Theories of Emotions

In sum, the present research sheds light on the elicitation of third-party anger and feelings of being moved. In what follows, I will argue that these findings have important implications for appraisal theories of emotions.

According to appraisal theories of emotion, appraisals relate situational features to personal concerns and this elicits emotions (Scherer, 1999). As outlined above, two appraisal dimensions can be identified, which are particularly relevant for moral emotions: appraisals of others' outcome and appraisals of norm compatibility. As depicted in Figure 2, the present research sheds light on the content of these appraisals and their relevance for specific moral emotions.

Figure 2. Implications for appraisal theories of emotion
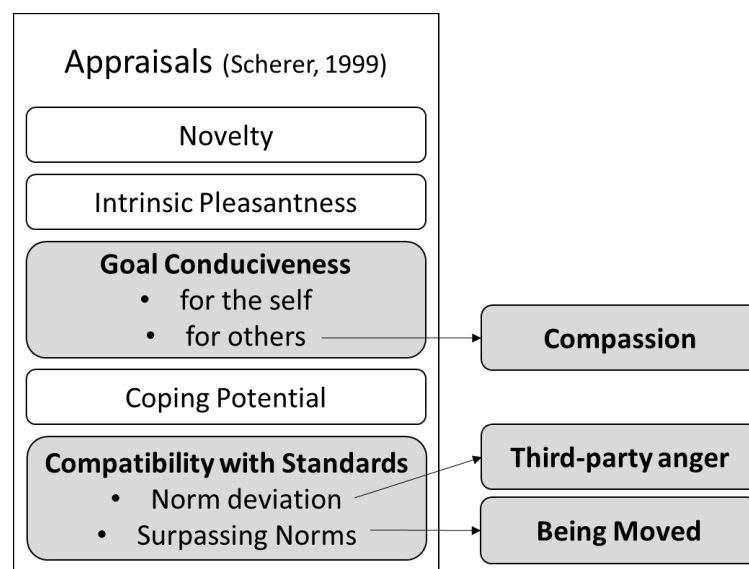
Note. The figure depicts implications of the present research for appraisal theories of emotion.

Specifically, the present research supports the claim that appraisals of others' outcome are needed to explain moral emotions. That is, people appraise others' outcomes and these appraisals mediate the elicitation of compassion. Previous research has already shown that others' suffering elicits compassion (e.g., Batson & Moran, 1999) and many appraisal theorist consider that a situation can be appraised in regard to others' interests (see Goetz, Keltner & Simon-Thomas, 2010; Hareli & Parkinson, 2008). Nevertheless, a systematic integration into general appraisal theories that explains when and how others' outcomes are considered is still missing. The present research empathizes the importance of such an integration. In particular, goal-conduciveness are not limited to outcomes concerning the emoter's well-being but can address others' well-being as well. Taken together, this strengthens the claim that additional processes like perspective-taking (Omdahl, 1995), treating others' well-being as an own goal (Nussbaum, 2001) or group-based appraisals (Smith, 1993) are needed to explain moral emotions.

Similarly, internal standard appraisals can be expanded. Appraisals of compatibility with standards (internal standard appraisals) typically address negative deviations from standards (Scherer, 2001). However, the present research shows that it does not only matter whether such a standard is violated but also which type of moral norm is violated. Specifically, anger was easily elicited by diverse norm violations except for purity violations, whereas the reverse holds for disgust. Thus, the type of norm violation differentiates the emotional reaction.

Finally, people do not only appraise negative deviations but also positive deviations from standards. Specifically, appraisals about surpassing pro-social or achievement standards mediated the elicitation of being moved. Thus, people do not only appraise whether others violate standards but also whether they exceed standards and these evaluations can explain emotional reactions like being moved.

In sum, appraisals of others' outcome, appraisals about the type of norm violation and appraisals about exceeding norms successfully predicted emotions. Thus, integrating these appraisal components into standard instruments for appraisal assessment such as the Geneva Appraisal Questionnaire (GAQ, Scherer, 2001) should significantly improve the predictive validity of these instruments.

Morality and Emotions

Taken together, the present research sheds light on the elicitation of third-party anger and being moved and specifies appraisals of moral emotions. In what follows, I will outline how this contributes to the more general questions of how morality and emotions are related.

The idea that morality and emotions are related is emphasized by the *moral intuitions approach* (for a review see Haidt, 2001). According to this approach, moral judgement can result from fast and emotionally laden processes (i.e., moral intuitions) instead of consciously weighing arguments (i.e., moral reasoning) (Haidt, 2001). In other words, people sometimes evaluate a behavior spontaneously as morally good or bad without much thinking. This spontaneous evaluation is associated with feelings of (dis-)approval or even with strong emotions (Haidt & Joseph, 2004). Recent psychological research suggests that people use both – moral reasoning and moral intuition - although scholars differ in their assumptions about whether the two processes are independent (e.g., Greene et al., 2008) or intertwined (e.g., Narvaez, 2010). The present research shows that moral emotions like third-party anger and being moved are associated with appraisals. Although appraisals are seen as fast and intuitive assessments of the world and thus as different from moral reasoning (Ellsworth & Scherer, 2003), appraisals might influence moral reasoning and vice versa.[7] In other words, appraisals might bridge the gap between moral intuition and moral reasoning.

Interestingly, these appraisals of moral emotions each have their counterpart in philosophical approaches to moral reasoning. Specifically, outcome appraisals can be seen as reflecting *consequentialism* and internal standard appraisals as reflecting *deontology*. According to consequentialism, which is based on the ethics of Jeremy Bentham and John Stuart Mill, actions should be judged by their consequences (Haidt & Kesebir, 2010). The consequences of a situation are typically assessed by outcome appraisals (Scherer, 2001). As shown in the present research, these outcome appraisals are not limited to own outcomes but can concern others' outcomes as well. Thus, consequentialism is reflected in outcome appraisals. These consequentialist considerations are often contrasted with deontological considerations. According to deontology, which is based on Immanuel Kant's categorical imperative, actions should be judged in regard to their conformity with universal rules (Haidt & Kesebir, 2010). Whether an action

conforms or deviates from rules, norms or standards is covered by internal standard appraisals (Scherer, 2001). Thus, deontology is reflected in internal standard appraisals. The involvement of appraisals suggests that emotional processes are relevant in both – consequentialist and deontological considerations.

This, however, conflicts with the *dual-process theory of morality* (Greene et al., 2001; 2008), which implies that deontological judgement is driven by affective processes whereas consequentialist judgment is based on controlled cognitive processes (Greene et al., 2008). This theory is supported by research on moral dilemmas, which shows that brain regions related to emotion (i.e. the limbic system) are more strongly activated during deontological judgments (Greene et al., 2001) and that cognitive load interferes with consequentialist judgment (Greene et al., 2008). The present research is consistent with the claim that processes underlying deontological and consequentialist judgments differ. However, it suggests that beyond moral dilemmas emotions are involved in consequentialist as well as in deontological judgment.

Morality, however, might even be more facetted. *Moral foundation theory* (Haidt & Joseph, 2004; Haidt & Graham, 2007) states that moral judgement and behavior is based on five moral principles which are care, fairness, authority, loyalty and purity. Thus, when focusing on justice only (which dominated research for a long time including Kohlberg's moral stages) one cannot understand how people judge right from wrong (Graham et al., 2013). Also, when considering the ethic of care in addition (which was introduced by Gillian in order to cover women's view on morality[8]), one cannot fully understand human morality (Graham et al., 2013). According to Graham et al. (2013), considering non-western societies was necessary to uncover authority, loyalty and purity as additional moral foundations.

The present research does not contradict this broad conception of morality but challenges the part of moral foundation theory that links each moral foundation to a specific emotion (Haidt & Joseph, 2004; 2008). The present research demonstrates that only care and purity violations elicit specific emotions (i.e., compassion and disgust). Violations of fairness, authority and loyalty elicited similar degrees of anger, rage and resentment. Thus, neither the specific morality-emotion links proposed by moral foundation theory (Haidt & Joseph, 2004; 2008) nor the claim that emotional reactions to moral violations are completely unspecific (Cameron et al., 2015) was supported. Rather, it is possible that moral principles

are in fact rooted in emotional systems (Haidt & Joseph, 2004), however, the links between morality and emotion are different from the links moral foundation theory suggests.

Taken together, morality and emotions are related in several ways. That is, different facets of morality such as consequentialist and deontological considerations correspond to affective processes. This correspondence does not imply that emotions cause moral judgments or motivate morally relevant behavior in every single situation (Prinz, 2006). Evidence for the causal role of emotions in moral judgement and behavior is in general rather weak (for a review see Huebner, Dwyer & Hauser, 2009). However, the *ability* to experience moral emotions might be necessary for the ability to form moral judgement and for the ability to behave in a morally correct manner (Prinz, 2006). That humans can respond emotionally to others' negative outcomes and to different types of norm violations seems to be crucial for social life. In that sense, emotions might be guardians to the self-ideal (Arnold, 1960, p. 299 ff.) that guide our decisions and make social life possible.

Limitations and Future Research

I outlined above how the present results contribute to the understanding of third-party anger and being moved, to appraisal theories of emotions and to approaches concerning morality and emotion in general. Limitations and potential applications are discussed in the following section.

The present research is mainly based on self-reports. As the majority of research on moral emotions is based on self-reports, the present research can be easily tied in with the extant literature. Still, self-reports are potentially influenced by social desirability (Krumpal, 2013) and this limits the implications that can be drawn from the present findings. However, every method of emotion assessment has its drawbacks. For instance, neuro-imaging is limited by the noise and tightness in an fMRI-scanner (Sukel, 2016) and psychophysiological measures are typically associated with more than one psychological process (Hess, 2011). Thus, the present findings provide one important component in research on moral emotions that should be complemented with more objective measures. This is particularly important for the physiological reactions associated with feelings of being moved (i.e., chills, warm feeling in the chest and tears in the eyes) as people are generally

poor in predicting their own physiological responses (Hess, Sénecal & Thibeault, 2004). In particular, chills could be measured by piloerection (i.e., goose bumps, Benedek et al., 2010). Furthermore, using self-reports for appraisal assessment has been criticized because appraisals are seen as fast and intuitive processes (see Scherer, 1999). To measure appraisals indirectly by specific appraisal outcomes such as expression patterns could be a solution to that (e.g., Lanctôt & Hess, 2007). The developed materials (e.g., newspaper articles in which norm and outcome can be varied independently; moving music, texts and videos) provide a useful basis for such future research projects.

The present research specifies appraisals of moral emotions and thus contributes to appraisal assessment. However, appraisals cannot explain all emotional episodes. Specifically, being moved by music is probably elicited by different mechanisms (Scherer & Zentner, 2001). For instance, music can elicit specific associations (based on previous experiences) or it can lead to emotional contagion (based on structural and expressive features of the music) (Scherer & Zentner, 2001). To investigate these processes further can help to better understand the role of appraisals for emotion in general and the function of being moved in particular.

The findings concerning third-party anger have important implications for media use. The present research indicates that reporting about norm violations in the media can elicit strong feelings of anger. Mentioning the harm done, by contrast, does not necessarily increase these feelings. Importantly, third-party anger can lead to punishment. In other words, communicating norm violations in the media can result in anger and the desire to punish the wrongdoer. Concretely, to call for more indignation like in the popular pamphlet *Indignez-Vouz!* (Hessel, 2011) might lead to collective action that enriches societies (Van Zomeren et al., 2004) but it can also enforce destructive actions like punishing those who are judged responsible for the injustice. However, we assessed punishment in terms of reducing others' resources. We did not assess whether people would also advocate more severe measures like physical punishment. Many people endorse physical punishment in terms of harsh interrogation when the respondent was involved in severe criminal acts like terrorist attacks (Carlsmith & Sood, 2008). To investigate the role of outcomes and norm violations in these extreme cases can help to determine how far people go when they are morally outraged.

Findings concerning feelings of being moved suggest that their practical relevance might be more diverse than previous research suggests. Being moved by exceptional helpfulness increases pro-social actions (Freeman et al., 2009; Lai et al., 2014; Schnall et al., 2010; Thomson & Siegel, 2013). However, given the diverse elicitors and values associated with being moved, it is unlikely that feelings of being moved always lead to pro-social actions. It is much more likely that being moved facilitates actions, which are in accordance with the value that elicited the emotion (Cova & Deonna, 2014). For instance, if someone is moved by success, this might facilitate behavior that enhances the person's own success rather than helping behavior. Thus, feelings of being moved can increase helping and caring but these feelings might also facilitate non-prosocial behavior. This opens the door for potential misuse of feelings of being moved for manipulative techniques in advertisement and persuasion. For instance, advertisement with moving music might be particularly successful. More importantly, it is possible that persuasion videos like those used by radical groups (Kruglanski et al., 2015) convince some young people because they are moved and overwhelmed by these clips. To investigate the role of being moved in such persuasion processes is an important topic for future research.

In sum, more research is needed to validate the present findings with objective measures and to clarify the behavioral consequences of third-party anger and being moved. Despite these limitations, the present research contributes to the question how third-party anger and being moved are elicited, how appraisal theories can be applied to moral emotions, how moral principles and emotions are related and what the potential role of these processes for social life might be.

Conclusion

Taken together, the present research sheds light on the elicitation of third-party anger and being moved and thereby clarifies how morality and emotion are related. We can be outraged by moral transgressions and we can be deeply moved by exceptional helpfulness. These emotions are associated with moral principles, elicited by appraisals and related to socially relevant behavior. Considering these processes can help to explain why people sometimes restrain their self-interest, which makes social life possible.

Footnotes

[1] Anger that third-parties experience, when they witness an injustice that affects others has been previously labelled "moral outrage" (e.g., Montada & Schneider, 1989), "empathic anger" (e.g., Batson et al., 2007) or "group-based anger" (e.g., Halperin, 2013).

[2] According to Schwartz (2007), values are „trans-situational goals […] that serve as guiding principles in the life of a person" (p. 712). Such guiding principles (or values) can be so-called moral values like justice but also non-moral values like achievement (Schwartz, 2007). Throughout this dissertation, the term "value" refers to Schwartz' definition of values.

[3] Appraisal theories can be led back to the psychologist Magda Arnold. In her book *Emotions and Personality* (1960), she describes the idea that emotions are elicited and differentiated on the basis of appraisals. In addition to this well-known and highly important contribution to emotion research, she also outlines her ideas about the role of emotions for morally correct behavior. According to Arnold (1960), emotions help us to measure up with our own self-ideals. Specifically, she claims that when someone "has done something he judges wrong, he will experience a variety of emotions that urge him to repair his action. Conversely, his progress towards his self-ideal is supported by positive emotions, by his love for everything that is good, true and beautiful" (Arnold, 1960, p. 299). This shows that the role of emotions for morality was already acknowledged in early appraisal theory.

[4] In her book *Cognitive Appraisal, Emotion, and Empathy* Becky Omdahl (1995) outlines the gap between empathy and appraisal theories of emotion. She argues that additional processes such as perspective-taking are needed to explain empathic reactions (Omdahl, 1995). Specifically, she argues that "When a person takes another's perspective and comes to appraise the situation in the same way, the perspective taker should apply the emotion rules to perceptions of the other's situation. If the same aspects of the situation are noted (e.g., the appraisals of the storyteller are matched by the reader), the same emotions should be elicited in the

reader as were experienced by the sender" (Omdahl, 1995, p. 140 f.). In that sense, empathy occurs when we imagine to be in another person's place and appraise the situation as if we were them.

[5] In her book *Upheavals of Thought: The Intelligence of Emotion*, the philosopher Martha Nussbaum (2001) provides an appraisal approach to compassion. Specifically, she claims that compassion requires the belief that "a serious bad event has befallen someone" (judgement of size), that "this person did not bring the suffering on himself or herself" (judgment of nondesert) and that "this person […] is a significant element in my scheme of goals" (eudaimonistic judgment) (Nussbaum, 2001, p. 321). *Eudaimonia* consists of the Greek words *eu* (i.e., good) and *daimon* (i.e., spirit) and represents the good and virtuous life in ancient Greek philosophy (Hursthouse, 2012). According to Nussbaum (2001), making an eudaimonistic judgment means to appraise the welfare of someone as an "end in itself" (p. 321) rather than as a mean for another goal. In that sense, for real compassion it is necessary to appraise another's well-being as an own goal.

[6] Eliot Smith (1993) introduced the concept of group-based emotions and group-based appraisals. Specifically, he argues that "to the extent a self-categorization functions as a self-aspect, appraisals of events or situations with respect to that social aspect of identity will also trigger emotion" (Smith, 1993, p. 303). In other words, we can appraise the relevance of a situation in regard to the interests of those groups we identify with.

[7] Different approaches link appraisals to moral reasoning. According to the *appraisal tendency approach* (Horberg, Oveis & Keltner, 2011), specific emotions are associated with specific appraisals and these appraisals can influence moral judgment. A different approach is provided by the *reverse engineering model* (Hareli & Hess, 2010; Hareli, Moran-Amir, David & Hess, 2013), according to which people can reconstruct appraisals from others' emotion expression. These reverse engineered appraisals can be used to make inferences about the other's character (Hareli & Hess, 2010) and about social norms (Hareli et al., 2013). Although these approaches differ in many respects, both illustrate that appraisals can bridge the gap between emotion and moral reasoning.

[8] Research in fact points to small gender differences in moral judgment. Specifically, a meta-analysis revealed that women are more care oriented than men ($d = -.28$) and reversely men are more justice oriented than women ($d = .19$) (Joffe & Hyde, 2000). However, as these gender differences are rather small, the original claim that men and women base their moral judgment on completely different principles was not supported (Joffe & Hyde, 2000). Throughout the studies of this dissertation, the effects are stable when controlling for gender.

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Note. This full reference list contains references from the synthesis and references from the original manuscripts.

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