Social, Sniffy, or Guilty?

Advantaged Group’s Emotional Reactions to Inter-Group Inequality

Dissertation
zur Erlangung des akademischen Grades
doctor philosophiae (Dr. phil.)

vorgelegt dem Rat der Fakultät für Sozial- und Verhaltenswissenschaften
der Friedrich-Schiller-Universität Jena

von Dipl.-Psych. Nicole Syringa Harth
geboren am 09.10.1977 in Homburg
Gutachter

1. Prof. Dr. Thomas Kessler

2. Dr. Colin Wayne Leach

Tag des Kolloquiums: 17. August 2007
## Table of Content

1 **INTRODUCTION** .......................................................................................................................... 5

   1.1 **EXCURSUS: WORKING DEFINITION OF EMOTION** ..................................................................... 6

2 **THEORETICAL BACKGROUND** ..................................................................................................... 10

   2.1 **HOW PEOPLE RESPOND TO INEQUALITY: RELATIVE DEPRIVATION AND RELATIVE ADVANTAGE** ...... 10

       2.1.1 Relative Deprivation Theory: A short overview ........................................................................... 10

       2.1.2 The role of emotions in Relative Deprivation Theory .................................................................... 12

       2.1.3 Inequality from the “top”: The case of relative advantage .......................................................... 13

   2.2 **INTER-GROUP RELATIONS: SOCIAL COMPARISON AND SOCIAL CHANGE** .................................. 19

       2.2.1 The Social Identity Approach ................................................................................................... 19

       2.2.2 Social comparison in Social Identity Theory ................................................................................. 20

       2.2.3 Dealing with inequality ............................................................................................................ 22

       2.2.4 Social change – driven by emotions? ............................................................................................ 23

   2.3 **EMOTIONS IN INTER-GROUP RELATIONS** .................................................................................. 25

       2.3.1 Initial evidence for emotions in social relations ........................................................................... 25

       2.3.2 Theory of Group-Based Emotions and empirical evidence ........................................................... 26

       2.3.3 Positive inter-group relations ....................................................................................................... 28

   2.4 **FROM INEQUALITY TO GROUP BEHAVIOR** .................................................................................. 30

       2.4.1 Different ways how relative advantage is experienced ................................................................. 30

       2.4.2 Contrasting the emotions pride, guilt, pity, and sympathy ............................................................ 34

       2.4.3 Excursus: emotion measurement ................................................................................................... 39

       2.4.4 Design and hypotheses .............................................................................................................. 41

3 **EMPIRICAL EVIDENCE** .................................................................................................................. 45

   3.1 **STUDY 1** ........................................................................................................................................ 45

       3.1.1 Method ........................................................................................................................................ 45

       3.1.2 Results ......................................................................................................................................... 49

       3.1.3 Discussion .................................................................................................................................... 54

   3.2 **STUDY 2A** ..................................................................................................................................... 58

       3.2.1 Method ........................................................................................................................................ 58

       3.2.2 Results ......................................................................................................................................... 60

   3.3 **STUDY 2B** ..................................................................................................................................... 62

       3.3.1 Method ........................................................................................................................................ 62

       3.3.2 Results ......................................................................................................................................... 64

       3.3.3 Discussion of Study 2a and Study 2b ............................................................................................ 70

   3.4 **STUDY 3** ........................................................................................................................................ 73

       3.4.1 Method ........................................................................................................................................ 73

       3.4.2 Results ......................................................................................................................................... 76

       3.4.3 Discussion .................................................................................................................................... 79
1 Introduction

Imagine yourself as a person living in an industrialized country, having all the benefits of technology. Now imagine another person, your age, your gender, living in a developing country, probably suffering from starvation and illness, poor medical care, and so forth. How do you feel with this picture in your head? Proudful? Guilty? Sympathetic? This image is quite blatant in depicting that some of us belong to groups that have more and some of us belong to groups that have less. It is very likely that most people would answer to feel sorry for those having to bear such miserable circumstances. Accordingly, a headline in the German newspaper DIE ZEIT claimed “Im Kampf um die wachsende Armut braucht Deutschland (…) mehr Sympathie“, meaning that in times of growing poverty, more sympathy is needed. But is this true? Can emotions help to challenge inequality?

Social inequality is an ongoing topic. In view of the permanently growing income gap, it currently is also an issue of public debate in Germany and the European Union. According to a recent report on European statistics, published by the Federal Statistical Office of Germany, the income gap in the EU has widened over the past few years: Whereas in 2000, the total income of the “richest” 20 % of the EU’s population was 4.5 times as high as that of the “poorest” 20 %, this imbalance had already increased to a factor of 4.8 by 2004. Up to now, a whole body of research has documented how people react to inequality when they believe to suffer from it, in other words, when they feel collectively deprived (Kessler & Mummendey, 2001; Simon & Klandermans, 2001; H.J. Smith & Ortiz, 2002). Collective protest, demonstrations, riots -- in short, the motivation to challenge inequality -- is a consequence of relative deprivation when individuals feel dissatisfied or angry about it.

While knowledge about relative deprivation and the associated emotions has grown over the last decades, much less is known about relative advantage. How do people react to the fact that their group is advantaged in comparison to another group? Probably most people would agree with Martin Luther King’s famous words that “Privileged groups rarely give up their privileges without strong resistance.” However, as the exception proves the rule, there have always been people who actually do not suffer from inequality but nevertheless feel the need to do something about it. Volunteers spend time and effort to engage in non-governmental or aid organizations, people participate in demonstrations to fight for others’ rights. Recently, many heterosexual people supported the request of

---

1 DIE ZEIT, 19.10.2006 Nr. 43
homosexual couples for legal authentication of their partnership. What motivates these people to stand up for others?

As in case of relative deprivation, there is good reason to assume that how members perceive their group’s better position will affect how they feel and what they would like to do about inequality. In the 80s, the research group around Montada (e.g., Montada & Schneider, 1989) started to explore the phenomenon of relative advantage in large scale survey studies. Their main focus, however, was on interindividual differences in the emotional experience and the link to justice beliefs. The focal point of their research was existential guilt as a result of being better off than suffering others. Yet, privilege is often invisible for those who benefit from it. Leach, Snider, and Iyer (2002) pointed out that, basically, advantage is taken for granted, or those benefiting from inequality tend to downplay their advantage. In order to challenge social inequality, however, the advantaged have to be aware of their privileged position. Leach and his colleagues (2002) presented a typology that allows systematical investigation of the group-level emotions associated with the phenomenon of relative advantage. They order the experience of relative advantage along four conceptual dimensions. Based on this typology, the present thesis aims at investigating group-based emotions about social inequality in experimental settings. The research questions addressed in this thesis aim at answering the following questions: How do those who benefit from inequality react to it? Which specific emotions are associated with the perception of being better off? What are the conditions responsible for these (group-based) emotions to occur? What behavior is motivated by these emotions? In order to gain a better understanding of when people are likely to challenge versus to affirm inequality, this thesis examines the degree to which especially pride, guilt, pity, and sympathy are distinct emotions about inter-group inequality. More precisely, this thesis investigates the potentially distinct behavioral tendencies triggered by pride, guilt, pity, and sympathy as a response to social inequality.

1.1 Excursus: Working definition of emotion

It is not an easy task to define what emotions are and an exhaustive discussion of the conceptualization of emotion would be beyond the scope of the present thesis (see e.g., Russell & Barrett, 1999, for an overview). However, given the lack of consensus on the definition of emotion, it seems necessary to describe what is meant by “emotion” throughout this work. Emotions are conceived as internal states that cannot be directly
measured. One indicator of an emotion is the word that people use to label their experience. People talk about their emotions every day. The concepts of emotions such as pride, guilt, sympathy, and so forth are part of everyday language. The same emotion words or categories are also embedded in scientific investigations. Yet, some emotion researchers are sceptical of using everyday concepts of emotions in research (e.g., Russell, 2003). Russell, for instance, argued that these concepts are part of a “folk theory” based in humans’ history and that people assume a mutual understanding of these concepts – that need not be wrong, but they need not be right either. It has often been discussed whether self-reports reflect peoples’ beliefs about what they feel, rather than the content of their actual feelings. Moreover, Russell points to the fact that different languages categorize emotions differently (see also e.g., Wierzbicka, 1999). Precise equivalents of the words for concepts such as pride do not exist in all languages and thus, they should not be accounted for in the same way. Even if the word exists in all languages, this word may cover slightly different phenomena. It is still under debate whether reported differences are actually due to differences in experiences or due to differences in language.

A new “language” or emotion framework based on a two-dimensional perspective has been proposed (Russell, 2003; Russell & Barrett, 1999). Russell and Barrett (1999) introduced the term *core affect*, which they define as “a neurophysiological state that is consciously accessible as a simple, nonreflective feeling that is an integral blend of hedonic (pleasure – displeasure) and arousal (sleepy – activated) values“ (Russell, 2003, p. 147). Some state of core affect is always present. Core affect is assumed to be universal and to exist without being labeled, interpreted, or attributed to any cause. A change in core affect is supposed to evoke a search for the cause of this change and thus may start an emotional episode. This emotional episode consists of several components: behavior in relation to the object of the emotional episode, attention towards, appraisal of, and attributions to that object, the subjective experience of having a specific emotion, physiological changes, and, finally, core affect. These components are similar to those assumed by Appraisal Theories of Emotion (see below). Generally, by limiting the impact of everyday words, the core affect model is seen as a chance to integrate seemingly conflicting theories of emotion and it is a promising framework for future emotion research. Still, it is not (yet) appropriate to answer all research questions, since it is a purely psychological approach not taking into account biology, evolutionary history, and, even more important for the present thesis, society. Moreover, at this stage, the measurement of the core affect dimensions valence and especially arousal (e.g., Barrett, 2006; Schütte, 2006) turns out to be difficult.
Recently, Barrett (2006) proposed a model of emotion experience that has much in common with ideas shared in the social psychological literature. It is based on the notion of core affect (Russell & Barrett, 1999), but takes into consideration emotions as contextual and socially situated. More precisely, according to her theoretical model (Barrett, 2006), the experience of emotion begins when people identify core affect to be about something. The experience of specific emotions such as pride or guilt, is seen as an act of categorization, guided by the embodied knowledge about emotion. Barrett emphasized that this knowledge is highly context-specific – that is, the situation will largely determine which representation of an emotion category will be constructed. In principle, this idea is consistent with the more traditional view of Appraisal Theories of Emotion (Arnold, 1960; Frijda, 1986; Lazarus, 1982; Ortony, Clore, & Collins, 1988; Roseman, 1984, 2001; Scherer, 1988; C.A. Smith & Ellsworth, 1985).

In its simplest form, Appraisal Theories of Emotion claim that emotions are elicited by evaluations (appraisals) of events and situations. Emotions are conceptualized as multi-componential phenomena (cf. Russell, 2003) and defined as complex syndromes of cognitions, physiological reactions, expressions, subjective feelings, and behavioral tendencies. Contemporary conceptualizations of Appraisal Theories point out the interaction with the situation, where appraisal and emotion occur in the context of ongoing activity (Frijda & Zeelenberg, 2001). They suggest a recursive or bi-directional relation between appraisals and emotions; hence, appraisal can be the antecedent as well as the consequence of emotions (Frijda, 1993; Russell, 2003). Frijda highlights action readiness as the most important consequence of emotions and defines emotion as “action readiness change. Emotion proper is relational action tendency and change in relational action tendency generally (activation)” (1986, p. 474). In other words, action readiness is the functional level of what emotions are in the first place; namely readiness to maintain or change the relationship to an object or event.

Regarding the debate about the role of language in emotion research, Frijda and his colleagues (Frijda, Markam, Sato, & Wiers, 1995) stated that the relationship between emotions and emotion words can be viewed in two different ways. On the one hand, one could assume that words exist (“emotion words”) that dictate the way that things are seen. On the other hand, one can assume that things exist (“emotions”) that are given names and thus have words assigned to them. The thesis at hand goes along with the second view that emotion words are labels for things that are experienced. Especially in social psychology, researchers are interested in emotions as reactions to the social context. Moreover, emotions
are not only seen as being responsive to social events, but also as being regulated by society and even as constituting social relationships (see Tiedens & Leach, 2004, for an overview). Of interest for this thesis is the interplay between emotion experience on the group level and inter-group behavior. Therefore, the present research focused on studying the subjective feeling component of emotion as measured by semantic self-report indicators as well as on behavioral tendencies associated with the subjective feeling.
2 Theoretical Background

2.1 How people respond to inequality: Relative Deprivation and Relative Advantage

Our desires and pleasures spring from society, we measure them therefore, by society and not by the objects, which serve for their satisfaction. Because they are of a social nature they are of a relative nature.

Karl Marx

2.1.1 Relative Deprivation Theory: A short overview

More than 50 years ago, Stouffer and his colleagues (Stouffer, Suchman, Devinney, Star, & Williams, 1949) did a large-scale socio-psychological study on American soldiers' attitudes and their problems in the institutionalized life of the army. They were surprised by the paradoxical finding that in some military sections, in which the conditions were quite good compared to other sections, the soldiers were more dissatisfied. The researchers came to the conclusion that the sense of deprivation must be informed by factors other than objective conditions. Relative Deprivation Theory (RDT; Crosby, 1976, 1982; Folger, 1986, 1987) was used as a post hoc explanation for this finding stating that the sense of deprivation depends on subjective rather than objective standards. Although there is agreement on this core statement of RDT there are numerous different definitions of relative deprivation to be found in the literature and relative deprivation theorists have suggested several antecedents that might lead to relative deprivation. The most prominent theoretical work by Crosby (1976, 1982), Folger (1986, 1987) and Runciman (1966) will be summarized to give an overview of RDT and its central role in explaining how people react towards perceived inequality.

In her early work, Crosby (1976) suggested several antecedent conditions for relative deprivation. According to her model, individuals who lack a desired object or opportunity should feel deprived when the following circumstances are fulfilled: People should feel deprived if they want the missing item or opportunity, if they feel entitled to obtain it, if they believe that it is feasible to obtain it, and if they feel not responsible for not having it. In her subsequent work, though, Crosby (1982) moved towards simplicity and reduced the model to a two-factor model. According to this model, (1) wanting what one does not have, and (2) feeling entitled to have it should be sufficient to trigger a sense of being relatively
deprived. Inspired by Kahneman and Tversky’s (1982) work on cognitive heuristics, especially the simulation heuristic, Folger reformulated the relative deprivation framework proposed by Crosby (1976, 1982). In his Referent Cognitions Theory (1986, 1987), Folger suggests that people become aware of alternatives to their current state of affairs by mental simulations or what he called referent cognitions. An unfavorable discrepancy between actual state and referent outcome would produce resentment if one is able to imagine better outcomes (high referent outcome), if the likelihood of change for the better is low (low likelihood of amelioration), and if more justified procedures might have led to better outcomes (high referent instrumentalities). This last precondition introduced the element of fairness into relative deprivation research.

While those theoretical frameworks proposed by Crosby (1976, 1982) and Folger (1986, 1987) deal primarily with definitions and antecedents of relative deprivation, other researchers focused more on different types of deprivation. Already in 1966, Runciman proposed an important conceptual distinction between two types of relative deprivation, namely relative deprivation at the individual level (egoistic) versus relative deprivation at the group level (fraternal). Egoistic deprivation referred to comparisons between one’s situation and the situations of other individuals, fraternal deprivation referred to being deprived as an in-group vis-à-vis an out-group. The meaning of the distinction made by Runciman (1966) becomes apparent in the consequences of deprivation. Runciman argued that egoistic deprivation is associated with personal improvement strategies whereas fraternal deprivation accounts for strategies that aim at improving the situation of the in-group. In addition, other social scientists, particularly political scientists and sociologists, pointed out (fraternal) relative deprivation as a potential cause for collective behavior (e.g., Gurr, 1970) and focused on RDT as an (post hoc) explanation of collective action or social movements. Dubé and Guimond (1986) report about one study in which they asked students of the University of Montreal approximately 3 months after a period of protest about personal and group deprivation and whether they took part in the protests. Regardless whether students felt personally deprived or not, those who felt deprived at the group level were much more likely to have participated in collective protest than those who did not feel collectively deprived. This early finding is consistent with more recent findings supporting Runciman’s (1966) idea that fraternal deprivation, but not personal deprivation, predicts support for collective action and attempts to change the social system (Olson, Roese, Meen, Robertson, 1995; Walker & Mann, 1987; Wright & Tropp, 2002). In the following, the sole focus will be on fraternal deprivation.
2.1.2 The role of emotions in Relative Deprivation Theory

In their meta-analytic review, H.J. Smith and Ortiz (2002) found support for Runciman’s distinction and the above mentioned fact that especially fraternal deprivation is linked to collective behavior. However, they pointed out that over the years relative deprivation has been operationalized and measured in various ways, making it difficult to find a general pattern over all studies on relative deprivation. Going back to the beginning of RDT, Stouffer saw dissatisfaction with the perceived comparative difference as an essential issue of relative deprivation. Also Crosby’s definition of relative deprivation as “wanting what one does not have and feeling entitled to have it” suggests that relative deprivation is not just a cold cognition, but has to do with feelings like resentment or a sense of grievance. Cook, Crosby, and Hennigan (1977) suggested to differentiate between cognitive and affective components of deprivation. In Folger’s Referent Cognitions Theory (1986, 1987), the three proposed “cognitive” conditions can be interpreted as appraisals triggering specific emotions. Folger (1987) stated, for instance, that the combination of a high referent outcome and a high degree of justification will generate dissatisfaction, but not resentment. The same discrepancy would trigger resentment if the instrumentalities are unjustifiable (see the link to Appraisal Theories of Emotion as described above).

H.J. Smith and Ortiz define relative deprivation as “the belief that you (or your group) are worse off compared to another (person or) group coupled with feelings of anger and resentment” (H.J. Smith & Ortiz, 2002, p. 94). Hence, H.J. Smith and Ortiz conceptualize affect as an integral facet of relative deprivation. Considering only studies that asked directly about emotions associated with deprivation, H.J. Smith and Ortiz found a strong link between fraternal relative deprivation and collective behavior. For the purpose of this thesis this finding is of particular interest, because it emphasizes the role of emotions for collective behavior. Several researchers have explicitly highlighted the importance of distinguishing between affective and cognitive components of relative deprivation (e.g., Cook, Crosby, & Hennigan, 1977; Guimond & Dubé-Simard, 1983; Mummendey, Kessler, Klink, & Mielke, 1999; Wright & Tropp, 2002). These authors consider the cognitive part as representing the perceived extent of deprivation while the affective part is represented by the emotions felt about deprivation. Wright and Tropp (2002) reported a study in which they investigated Latino and African American respondents’ support for collective action. Both groups indicated stronger feelings of fraternal deprivation when comparing with Whites than when comparing with other minorities. The authors hypothesized that the feeling of inferiority towards a dominant group will only then lead to collective action when the
perception of inequality is not only experienced cognitively, but also emotionally. Emotions such as anger, resentment, or dissatisfaction were expected to be the driving force behind collective action. Assessing both cognitive and emotional aspects, Wright and Tropp’s (2002) study indicated the prominence of emotions over cognitions in their predictive power for collective action.

H.J. Smith and Kessler (2004) went a step further and proposed to examine the specific emotions elicited by perceptions of relative deprivation in more detail. They argued that with more specific emotions more precise predictions about behavior would be possible. Like H.J. Smith and Ortiz (2002), they criticized that most researchers assume rather than measure emotions. In addition, H.J. Smith and Kessler (2004) claimed to be more careful in compiling emotion scales. Inequality may be experienced in terms of emotions with a negative valence, but whether this perception results in frustration, sadness, or anger may have different consequences. Therefore, the authors proposed that specifying the emotional experiences associated with perceptions of deprivation would help to understand what motivates collective action and what motivates inaction. While the sad and frustrated may do nothing, angry people may fight for their rights.

2.1.3 Inequality from the “top”: The case of relative advantage

Relative deprivation and relative advantage can be seen as two sides of the same coin and thus, as two sides of social inequality. While knowledge about the antecedents and consequences of relative deprivation has grown, there is sparse knowledge about how the advantaged react towards inequality. A systematic theoretical presentation of the phenomenon is missing. In principle, two research groups approached the concept of relative advantage - mainly empirically - : one is the group around Montada and Schmitt in Germany (Dalbert, Schmitt, & Montada, 1982; Montada & Schneider, 1989; Schmitt, Behner, Montada, Müller, & Müller-Fohrbrodt, 2000) and the other is the group around Guimond in France (Guimond & Dambrun, 2002; Dambrun, Guimond, & Taylor, 2006).

The Montada Group

Interested in questions of social justice, Leo Montada and his research group were the first who investigated relative privilege, the situation of being relative advantaged compared to others on dimensions such as wealth, prestige, education, freedom, health and so forth (Dalbert et al., 1982; Montada & Reichle, 1983; Montada & Schneider, 1989). They
saw relative privilege as a psychological antipode of relative deprivation (Crosby, 1976, 1982). Their research was influenced by principles of Equity Theory (e.g., Adams, 1965; Homans, 1961) and by Hoffman’s (1976) concept of existential guilt, which will be explained below.

At a more general level, Equity Theory (Adams, 1965; Homans, 1961; Walster et al., 1978) is concerned with how social exchange operates. The core idea of Equity Theory is that societies develop norms of equity and teach these to their members. People are assumed to compare with others in order to evaluate the fairness of their lot and even if they will generally try to maximize their outcomes, they are assumed to be most satisfied when the ratio between benefits and contributions is similar for those participating in the exchange. When individuals find themselves participating in inequitable relationships, they become distressed. Those who discover they are in an inequitable relationship should attempt to eliminate their distress by restoring equity. There are several studies from the 1960s demonstrating that persons who thought to be overpaid wanted to compensate for the perceived inequity (Berscheid, Walster, & Barclay, 1969; Walster, Walster, Abrahams, & Brown, 1966). Following these equity principles, Montada and Reichle (1983) assumed that relative overpay or relative privilege would lead to the experience of existential guilt and the need to restore justice. Existential guilt (Hoffman, 1976; Montada & Reichle, 1983) has been defined as feeling guilty because of privileged circumstances in which one’s own advantaged situation compared with the situation of others is perceived as not (entirely) justified. The following quote is a good illustration for existential guilt:

“Whenever I observe how difficult it is for physically disabled people to socialize with others and to make friends, then I as a healthy person have a bad conscious and feel as benefiting from an undeserved fortune” (own translation, quoted from Dalbert, Schmitt, & Montada, 1982, p. 38).

It should be clear that this quote describes a person who feels to benefit from something others do not have, namely an unseathed body. Usually, people do not think of themselves as advantaged; they take privileges for granted (Leach et al., 2002) or even think of their advantage as justified. People have the tendency to perceive something as fair when it is positive for them (cf. Tyler & Smith, 1998). However, in a specific comparison situation, when for example differences between bodily disabled and non-disabled people

---

2 Montada and colleagues refer to relative advantage as relative privilege.
3 Equity Theory also suffers from certain shortcomings, for instance, the theory makes no predictions about when people will respond in which kind of way to injustice; equity theory also deals with distributive justice only, and for in-put and out-put there is no formalization of what is “equivalent”.
are salient, people might think of themselves as privileged. Montada and colleagues have been interested in social justice and the emotions accompanying relative advantage. Yet, they focus mainly on existential guilt as a response to inequity, leading to justice compensating behavioral intentions. In other words, these researchers highlight affirmative aspects of relative advantage by assuming that people want to compensate for relative overpay.

Already in 1989, Montada and Schneider conducted a large survey study in Germany to investigate different emotional reactions of advantaged people towards groups of people living under comparatively less favorable conditions: the unemployed, poor people in developing countries, and foreign workers in Germany. They assumed that existential guilt might be only one of the emotions that arise when people are confronted with inequality benefiting their group. Consequently, they also asked for emotions such as sympathy, moral outrage, and anger. The researchers were interested in comparing these emotional responses with regard to antecedent cognitions and consequent (prosocial) activities. Regarding the antecedents, one of the main findings was that the emotions existential guilt, sympathy, and moral outrage were predicted by perceived injustice, while anger about the disadvantaged was related to holding the needy responsible for their situation and perceiving one’s own advantage as justified and equitable. Regarding the consequences, one of the main findings was that especially guilt and moral outrage predicted prosocial commitment, while sympathy was a rather weak predictor.

The pattern for existential guilt was replicated in further studies (Schmitt et al., 2000; Schmitt & Maes, 1998). In one study, conducted in Paraguay, Paraguayan students with a rich family background experienced feelings of existential guilt when they were confronted with the disadvantaged living conditions of Indians and Campesinos. Existential guilt was triggered by considering the unfair unequal status relation, although the students were not responsible for it (Schmitt et al., 2000). Existential guilt was related to participants’ intention to do something about this inequality and was followed by the tendency to restore justice. It should be noted, however, that the behavioral intention measures used in these studies were quite general (e.g., “Somehow I feel responsible to do something against these disadvantages”).

Schmitt and colleagues (2000) introduced a more formalized model of relative privilege on which their past and present research is based. They focus on the coherence between personal disposition, cognitions, emotions, and behavior. According to this research group, personal dispositions provide the basis for specific cognitions to occur.
More precisely, justice believes (Belief In A Just World, see Lerner, 1980 for an overview) and sensitivity to injustice are provided as explanations at the personal level. The authors think of their model as a causal model in the sense of individual dispositions shaping specific cognitions, which in turn trigger emotions and subsequent behavior. Although the survey studies mentioned give a great insight about reactions to the disadvantaged and associations between cognitive appraisals of situations, reported emotions and behavior tendencies, they are limited in explanations of causality. Moreover, the studies are more exploratory in their character with the recent formalized model as a post hoc explanation.

**The Guimond group**

Guimond and his research group approach relative advantage from a social comparison perspective and focus more on the cognitive components of relative advantage. In this line of reasoning, they highlight negative aspects and argue that advantage promotes high levels of prejudice and discrimination towards other groups. Serge Guimond and his colleagues (Guimond & Dambrun, 2002; Dambrun, Guimond, & Taylor, 2006) investigated relative advantage in experimental settings. Based in terms of social comparison, they define relative advantage, as “a positive comparison outcome” (p. 901). They equate high social status with relative advantage, because both reflect a favorable position on comparison dimensions. In their studies, they are mainly interested in the consequences of social comparison outcomes and suggest that both negative and positive comparison outcomes lead to more negative inter-group attitudes.

In one of their experiments (Guimond & Dambrun, 2002, Study 2) they compared the impact of relative deprivation and relative advantage on generalized prejudice. They started off telling participants that job opportunities for two groups of students (psychology versus economics/law) were similar in the past, but became increasingly differentiated over time. Relative deprivation was manipulated by telling participants that their group would be worse off than an out-group regarding job opportunities in the future and relative advantage was manipulated by telling participants that they would benefit from more favorable job opportunities in the future. Thus, social status was due to comparison towards another group as well as comparison on a temporal dimension. Nothing was said about the circumstances of this development, for instance about legitimacy or responsibility. Both relative deprivation and advantage predicted increased levels of prejudice against out-groups compared to a control condition. In addition, the authors distinguished between cognitive

---

4 Guimond and colleagues refer to relative advantage as relative gratification.
and affective components of relative advantage. The cognitive aspect was assessed with two items asking participants how they perceive the standing of the in-group compared to the out-group (“I feel that the fate of our group is improving compared to the other group”), while the affective aspect was assessed with two items asking participants how satisfied they are (“When I think about the future and compare the situation of my group to the situation of the out-group, I’m satisfied”). Investigating what drives the effect on prejudice, the authors checked whether the cognitive or affective components acted as mediators. Only the cognitive components of relative gratification were found to mediate the effect on prejudice.

Although this study was the first showing a causal link between relative advantage and prejudice, it is critical whether the operationalization of the cognitive and affective aspects of relative advantage allows for drawing the conclusion that the effect of relative advantage is only driven by cognitive components. Possible relations between the cognitive evaluation of the situation and the affective components were not taken into account. However, emanating from RDT (e.g., Folger, 1986) and Schmitt’s model of relative privilege (Schmitt et al., 2000), the cognitive evaluations of the situation compared to an alternative situation should be associated with emotional reactions to this situation.

**Summary and status quo**

Taken together, using Equity Theory principles (e.g., Adams, 1965) to explain how the advantaged deal with inequality, affect is an essential part of Montada and colleagues’ conceptualization of relative advantage. Contrary to what one might expect, findings from Equity theory and Montada’s research provided a first indication that relative advantage is not only a positive experience. Their main focus is on existential guilt as a response to inequity, which consecutively leads to prosocial behavior intentions. In other words, these authors assume that people want to compensate for relative overpay and thus, they emphasize the affirmative role of relative advantage for social justice concerns. In contrast to this approach, Guimond and his research group (2002, 2006) highlight negative aspects and argue that advantage promotes high levels of prejudice and discrimination towards other groups. A further significant difference between Montada’s and Guimond’s works is that Montada and colleagues (Montada & Schneider, 1989; Schmitt et al., 2000) asked members of advantaged groups that were in favor compared to disadvantaged groups on explicit dimensions to report emotions and behavior intentions towards these specific disadvantaged groups. For example, in the study mentioned above, the Paraguayan students were
advantaged compared to the Paraguayan Indians and Campesinos in terms of wealth and education. The dependent variables used in this study were related to the situation of these groups. Thus, in line with exchange theories (e.g., Walster et al., 1978) the group of respondents benefited from inequality, while the target group suffered from “the same” inequality. Guimond and colleagues’ operationalization of advantage resembles positive feedback that results in a high status perception. They measured generalized prejudice that is prejudice against out-groups that were not related to the comparison dimension from which the advantaged benefited. Satisfaction, justification of dominance, and a generalized bias against various out-groups were consequences of acknowledged gratification.

It should also be noted at this point that, in opposition to RDT (Runciman, 1966), the research on relative advantage does not explicitly differentiate between personal and group level advantage. However, as the example concerning disabled versus non-disabled people demonstrates, a sense of relative advantage may be possible at the personal as well as at the group level. When investigating this concept, however, most studies interviewed participants in their role of being group members, for instance, the employed versus unemployed, living in a rich industrial country versus a developing country (Montada & Schneider, 1989; Schmitt et al., 2000) or belonging to a specific occupational group (Guimond & Dambrun, 2002). Taken together, these studies provide a first insight into the phenomenon of relative advantage. However, they are not sufficient to clarify the conditions that lead to one or the other reaction of the advantaged as a response to inequality. A formalization of antecedents comparable to those developed for RDT (cf. Crosby, 1982) and consequences of relative advantage does not exist.

How inequality is experienced from side of the advantaged may influence inter-group behavior and thus, may have large-scale consequences for changes in the social system. Recently, Leach and his colleagues (Leach et al., 2002) approached these issues and specified different ways in which advantage can be experienced. More precisely, these authors offered a typology that allows for a systematic investigation of relative advantage and related emotions. Before I dwell on this typology, Social Identity Theory (SIT; Tajfel & Turner, 1979) as one of the most influential theories on inter-group behavior (Brewer & Brown, 1998) is introduced to better understand the notion of group-level emotions and behavior.
2.2 Inter-group relations: Social comparison and social change

Ideally, the central issue of social psychology should be the study of psychological processes accompanying, determining, and determined by social change.
Henri Tajfel

2.2.1 The Social Identity Approach

The more relative deprivation and relative advantage are understood as group phenomena, the more Social Identity Theory (SIT) provides a relevant background for understanding group behavior. SIT is concerned with the relationship between real social context and psychological processes. Developed by Tajfel (Tajfel, 1978), SIT is based on the distinction between two extremes of social behavior, namely interpersonal versus inter-group behavior. Tajfel assumed that all social situations fall between these two extremes of the inter-personal-inter-group continuum. He wanted to explain how social interaction differs between both extremes and when individuals would act in terms of the self versus in terms of the group. Parallel to this distinction, SIT differentiates between social and personal identity to explain inter-group behavior.

According to SIT, people conceptualize their social environment in terms of groups or social categories to systematize and simplify the social world. These groups and categories provide meaning to their members and help to guide action. From this perspective, social categories can be considered as a system of orientation to define the individual’s place in society; individuals that share features of a certain social category form an in-group, while the other individuals belong to an out-group. Social groups particularly gain meaning in relation to a relevant out-group. Social identity of a group member is then defined as “part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership” (Tajfel, 1978, p. 63). As pointed out by SIT, if social identity is salient, inter-group behavior and comparisons are likely to occur. Personal identity, on the other hand, is defined in terms of unique characteristics of the self and interindividual differences; interpersonal behavior and comparisons will arise when personal identity is salient.

Self Categorization Theory (SCT, Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) can be considered as a complementary theory to SIT, which addresses questions of
the relation between the individual and the group. As in SIT, the central assumption is that individuals derive part of their self-concept from their membership in a socially defined group or category, thus from social categorization. According to SCT, people belong to several social categories (e.g., female, German, basketball player). The individual self stands for self-definition as a unique individual (“me”) and the social self for self-definition as an interchangeable group member (“we”). Whether an individual defines her- or himself in terms of personal or social identity depends on the salience of a category in a given social context. The clarification of salience of categories is the core of SCT. By salient group membership, Oakes (1987, p. 118) refers to the psychological function and not to the “attention-grabbing” property of a stimulus; salience indicates the conditions under which a specific group membership becomes prevalent in ones self-perception. SCT predicts that a category becomes salient if it is cognitively accessible (personal variable) and if the perceived reality fits the characteristics of the category (context variable). As a consequence, a salient category will bring people to perceive in-group members (including the self) as similar to each other whereas out-group members are perceived as dissimilar and different from the in-group. One facet of the accessibility of a specific social categorization is the strength of identification with the relevant category. To the extent that self-categorization is salient as an element of social identity, it should also possess affective significance; thus identification as an in-group member is a precondition for affective experiences in relation to that group.

2.2.2 Social comparison in Social Identity Theory

Social comparison has gained importance in social psychology since Festinger introduced his theory of Social Comparison (1954). The original focus of Social Comparison Theory was on (performance) comparisons at the inter-personal level. Festinger argued that there is a need in humans to evaluate their abilities and opinions. To do so, other individuals would serve as social standards. He argued that people prefer to compare themselves with similar others and that they strive to improve their performance (“unidirectional drive upward”), which might lead to upward (with others who are better off) rather than downward comparisons (with worse off others). On this note, a review of studies revealed that people may make upward comparisons in hope of enhancing their self-assessment (Collins, 1996). While Festinger stressed the importance of self-evaluation, other motives, such as self-enhancement have since been discussed. Downward Comparison Theory (Wills, 1981) suggests that under certain conditions persons would be more likely to engage in downward comparisons with worse off others in order to protect self-esteem and
to feel better. Both theories and subsequent empirical evidence have been concerned with comparisons between individuals (see Wood, 1989, for an overview). Tajfel suggested that social comparison could take place at the group level as well: “The only ‘reality’ tests that matter with regard to group characteristics are tests of social reality. The characteristics of one’s group as a whole (...) achieve most of their significance in relation to perceived differences from other groups and the value connotation of these differences“ (1978, p. 66).

SIT states that individuals are motivated to belong to a positively evaluated group. Social comparison between groups is seen as a means through which the individual obtains an assessment of his or her group’s social status. When comparing with relevant other groups, individuals strive for positively discrepant comparisons between their in-group and the out-group (Tajfel & Turner, 1979). Group enhancement as a general motive leads to in-group bias, that is, people systematically favor their in-group over out-groups (e.g., Billig & Tajfel, 1973).

The status of one’s group, either high or low, is seen as the outcome of an inter-group comparison and reflects the group’s relative position. It is assumed that the outcomes of inter-group comparisons directly influence the individual’s self-esteem; positive comparisons should produce high esteem and negative discrepant comparisons low esteem. Social comparison is not only central to the Social Identity Approach, but also for relative deprivation and relative advantage. Negative comparison outcomes may lead to the perception of low in-group status and to feelings of relative deprivation, whereas positive comparison outcomes may lead to the perception of high in-group status and to feelings of relative advantage. Talking about advantages and disadvantages often implies advantaged groups having high and disadvantaged groups having low status. This is not necessarily true in every case. As Ellemers and colleagues pointed out (Ellemers, Wilke, & van Knippenberg, 1993), the status of natural groups, such as cultural, national, or religious groups, is not only the result of a comparison on a single dimension, but the result of a complex comparison process including several dimensions. Having this in mind, one can imagine a group having high status on a particular dimension, but low status on another. To cite an example, on the one hand, the elderly enjoy a certain respect by younger people and there is a kind of societal consensus concerning the prestige of the group of elderly. On the other hand, when it comes to engagement for jobs, the elderly are disadvantaged compared with younger applicants (Finkelstein, Burke, & Michael, 1998). I mention this point, because the studies reported later in this thesis established inequality through comparisons
on single dimensions and instead of using the term high versus low status I will refer to the advantaged versus disadvantaged group.

2.2.3 Dealing with inequality

SIT proposes that members of low status groups should experience their inferiority as unpleasant and be motivated to change their situation. Tajfel and Turner (1979) suggested a variety of reactions ranging from individual, to creative and collective strategies. Individual strategies, such as social mobility, imply attempts to pass from a lower to a higher status group at an individual level (e.g., leaving the low status group). Creative strategies aim at altering features of the comparison context, in order to re-evaluate the in-group, so that more favorable comparison outcomes are possible (e.g., switching the comparison dimension). Competitive strategies aim at changing the relation between groups (e.g., collective action or protest).

The choice of the strategy is assumed to be influenced by structural variables. Regarding this, Tajfel was particularly concerned with what he called “belief system”, namely people’s beliefs about the nature and structure of the inter-group relations. This belief system is seen as a continuum characterized by its two dimensions “social mobility” and “social change”. Depending on the social context as defined through the stability and legitimacy of the status differences and the permeability of group boundaries, group members would engage in different strategies; thus it is crucial whether there are cognitive alternatives to the given comparison outcome available. Empirical research confirms that the use of the different identity management strategies is related to structural variables (Ellemers, 2001; Kessler & Mummendey, 2002; Mummendey, Kessler, Klink, & Mielke, 1999; Mummendey, Klink, Mielke, Wenzel, & Blanz, 1999; Tajfel & Turner, 1979; Turner, 1999). On the basis of SIT’s general rationale that people strive for a positive social identity, the vast majority of research on social identity management has focused on groups that are, at least temporarily, disadvantaged in comparison to a relevant out-group. Indeed, there is compelling evidence that the awareness that one’s group is relatively inferior or otherwise disadvantaged in comparison to an out-group can weaken one’s group-based self-esteem (Branscombe & Wann, 1994; Branscombe, Spears, Ellemers, & Doosje, 2002) and trigger responses like attempting individual mobility (e.g., Ellemers, van Knippenberg, & Wilke, 1990) or striving for social change (e.g., Ellemers, 1993). The present research is particularly interested in the proposed competitive strategy that aims at social change; more precisely, whether social change is triggered by the emotions of the advantaged group.
2.2.4 Social change – driven by emotions?

So far, SIT has mostly focused on cognitive and motivational determinants of personal and social identification and identity management strategies, while in relative deprivation research typically feelings of deprivation are addressed to predict behavior tendencies (Ellemers, 2002). Likewise, research on relative advantage has investigated emotions as a response to inequality, particularly feelings of guilt (Leach, Iyer, & Pedersen, 2006; Montada & Schneider, 1989). When it comes to the point of predicting the likely consequences of disadvantage, striving for social change through collective action is a crucial issue in both theories, RDT and SIT. As discussed from the RDT side, collective action from the disadvantaged is especially likely where relative deprivation is seen as illegitimate and accompanied with specific feelings of dissatisfaction, such as anger or resentment (H.J. Smith & Kessler, 2004). Similarly, SIT assumes social change as most likely when boundaries between the groups are impermeable, the situation is perceived as illegitimate and unstable. In general, social change has always been considered as a collective movement starting from the disadvantaged or low status group. Nevertheless, social change as defined by Tajfel does not explicitly rule out the possibility of social change attempts from part of the advantaged.

“Social change (...) will be understood here as a change in the nature of the relations between large-scale social groups, such as socio economic, national, religious, racial or ethnic categories; and therefore social movements will be understood on the social psychological level as, (...), efforts by large numbers of people, who define themselves and are also often defined by others as a group, to solve collectively a problem they feel they have in common, and which is perceived to arise from their relations with other groups” (Tajfel, 1978, p. 46).

From the SIT point of view, members of high status or advantaged groups should be motivated to protect their status (Ellemers, Doosje, van Knippenberg, & Wilke, 1992). However, history has shown that there have always been exceptions where members of advantaged groups got involved in equality support instead of defending their status superiority. To illustrate this, the women's movement starting in the 19th century had male supporters as well. John Stuart Mill, as a famous example, was one of those who demanded women's suffrage and who actively campaigned for women's rights. Or in 1909, white students were co-founders together with black students of the National Association for the Advancement of Colored People (NAACP) to improve the rights of minorities. In Germany,
more recently, many heterosexual people supported the request of homosexual couples for legal authentication of their partnerships.

Back on the theoretical level, SIT (Tajfel, 1978) in its early beginning assumed that perceiving status relations as illegitimate would lead to negative attitudes and inter-group conflicts comparably for high and low status groups. More recently, however, Turner (1999) reasoned that high status group members might be highly discriminatory under conditions where they perceive their legitimate superiority as threatened by the low status group, but not where they perceived their superiority as illegitimate. Several studies seem to justify this conclusion (see Bettencourt, Charlton, Dorr, & Hume, 2001 for an overview).

As discussed above, given that members of high status or advantaged groups recognize their advantage, they might perceive this inequality as a relevant common problem. Either as a problem for themselves, as a possible threat to their status (Scheepers & Ellemers, 2005; Tajfel & Turner, 1979) or as a wrongfulness for the disadvantaged others. Both views may lead to different emotional reactions and, taking this further, these emotions may motivate members of advantaged groups to either engage in defending the status quo by intensified social competition or in social change attempts. Interestingly, Turner and Brown (1978) argue that it is threat to high status group’s positive identity what makes them show in-group bias, whereas the underlying psychological process for less in-group bias in an illegitimate high status position has been explained with feelings of guilt.

To make the point, parallel to the cognitive or motivational determinants as they have been suggested by SIT, emotions may play a fundamental role for social change attempts as the empirical results of RD research suggest. Emotions may be especially useful in explaining and understanding the role of the advantaged. As cited above, Tajfel referred to the “emotional significance” of group membership (1978, p. 63) to define features of social identity, but in general, SIT offers a rather general account of the emotional part of inter-group relations. Adding an affective component has been recently identified as one of the key challenges for future developments in SIT (Brown, 2000). Reformulating Tajfel, I am interested in emotions as psychological processes accompanying, determining, and determined by social change.
2.3 Emotions in inter-group relations

Those young German men and women who every once in a while (...) treat us to hysterical outbreaks of guilt feelings are not staggering under the burden of the past (...) rather, they are trying to escape from the pressure of very present and actual problems into a cheap sentimentality.

Hannah Arendt

2.3.1 Initial evidence for emotions in social relations

Prejudice, stereotypes, and discrimination are typical topics in inter-group relations. Two decades ago, Dijker (1987) pointed to the fact that a more detailed understanding of the affective components of inter-group evaluations could improve the understanding of these relations. Assessing emotions could help to bridge the gap between attitudes and behavior, which is regularly a debate in social psychology. With his study, Dijker identified several emotions that Dutch people experienced when confronted with members of ethnic minority groups in the Netherlands. Interestingly, these emotions were useful in differentiating between aspects of ethnic contact. With Surinamers, contact was associated with positive mood and anxiety reduction, whereas with Turks and Moroccans, only negative emotions were related to contact. Likewise, other researchers have demonstrated emotions as potent and consistent predictors of attitudes towards out-groups (Esses, Haddock, & Zanna, 1993; Stangor, Sullivan, & Ford, 1991).

Susan Fiske and her colleagues (Fiske, Cuddy, Glick, & Xu, 2002) set a ball rolling with their model of mixed stereotype content. According to this model, stereotypes contain both negative and positive convictions. More precisely, the authors proposed two core dimensions of stereotype content: competence and warmth. Regarding emotions in inter-group relations, Fiske and colleagues assumed that these emotions result from the competence and warmth appraisal of the groups. Envy, for instance, is expected to target high status, competitive groups seen as competent but cold. Although the aim of Fiske’s research is somewhat different from what this thesis aims at - they want to show that groups per se elicit affective reactions - it emphasizes the relevance of emotions for inter-group behavior and implications for justification of hierarchies (Fiske, Cuddy, & Glick, 2003).

Early work on inter-group relations did not (explicitly) pay much attention to emotions, but stressed the importance of cognitive (Allport, 1954) and motivational factors
(Tajfel & Turner, 1979; Turner et al., 1987). However, as reviewed above, reanalyzing the data provided by relative deprivation research points clearly to the importance of emotions for inter-group behavior (H.J. Smith & Ortiz, 2002). Since the 90’s, emotions attract the attention of many researchers and emotions are not seen anymore as a typical individual phenomenon. In fact, the interplay between emotions and the social world is highlighted (see Tiedens & Leach, 2004 for a review) and will be discussed in the following.

2.3.2 Theory of Group-Based Emotions and empirical evidence

Concerning inter-group relations, E.R. Smith (1993, 1999) called for a new conceptualization of the traditional prejudice approach. He suggested a refinement of the simple positive / negative attitude concept and recommended to focus more on specific emotions. He theorized that individuals may experience a variety of emotions about inter-group relations and that each specific emotion will have specific implications for individuals’ inter-group behavior (E.R. Smith, 1993; 1999). Combining SCT (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and Appraisal Theories of Emotions (e.g., Roseman, Spindel, & Jose, 1990), E.R. Smith suggested that individuals’ appraisals of their in-group’s relation to an out-group determine which specific emotions they experience. According to SCT, as outlined above, being a member of a certain group is part of a person’s psychological self. If individuals conceive themselves as members of a social group, they are likely to experience emotions on behalf of their group membership. Imagine you are a sports fan and someone tells you that your team won an important game. Most probably, you will be happy about your in-group’s success even though you neither personally contributed nor did you watch the game. Hence, events affecting the in-group are likely to trigger group-based emotions.

Appraisal Theories of Emotions describe specific dimensions (appraisals) that are involved in the production of multiple emotions (e.g., Roseman et al., 1990). More precisely, each distinct emotion is elicited by an appraisal pattern and the emotions, in turn, trigger certain behaviors (e.g., Frijda, Kuipers, & ter Schure, 1989). Interpretations and appraisals of an event relevant to one’s group may elicit emotions regarding the group context. As a combination of self-categorization theory and appraisal theories of emotions, the benefit of the group-based emotion concept is its contribution to a differentiated evaluation of inter-group relations.

Mackie, Devos, and Smith (2000) delivered the first explicit test of E.R. Smith’s Theory of Group-Based Emotions (1993). In a set of three studies the authors focused on group membership defined by support for or opposition to particular issues and appraisals of
in-group strength (measured or manipulated as the amount of collective support given to the in-group in comparison to the out-group). They measured the impact of these variables on the emotions anger, fear, and contempt and on the two actions tendencies, moving away and moving against the out-group. The results confirmed that when social identity is salient, appraisals of an event lead to specific emotional responses and action tendencies towards the out-group. Appraisal of in-group strength produced anger and anger predicted offensive action tendencies towards the out-group. However, these studies failed to find evidence for their idea that weak collective support would lead to fear and fear to move away tendencies. Besides, contrary to expectations, the emotions anger and contempt were not distinguishable in these studies.

The link between categorization and group-based emotions has been the topic of several experimental studies by Yzerbyt and his colleagues (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; Gordijn, Wigboldus, & Yzerbyt, 2001; Yzerbyt, Dumont, Wigboldus, Gordijn, 2003). In contrast to Mackie and colleagues (2000), these researchers took a slightly different path. They were particularly interested in whether people would experience emotions such as anger when in-group members were harmed by the out-group, thus, in the experience of emotions on behalf of other in-group members. They found, for instance, that learning that some people are treated unfairly elicits negative emotions (e.g., anger) if one categorizes these people as in-group members but leads to less negative emotions when these people are categorized as out-group members (Gordijn, Wigboldus, & Yzerbyt, 2001). Moreover, individuals who highly identify with an in-group also tend to experience more intense group-based emotions and showed behavior tendencies in line with these emotions (Yzerbyt et al., 2003). In this study, Yzerbyt and colleagues also found that anger did fully mediate the relation between categorization context and offensive action tendencies against a perpetrator.

Kessler and Hollbach (2005) were interested in the bi-directional causal link between appraisal conditions, in this case identification, and emotions. In their study, they manipulated type of emotion (happiness vs. anger) and object of emotion (in-group vs. out-group) to test whether group-based emotions would influence identification with a group. The results showed an interaction effect of type of emotion and object of emotion on change in in-group identification. Identification with the in-group increased with happiness towards the in-group or anger towards the out-group, whereas identification decreased with anger toward the in-group and happiness toward the out-group. In addition, the intensity of emotions determined the degree of change in identification.
Summarizing these studies, researchers provided evidence for the existence of group-based emotions, showing the (bi-directional) link between group-identification and emotional experience. In doing so, researchers were especially interested in differentiating negative emotions, such as fear, anger, and contempt to explain in-group bias and inter-group conflict. A growing number of studies emphasizes the importance of negative emotions, especially anger, as a response to discrimination or negative treatment (Branscombe, Schmitt, & Harvey, 1999; Gill & Matheson, 2006; Hansen & Sassenberg, 2006; Kessler & Hollbach, 2005), which is likely to encourage collective action tendencies (Mackie et al., 2000; van Zomeren, Spears, Fischer, & Leach, 2004; Yzerbyt et al., 2003). The findings from research on relative deprivation reviewed above are in line with this, showing anger as an emotion with high action potential. So far, positive group-based emotions and their impact on positive inter-group relations received less attention.

### 2.3.3 Positive inter-group relations

There is research on positive inter-group attitudes suggesting that positive emotions are closely linked to positive inter-group behavior (e.g., Dijker, 1987; Stangor et al., 1991). In a study of attitudes toward Asian Americans, Ho and Jackson (2001) found that positive inter-group attitudes toward Asian Americans were specifically related to positive dependent variables (i.e., positive emotions and acceptance of positive stereotypes), whereas negative attitudes were specifically related to negative dependent variables (i.e., negative emotions, negative stereotypes, and greater social distance). This research suggests that it is crucial to consider negative emotions and attitudes independently from positive emotions and attitudes when attempting to understand positive inter-group behaviors.

Thinking about positive emotions and positive interactions, referring to the helping literature appears as a must. So far, research on helping behavior has focused mainly on interpersonal helping (for reviews, see Batson, 1991) and paid less attention to inter-group helping. Yet, many helping relations occur between groups, an example is foreign aid. Studies on interpersonal helping came to the conclusion that people are aroused by others distress and exhibit emphatic reactions to those in need (e.g., Davis, Conklin, Smith, & Luce, 1996). Recently, Stürmer and colleagues (Stürmer, Snyder, Kropp, & Siem, 2006) investigated empathy-motivated helping at the group level. They found that empathy-motivated helping is typically restricted to the in-group, whereas empathy-motivated helping across group boundaries is less likely (Stürmer et al., 2006; Stürmer, Snyder, & Omoto, 2005). In other words, an empathy by group membership moderation was found, confirming that empathy had a stronger impact on helping intentions when the target was...
categorized as an in-group member than when the target was a member of the out-group. Though this is an interesting result, other researchers have demonstrated the existence of prosocial behavior across group boundaries. Nadler and Liviatan (2006) found that expressions of empathy supported willingness for reconciliation tendencies between Israeli-Jews and Palestinians (Nadler & Liviatan, 2006). Here, empathy seems to be helpful in overcoming group boundaries. Moreover, as outlined above, Montada and Schneider (1989) found that Germans who sympathized with disadvantaged groups such as asylum seekers supported easing government restrictions on asylum.

Reconsidering these few studies at group-level helping and prosocial behavior from a different perspective, it stands out that helping and being helped reflects status hierarchies (see also Nadler, 2002). Intuitively, we put the help giving group in the role of the high and the receiving group in the role of the low status group. In other words, these studies provide indirect evidence that under certain conditions members of high status groups are willing to support the disadvantaged.
2.4 From inequality to group behavior

Never doubt that a small group of engaged people can change the world - indeed it is the only way the world has ever changed
Margarete Mead

2.4.1 Different ways how relative advantage is experienced

In the previous section, I have reviewed research that has documented how members of relatively deprived groups react to their disadvantage. Less is known about how the advantaged react to inequality. It should have come apparent that (group-based) emotions are powerful in predicting (inter-group) behavior tendencies. By investigating what emotions are associated with the perception of being advantaged we hope to better understand promotion or inhibition of social change.

Yet, Leach and colleagues (2002) pointed out that recognizing advantage is not self-evident; in fact, people try to avoid acknowledging their relative advantage by either taking advantage for granted or by minimizing it. The authors quote the example that men given greater pay than women for equal work do generally not notice this inequality. Instead, men tend to compare their pay with other men. This same-sex comparison has been found to be influential for feelings of satisfaction (see Major, 1994). Though there are ways to avoid recognizing advantage, there are circumstances under which relative advantage is acknowledged. Some social situations of inequality may be so salient that downward comparison is inevitable. Naturally, recognition of relative advantage is based in downward comparisons with less fortunate others. Recently, Mallett & Swim (2007) showed that people are able to recognize group differences when it is brought to their mind. Regarding gender roles, treatment by authorities, finances, social treatment and so forth, Whites, men, and women all perceived inequality to the same extent.

Leach and colleagues (2002; see also R.H. Smith, 2000) offered a typology to study the emotional experience of relative advantage more systematically. As argued by these authors, four appraisal dimensions are of particular importance to understand how individuals feel about inter-group inequality. They specified (1) focus of attention (2) perceived legitimacy, (3) perceived stability, and (4) perceived control as important dimensions. The focus dimension determines which side of the inequality, whether it is the situation of the advantaged or disadvantaged, is most salient. Perceived legitimacy and
From inequality to group behavior

stability trace back to SIT and define the social structure of the inter-group relation, specifically the security of a given situation. Another dimension is perceived control, which, according to Leach and colleagues, tells something about whether the advantaged perceive themselves as having control over their situation or whether the disadvantaged are responsible for their position. A combination of these dimensions equals appraisal patterns that are responsible for specific emotions to occur.

Self-other focus versus perspective-taking

In situations of social comparison, emotions occur in relation to the social context, but people usually do not focus upon the entire situation. Appraisal Theories of Emotion (e.g., Scherer, 1988) suggest that one of the first evaluations of a situation to occur is whether the situation does affect oneself/one's in-group or others. This then draws the attention either to oneself/one's in-group or to the others. Taking this further, whether inequality is framed in terms of in-group advantage or out-group disadvantage may shape all subsequent appraisals and emotions. Focus of attention specifies which side of the inter-group inequality is salient during the comparison process. In other words, out-group focus is about how a person feels when having in mind the situation of the out-group and in-group-focus is about how a person feels when having in mind the situation of the in-group. Accordingly, a focus on the in-group who benefits from inequality highlights the in-group’s relative advantage. Several recent studies of real-world in-groups that benefit from inequality show perceived in-group advantage to be associated with the emotion of guilt (Iyer, Leach, & Crosby, 2003; Leach et al., 2006). For example, Powell and colleagues (Powell, Branscombe, & Smith, 2005, Study 2) asked European Americans to generate a list of either their in-group’s advantages or African-Americans’ disadvantages. Those, who were made to focus on their in-group’s advantages, felt greater guilt about the inter-group inequality. In contrast, focus on the out-group who suffers from inequality highlights the out-group’s relative disadvantage. This appraisal should be associated with the emotion of sympathy (Iyer et al., 2003). In other words, framing the same situation either as in-group advantage or out-group disadvantage may lead to different emotions.

At this point it may be helpful to draw a distinction between focus of attention and the more familiar concept of perspective-taking (i.e., putting oneself into the shoes of another; see also 2.4.2 for the distinction between pity, sympathy, and empathy). According to Batson (Batson, Lishner, Carpenter, et al., 2003), perspective-taking means either (1) simulation of oneself in the situation of others or (2) imagine the others feelings in his/her
situation. In general, perspective-taking is known to be an important factor to simulate morality. It has been linked with moral development (Kohlberg, 1976), empathy and altruism (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997), and increased prosocial behavior (Batson et al., 2003). Until recently, this has mainly been done at the inter-personal level. Since the last decade, researchers also have demonstrated that perspective-taking is helpful in reducing stereotyping, prejudice and inter-group conflict (Galinsky & Moskowitz, 2000; Vescio, Sechrist, Paolucci, 2003). Perspective-taking as well as out-group focus are expected to lead to emotional alignment with other persons.

Besides, the distinction between self- and other-focus is evocative of a theoretical distinction in emotion research; emotion researchers differentiate between self-oriented emotions (e.g., Tangney, 2002) versus other-oriented emotions (e.g., Haidt, 2003). Self-oriented emotions involve self-evaluative processes. Some authors argue that they form the core of people's moral motivational system (Tangney, 2002) and others emphasize their regulatory role in social interactions (Keltner & Gross, 1999). The importance of self-oriented emotions in the inter-group context becomes more apparent in Kemeny, Gruenewald and Dickerson’s (2004) statement that self-oriented emotions such as pride may be one way that individuals feel their place in the social hierarchy. They hold the view that a basic motive of self-oriented emotions is associated with issues of social status and acceptance in the sense that individuals strive for positive value of their social self. Other-oriented emotions, in contrast, are associated with an other-oriented motivation (Eisenberg, 2000). It is argued that other-oriented emotions help to protect the moral order. Researchers have continued to demonstrate empirical relations between other-focus emotions, such as sympathy, and prosocial behavior and helping behavior (e.g., Batson, Lishner, Carpenter, et al., 2003).

**Legitimacy perception**

A second key variable regarding relative advantage is legitimacy. Perceptions of legitimacy about inter-group inequality indicate the degree to which groups perceive a status relation to be fair. Legitimacy is basic to many theoretical perspectives in inter-group relations (e.g., Major, 1994). Within SIT (Tajfel & Turner, 1979), “legitimacy” is defined as a socio-structural variable and has been addressed in relation to status hierarchies. According to SIT, status differences intensify or reduce mutual ethnocentrism according to whether the groups perceive alternatives to the existing social order (see Turner & Brown, 1978). One factor that can lead to the perception of alternatives is the perceived legitimacy
of the status differences. It is associated with the perceptions that the situation should change. Illegitimacy makes members of both high and low status groups aware of a variety of alternatives to the existing status structure. The role of legitimacy for inter-group behavior is “snore complex” (Tajfel & Turner, 1979, p. 106). Similarly, legitimacy is central in RDT indicating a sense of “entitlement” (see Ellemers, 2002; Mummendey, Kessler, Klink et al., 1999, for ideas concerning the integration of SIT and RD). As outlined above, dissatisfaction with the current outcome only turns into emotional experience and thus motivates collective action when the discrepancy between what is and what ought to be is perceived as illegitimate. Besides, also Equity Theory (Adams, 1965; Homans, 1961; Walster et al., 1978) proposed that people prefer fair outcomes while perceived injustice or deviations from equity produce a sense of dissonance, which triggers distress.

Aside from that, legitimacy is known as an important appraisal dimension in emotion research (Roseman et al., 1990). The assessment whether an outcome is deserved or not deserved elicits different emotional reactions. In terms of inter-group relations, the appraisal of relative advantage as legitimate or illegitimate should give rise to different group based emotions. For example, one of the only studies to manipulate the legitimacy of inter-group inequality is a recent study by Miron, Branscombe, and Schmitt (2006, Study 2). They manipulated the legitimacy of gender inequality in pay by providing men with research evidence that women were either equal or lower in the abilities required for well-paid jobs. When gender inequality was framed as illegitimate, men reported feeling more guilty about it. This is in line with previous research showing a correlation between illegitimate advantage and feelings of guilt (Branscombe et al., 2002; Iyer et al., 2003; Schmitt et al., 2000).

To sum up, relative advantage as a consequence of social inequality has been ignored for quite a long time. As should have become clear, understanding the specific emotions associated with relative advantage could help in understanding the chances and limits for changing inequality. Most research, however, focused on single appraisals instead of appraisal patterns and experimental manipulation of appraisals in inter-group research is rare. Moreover, research hitherto did not contrast the conditions that lead to one emotion to those that might lead to other emotions. Besides, it is striking that guilt is almost the only emotion that has been investigated in an experimental setting as a response to relative advantage (except for sympathy in Iyer et al., 2003, Study 2). Based on the typology of
downward comparison provided by Leach and colleagues (2002)⁵, the studies presented later in this thesis combined the two appraisal dimensions focus and legitimacy to investigate specific features of emotional experiences of relative advantage in more detail. Instead of focusing on negative emotions only, positive emotions, such as pride and sympathy have been investigated as well. Differentiating between specific emotions instead of just “negative” or “positive” experience of inequality allows for specific predictions of behavior.

<table>
<thead>
<tr>
<th>SELF-FOCUS</th>
<th>OTHR-FOCUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNSTABLE ADVANTAGE</td>
<td>STABLE ADVANTAGE</td>
</tr>
<tr>
<td>LLG</td>
<td>Indignation</td>
</tr>
<tr>
<td>HGH</td>
<td>Pride</td>
</tr>
<tr>
<td>LOW CONTROL</td>
<td>Disdain</td>
</tr>
<tr>
<td>HIGH CONTROL</td>
<td>Pity</td>
</tr>
<tr>
<td>LOW CONTROL</td>
<td>Fear/Worry</td>
</tr>
<tr>
<td>HIGH CONTROL</td>
<td>Sympathy</td>
</tr>
<tr>
<td>Guilt</td>
<td>Gloating</td>
</tr>
<tr>
<td>Moral outrage</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. A typology of downward comparisons from relative advantage (Leach et al., 2002).

### 2.4.2 Contrasting the emotions pride, guilt, pity, and sympathy

Derived from the typology of downward comparison (Leach et al., 2002), four particular group-based emotions that may be experienced by members of relative

---

⁵ I want to comment shortly on the stability and control dimension, and give a rational why stability and control have not been subject of investigation. Stability was not chosen because of the simple fact that according to the typology as well as according to appraisal dimensions in the emotion literature, stability seems to be less qualified for differentiating between emotions than focus or legitimacy. Furthermore, compared to the other dimensions, control it is rather vague. On the one hand, control is similar to perceived stability in the sense that people believe the situation is changeable, and on the other hand, that the relevant group is able to change it (see collective efficacy, Bandura, 1997). Leach and colleagues (2002) did not mention this differentiation and moreover, they used the term responsibility interchangeable. In my view, efficacy is more future-focused (capability to organize and execute action), while responsibility is more past-focused (did or missed to do something) and thus, both could lead to different emotional reactions.
advantaged groups can be distinguished through a combination of focus of attention and legitimacy of status relation: pride, guilt, pity, and sympathy. One important benefit to studying multiple emotions is that each emotion may have specific effects on behavioral tendencies that are different from that of the other emotions. Basically, changes in action readiness are central to the analyses of emotions (Frijda et al., 1989). Each emotional experiences of relative advantage may trigger different behavioral tendencies either preserving or changing the status relation.

**Group-based pride**

To my knowledge, empirical evidence for group-based pride, and its basis in appraisal, is limited (for a review, see Leach et al., 2002). For example, Cialdini’s (1976) notion of “basking in reflected glory” implies that individuals feel pride in their in-group’s legitimate success over an out-group. However, none of the work on this concept has examined focus or legitimacy in an inter-group context or directly assessed feelings of pride. Although it is well-established that individuals evaluate themselves more positively when their in-group benefits from a legitimate advantage over an out-group (e.g., Ellemers, Kortekaas, & Ouwerkerk, 1999), it is unclear if this is experienced in terms of the emotion of pride (Leach et al., 2002). Generally, researchers measured group member’s self-esteem, which is influenced by judgments about the status of the groups to which they belong. As mentioned above, in the inter-personal comparison literature Wills (1981) proposed downward comparison with less fortunate others as a strategy to achieve or maintain positive self-esteem. According to Weiner (1985), both pride and self-esteem are similar because both are experienced as a consequence of attributing a positive outcome to the self. Based on research on individual emotions, pride is understood as a pleasant feeling that is gained through competition with others (Weiner, 1985; Zammuner, 1996), particularly in situations where people believe that their “success” is justified or deserved. Weiner stated that “a dollar attained because of good luck could elicit surprise; a dollar earned by hard work might produce pride” (Weiner, 1985, p. 559). A direct link between group-based pride and inter-group behavior has not been shown yet. However, research on nationalism indicated nationalistic pride as a predictor for xenophobia and a preference for cultural homogeneity (Cohrs, Dimitrova, Kalchevska, et al., 2004). Beside, it is known from self-esteem research that high group-based esteem enhances in-group favoritism (Verkuyten & Hagendoorn, 2002). This is in line with H.J. Smith and Tyler (1997) suggesting that pride captures people’s feelings about a group and is related to collective self-esteem. They found
that people feeling more proud of their group favored their in-group and viewed positive attributes as less representative for an out-group. Therefore, pride about legitimate advantage will probably not lead to efforts to change the social order.

**Existential guilt**

Guilt is generally described as an aversive, dysphoric feeling about the recognition that something is against social or moral standards (Kugler & Jones, 1991; Roseman et al., 1990). Many of the studies dealing with guilt in the inter-group context are concerned with what is called *white* or *racial guilt*. Steele (1990) used the term White guilt to describe the unpleasant feeling of European Americans stemming from the awareness of an illegitimate advantage over African Americans. This kind of guilt is currently gaining a great deal of attention (Branscombe, Doosje, & McGarty, 2003; Iyer et al., 2003; Swim & Miller, 1999). While white guilt and racial guilt are important concepts to consider, there is also research on other forms of guilt. Existential guilt is defined as the readiness to feel guilty as a consequence of facing one’s illegitimate advantage. Montada and colleagues (1983) argued that, when evaluating one’s situation along dimension of justice, existential guilt is less associated with behavior, but rather with life circumstances. Following findings of others (e.g., Hoffman, 1976; Leach et al., 2006; Powell et al., 2005; Schmitt et al., 2000), I agree that a mere unearned advantage should be sufficient to elicit feelings of existential guilt without people being responsible for inequality. Lately, Mallett and Swim (2007) provided empirical evidence that perceived inequality, responsibility, and justifiability are unique predictors of group-based guilt.

Besides, there is also research on “guilt by association” (e.g., Doosje, Branscombe, Spears, & Manstead, 1998), which means that people feel guilty because they feel associated with others who are responsible for the illegitimate disadvantage or suffering of others (another group). This kind of guilt is based on the in-group’s misdeeds, even if these were committed in the past and without the individual being directly responsible for it. This notion of guilt is often pulled together with historical events, such as the Holocaust in Germany and the public debate whether the Germans “still” feel guilty and a moral responsibility for what they (their ancestors) have done. Currently, there is a vivid discussion among researchers about the consequences of group-based guilt. While some authors hypothesize that collective guilt should lead to a desire for reparation (Branscombe, Slugoski, & Kappen, 2004) or apologies (McGarty, Pedersen, Leach et al., 2005) others argue that guilt seems to explain the support of abstract goals of compensation, but does not
appear to motivate concrete forms of political action, such as organizing demonstrations (Leach et al., 2006) and is therefore limited in its explanation of efforts to change inequality. As a side note, I would like to mention that currently several social psychologists work on differentiating between guilt and shame on a theoretical and empirical level. These authors built on an earlier discussion by Lewis (1971) who stated that both of these reactions involve negative affect but the focus of the experience differs: in guilt the main emphasis is on the wrong-doing and its consequences for the other (“I did this bad thing to X, who suffered as a result”) at the same time as shame is marked more by a focus on the negative implications of that wrongdoing for one’s self-concept (“I did this bad thing to X, and therefore I am (seen to be) a bad person”). There are two reasons why this thesis does not differentiate between guilt and shame. First, I’m not concerned with wrongdoings, but with the mere perception of illegitimate advantage, triggering existential guilt. Thus, responsibility is not involved. Second, shame and guilt are semantically very close to each other (C.A. Smith & Ellsworth, 1985). When research focuses on this narrow semantic field, the differentiation between guilt and shame may be highly relevant. The present research, however, focused on the broader semantic field of emotions by contrasting pride, guilt, and sympathy. Thus, the small semantic distance between shame and guilt is less meaningful compared to the wider distance between pride, guilt, and sympathy.

**Group-based pity**

Pity clearly is an out-group focus emotion that denotes a feeling of sorrow for another person or group of persons. It should be most likely when the advantaged group members take an out-group focus and the situation is framed as legitimate. According to Leach and colleagues, a legitimate and therefore secure status relation “allows a somewhat paternalistic reaction towards the disadvantaged in form of pity” (2002, p. 151). Although at a first glance pity seems to be a positive emotion, it is associated with the view of the disadvantaged as being inferior. Likewise, other authors theorize that pity is part of paternalistic stereotyping that serves as an explanation to legitimize the status difference favoring the dominant group by perceiving the out-group as weak and dependent (e.g. Fiske, Cuddy, Glick, & Xu, 2002). People would not typically pity a group considered superior to one’s own. Following the argumentation by Leach and colleagues (2002), pity is not likely to motivate behavior that aims at changing the situation of the disadvantaged and thus, the status hierarchy. Because the disadvantaged seem to be weak and incompetent the structures appears natural and immutable. So far, empirical evidence for pity motivated behavior is
rare. Thinking further, when the disadvantaged become demanding and threaten the status hierarchy, pity may even change into a more hostile, negative emotion, such as disdain (e.g., Leach et al., 2002).

**Group-based sympathy**

Conceptually, sympathy belongs to out-group focused emotions (Haidt, 2003) and refers directly to the misery of another person or group. Sympathy seems to be the prevailing response to others misfortunes (Weiner, 1995). It reflects a prosocial orientation and a concern for others. In the inter-group context, group-based sympathy is triggered through a focus of attention on the disadvantage of another group (Iyer et al., 2003). It has also been demonstrated that sympathy seem to be stronger when others disadvantage is perceived to be illegitimate and not self-inflicted (Montada & Schneider, 1989; Rudolph, Roesch, Greitemeyer, & Weiner, 2004). When poverty, for example, is explained in terms of illegitimate and uncontrollable circumstances, sympathy is likely to occur (Weiner, 1995). Sympathy, in contrast to pity, leads to real helping behavior. Batson and colleagues have demonstrated that sympathy may not only motivate prosocial behavior in specific contexts, but it may also cause enduring changes in ones concern about others’ well-being (Batson, Turk, & Shaw, 1995). For example, people who are induced to experience sympathy for a member of a stigmatized group actually develop more benign attitudes toward those individuals weeks later (Batson, Polycarpou, Harmon-Jones, et al., 1997). In one of the few studies at the inter-group level, Iyer et al. (2003) showed that sympathy with disadvantaged African Americans suffering discrimination was associated with support for equal opportunity policy (Iyer et al., 2003).

**Pity, sympathy, and empathy: what is the difference?**

In the literature so far, there has been some confusion with the labels pity, sympathy, and empathy. In line with several researchers (e.g., Wispe, 1986) I would like to point out the difference between pity, sympathy, and empathy. Pity and sympathy, in contrast to empathy, does not mean perspective-taking in the sense of understanding how the other feels. Parallel to the theoretical distinction between focus of attention and perspective-taking, a typical empathy manipulation would instruct people to “imagine how XY feels”.

---

6 In Batson’s research (e.g., Batson et al., 1997) the term empathy is used; during the experimental procedure participants are asked to imagine how the target person feel. When answering the questionnaire, however, participants have to indicate how much they themselves experienced sympathetic, soft-hearted, warm, compassionate, etc. emotions.
Thus, empathy is a vicarious emotion and to be empathic means to feel what the other feels, for example empathic anger. Hence, empathy is not an emotion by itself. By contrast, sympathy is defined as feeling with the person in need. The actual feeling is sympathy. Likewise, pity means to feel sorry for someone.

2.4.3 Excursus: Emotion measurement

As outlined above, the present research studied the subjective feeling component of emotions as measured by self-report indicators as well as behavioral tendencies associated with the subjective feeling. Emotion research, especially in social psychology, has induced emotions by either asking participants to imagine (prospective) or to remember (retrospective) an event when they experienced a particular emotion (Frijda, Kuipers & ter Schure, 1989; C.A. Smith & Ellsworth, 1985), by presenting participants with vignettes, or scenarios that correspond to predicted appraisal dimension profiles for a particular emotion (Berndsen & Manstead, (in press); Smith, Haynes, Lazarus, & Pope, 1993); or by studying in-vivo situations (Scherer & Ceschi, 1997; Smith & Ellsworth, 1987). Usually, participants have to respond to questions about their emotions, and/or to questions concerning their evaluation of the event in terms of the different appraisal dimensions. The studies at hand used the vignette-methodology to trigger emotions. This method seems to be appropriate as suggested by a study of Robinson and Clore (2001), which directly compared ‘in vivo’ and ‘simulation’ methods of emotion elicitation. Despite the different information available for the participants in these two conditions, the authors found a high degree of convergence in participants’ emotion responses. According to these results, written scenarios were assumed to be a useful methodology for inducing emotions.

In the following studies, participants have been instructed to respond to questions about their emotional state. They were asked to report their online emotions directly after reading the scenarios; retro- or prospective emotions have not been assessed. Nonetheless, methodological questions have been raised about the use and validity of self-report in emotion research (Nisbett & Wilson, 1977; see for an overview Aronson, Ellsworth, Carlsmith, & Gonzales, 1990) in contrast to more “objective” measures, such as observational techniques (e.g., coding facial expression) or physiological reactivity. One of the basic criticisms is that participants' self-reports could be more representative of their stereotypes about emotions than of the real emotion experience. Social desirability bias or the difficulty for the participant to access the information necessary to describe processes involved in appraisal and emotion have also been mentioned as problematic. Even though, several researchers (e.g., Frijda, 1986) advocate for subjective measurement. Instead of
trying to determine the best method to study emotions, it might be more reasonable to try to use multiple methods whenever possible. Most important should be the choice of the method as a function of the research question: Physiological measurements, for instance, might not be most suitable to distinguish between specific emotions. So far, self-report is still one of the most common and potentially the best way to measure a person’s emotional experiences (Clore, 1994; Diener, 2000). In addition, online emotion reports as used in the presented studies are assumed to be less prone to bias than retro- or prospective reports (Robinson & Clore, 2002).
2.4.4 Design and hypotheses

The aim of the present work is to investigate the group-based emotions experienced by members of relative advantaged groups as reactions to inter-group inequality. Appraisal Theories of Emotion (Roseman et al., 1990) pointed out specific patterns of appraisal that produce particular emotions. E.R. Smith (1993, 1999) extended Appraisal Theories to the inter-group context. The studies reviewed in the previous section provided evidence for Smith’s assumption that a salient social identity elicits specific inter-group emotions and subsequent behavioral intentions. In combining research on Relative Deprivation Theory (e.g., H.J. Smith & Kessler, 2004), Social Identity Theory (Tajfel & Turner, 1979), and Theory of Group-Based Emotions (Smith, 1993, 1999) I argue that there are different ways how the relative advantaged experience inequality in terms of emotions. Research on group-based emotions hitherto mainly investigated negative emotions to explain negative inter-group behavior (e.g., Mackie et al., 2000), while positive group-based emotions and their impact on positive inter-group relations received less attention. This thesis aims at investigating negative as well as positive inter-group emotions.

So far, most research on group-based emotions focused on single appraisals instead of appraisal patterns. Based on the conceptual model of Leach et al. (2002; see also R.H. Smith, 2000), the contribution of the present thesis lays in the combination of two appraisal dimensions to investigate specific features of emotional experiences of relative advantage. I distinguish the group-based emotions pride, existential guilt, pity, and sympathy about inter-group inequality on the basis of the dimensions focus (in-group vs. out-group) and legitimacy (legitimate vs. illegitimate).

Different from previous studies in this area, I chose an experimental procedure to establish social inequality and to manipulate the appraisal dimensions. Thus, it was possible to contrast the conditions that lead to one emotion to those that might lead to other emotions. Instead of applying a 2 x 2 design, the 1 x 4 design (in-group-focus legitimate (IGF legitimate) vs. in-group-focus illegitimate (IGF illegitimate) vs. out-group-focus legitimate (OGF legitimate) vs. out-group-focus illegitimate (OGF illegitimate) was more appropriate to account for the hypothesized rank order of means (A > B = C = D): Each single combination of focus and legitimacy, out of the four possible ones, should lead to one specific emotion. When combined, focus and legitimacy determine the conditions under which members of groups that benefit from inter-group inequality will feel pride, guilt, pity, or sympathy. These emotions should be more intense in one specific condition compared to the other three conditions.
As outlined above, two pre-conditions are essential for the study of advantaged group’s emotional reactions to inter-group inequality.

- First, identification with the in-group is necessary for group-based emotions to occur.
- Second, advantage has to be recognized.

**Specific Emotion-Hypotheses**

**H1a: Group-based pride**

It is predicted that group-based pride, experienced by members of relative advantaged groups, is stronger when in-group-focus is salient and in-group advantage is perceived to be legitimate compared to salient illegitimate in-group advantage and legitimate or illegitimate out-group disadvantage.

**H1b: Existential guilt**

It is predicted that existential guilt, experienced by members of relative advantaged groups, is stronger when in-group-focus is salient and in-group advantage is perceived to be illegitimate compared to salient legitimate in-group advantage and legitimate or illegitimate out-group disadvantage.

**H1c: Group-based pity**

It is predicted that group-based pity, experienced by members of relative advantaged groups, is stronger when out-group focus is salient and others’ disadvantage is perceived as legitimate compared to illegitimate and salient legitimate or illegitimate in-group advantage.

**H1d: Group-based sympathy**

It is predicted that group-based sympathy, experienced by members of relative advantaged groups, is stronger when out-group-focus is salient and others’ disadvantage is perceived as illegitimate compared to legitimate and salient legitimate or illegitimate in-group advantage.
Table 1. Hypotheses concerning the group-based emotions experienced by members of relative advantaged groups as reactions to inter-group inequality.

<table>
<thead>
<tr>
<th></th>
<th>IGF legitimate</th>
<th>IGF illegitimate</th>
<th>OGF legitimate</th>
<th>OGF illegitimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-based pride</td>
<td>+++</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Existential guilt</td>
<td>+</td>
<td>+++</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Group-based pity</td>
<td>+</td>
<td>+</td>
<td>+++</td>
<td>+</td>
</tr>
<tr>
<td>Group-based sympathy</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+++</td>
</tr>
</tbody>
</table>

Note. +++ indicates that the emotion is expected to be more intense compared to +.

Behavior and Emotion-Behavior-Hypotheses

As outlined above, taking into account research on Relative Deprivation Theory (e.g., Smith & Kessler, 2004), Social Identity Theory (Tajfel & Turner, 1979), and Theory of Group-Based Emotions (Smith, 1993, 1999) I argue that emotions, rather than just cognitive or motivational determinants (cf. SIT, Tajfel & Turner, 1979), may motivate inter-group behavior. Each specific emotional experience of relative advantage may trigger different behavioral tendencies (Mackie et al., 2000) either preserving or changing the status relation. Thus, not only the relative deprived may instigate social change, but also the relative advantaged, when stimulated by their emotions.

More precisely, the group-based emotions pride, existential guilt, pity, and sympathy should have quite different implications for individuals’ tendencies to act within the context of their inter-group relations. When the relative advantaged experience for instance pride about their in-group advantage, pride is expected to trigger in-group favoring behavior, thus, pride is likely to affirm inequality, whereas sympathy, felt by the relative advantage, is expected to trigger support of the disadvantaged, thus, sympathy is likely to challenge inequality.

While there was information provided by the literature to derive hypotheses about which kind of behavior tendency would follow which emotion, predictions for direct effects of the experimental conditions on behavioral tendencies were more speculative and could not directly be derived from the typology proposed by Leach (Leach et al., 2002). Only the legitimate advantage condition was an exception. According to SIT and results provided by a meta-analysis (Bettencourt et al., 2001), in-group favoring behavior should be especially pronounced when in-group advantage is expected to be legitimate.
Specific Emotion-Behavior Hypotheses

H2a: It is predicted that the greatest amount of in-group favoring behavior is found when in-group focus is salient and in-group advantage is perceived to be legitimate compared to salient illegitimate in-group advantage and legitimate or illegitimate out-group disadvantage.

H2b: It is predicted that pride triggers in-group favoring behavioral tendencies. Pride is expected to affirm inequality.

H2c: It is predicted that guilt triggers compensatory behavioral tendencies. Guilt is expected to be a relatively weak predictor for the actions that aim at reducing the inter-group inequality.

H2d: It is predicted that pity triggers paternalistic behavior. Pity is expected to affirm inequality.

H2e: It is predicted that sympathy triggers supportive behavior regarding the disadvantaged. Sympathy is expected to challenge inequality.
3 Empirical evidence

3.1 Study 1

This first study aimed at investigating how relative advantage is experienced in terms of group-based emotions (Leach et al., 2002). Building on previous studies in inter-group research that were mainly interested in guilt, this study was designed to compare group-based pride, existential guilt, pity, and sympathy. Study 1 was set up within the context of job opportunities for psychologists compared with job opportunities for social pedagogues. Written scenarios, which are common in emotion research (Schorr, 2001), were used to manipulate the appraisals focus and legitimacy. According to the predictions developed in the previous chapter, focus of attention and legitimacy of the status relation are important for how acknowledged relative advantage is experienced. What has not been tested hitherto is the joint impact of both variables for the emotions pride, existential guilt, pity, and sympathy. In this study it was possible to compare the conditions that lead to one emotion to those that might lead to other emotions.

The second aim of Study 1 was to investigate the emotion behavior link (Frijda et al., 1989). To assess behavioral tendencies, a simple resource distribution task was used. It was expected that participants would show a systematic tendency to favor their group (Hewstone, Rubin, & Willis, 2002) by allocating more resources to the in-group compared to the out-group. However, as outlined above, group-based pride, existential guilt, pity, and sympathy were expected to predict resource distribution differently. As argued above, group-based pride, in contrast to guilt, pity and sympathy, should reinforce behavior tendencies favoring the in-group, while existential guilt, pity, and sympathy should be associated with less in-group favoring behavior.

3.1.1 Method

Design, Sample, and Procedure

An experimental study with four conditions was designed in which one condition equals one combination of focus and legitimacy: in-group-focus legitimate (IGF legitimate) vs. in-group-focus illegitimate (IGF illegitimate) vs. out-group-focus legitimate (OGF legitimate) vs. out-group-focus illegitimate (OGF illegitimate). At the beginning of the semester, the questionnaires were administered after psychology lectures for undergraduates at the Universities of Dresden and Jena. Participants ($N = 82$, 90 % female, age: $M = 21$ yrs.,
range: 18-30 yrs.) were randomly assigned to one of four conditions, resulting in almost equal cell sizes of $n > 20$. A maximum of 15 students could take part in one session. Participants received a standardized instruction, then they were asked to read the scenario, and afterwards, to answer the subsequent questions. Having completed the questionnaires, participants were debriefed and thanked for participation with a chocolate bar.

**Material**

**Experimental manipulation**

Written scenarios in the form of fake newspaper articles were used in order to establish relative advantage and to manipulate focus and legitimacy. A story was developed that described the alleged job situation for social scientists in Germany. Participants, psychology students, were told that they were advantaged compared with students of social pedagogy regarding job opportunities. All articles were identical except for the sentences by means of which the independent variables, focus and legitimacy, were manipulated. In the in-group focus condition these sentences pointed at the situation of the in-group (psychology students) and were phrased in terms of in-group advantage. It was said that psychologists have better job opportunities and an average income of 130 percent compared to social pedagogues. In the out-group focus condition the sentences highlighted the situation of the out-group (students of social pedagogy) and were phrased in terms of out-group disadvantage. It was said that social pedagogues have worse job opportunities and an average income of 70 percent compared to psychologists. The manipulation of legitimacy of the inequality referred to quality of education. In the legitimate conditions the education of psychologists was described as excellent and the education of social pedagogues as poor and vice versa in the illegitimate condition.

**Emotional reactions**

Emotional reactions were measured on 9-point scales. After reading the fake newspaper articles, participants immediately had to respond to a list of emotion items and to indicate the extent of their momentary emotional state (“When thinking about the described situation I feel…” from 1 = not at all to 9 = very intense). Group-based pride was measured with three items (proud, successful, superior). Three items concerned the emotion existential guilt (guilty, have a bad conscience, ashamed). Two items assessed sympathy (sympathy, compassion), and further two items assessed pity (pity, to feel sorry). In addition to these main emotions, the emotion scale also included items to measure disdain (contemn, disdain,
disgusted), which was another emotion mentioned in the typology of downward comparison (Leach et al., 2002). The reason for this is that pity was expected to alter easily into a more hostile emotion, such as disdain, if the advantaged perceive a potential instability of the status relation (see also Fiske & Glick, 1995). Including this emotion in the questionnaire gave the possibility to test this alternative hypothesis. The order of the emotion items in the scale was varied randomly within the experimental conditions.

Relative advantage and identification

Whether the perception of relative advantage was successfully established was checked by a single item on a 7-point scale “Regarding the job situation, psychologists are relatively advantaged compared to social pedagogues” (1 = absolutely not, 7 = absolutely). Four items measured identification with psychology students (e.g., “I am glad to be a psychology student”, α = .83) using a 7-point Likert scale. These identification items were chosen from Doosje, Ellemers, and Spears (1995).

Measure of behavior tendencies: Resource distribution

In order to measure participants’ behavior intentions, a resource distribution task was employed. Within the scope of the cover story, participants were instructed to imagine how they would act if they were able to influence the financial distribution on the social job market. Then, their task was to distribute 100 monetary units between the groups of psychologists and social pedagogues. All participants had to write down how many monetary units they would allocate to their in-group and how many units they would give to the out-group. They recorded their distributions in spaces provided in the questionnaire.

Preliminary analyses

Pre-test of the material for the appraisal manipulation

The material was pre-tested on an independent sample (N = 81), to ensure that the manipulation material would be appropriate to manipulate the appraisals focus and legitimacy. A 3-point scale was used to check for the focus manipulation (1 = social pedagogues, 2 = both groups of social scientists, 3 = psychologists). A 2 (focus) by 2 (legitimacy) ANOVA with the focus manipulation check as dependent variable revealed a main effect of focus, M_{OGF} = 1.03, M_{IGF} = 2.88, F(1,77) = 1126.53, p < .001, a main effect of legitimacy, M_{OGF} = 2.05, M_{IGF} = 1.93, F(1,77) = 6.79, p < .05, and a non-significant interaction, F(1,77) = 2.89, p = .09. Thus, participants’ focus of attention was successfully manipulated. Where an inequality was framed as their in-group’s advantage, participants
focused more on their in-group than on the out-group. Although the conditions of illegitimate inequality led participants to focus slightly more on the out-group, participants tended to focus on both groups irrespective of legitimacy.

Furthermore, participants had to respond to the question how they perceived the status relation between psychologists and social pedagogues concerning the job situation in regard to justice aspects. The items of this legitimacy manipulation check were phrased according to the experimental manipulation in terms of either in-group advantage perceived as fair or unfair versus out-group disadvantage perceived as fair or unfair on a 7-point scale ranging from 1 (very unfair) to 7 (very fair). A 2 (focus) by 2 (legitimacy) ANOVA with the legitimacy manipulation check as dependent variable revealed that participants in the legitimate condition found the situation to be fairer ($M = 4.48$) than participants in the illegitimate conditions ($M = 3.08$), $F(1,78) = 30.00, p < .001$. Also, participants in the IGF conditions perceived the situation to be more fair ($M = 4.50$) than participants in the OGF conditions ($M = 3.05$), $F(1,78) = 31.99, p < .001$. The manipulation of the legitimacy of the inter-group inequality also appeared successful. Participants perceived the inequality made legitimate by an “excellent” education to be more fair than the inequality made illegitimate by a “poor” education. The perceived fairness of the inter-group inequality was also affected by our manipulation of focus. Consistent with some previous research (e.g., Iyer et al., 2003, Study 2; for a review, see Mikula, 1993), participants appeared to justify the inequality when it was in-group-focused. This seems likely to be a defensive reaction to belonging to an in-group that may be perceived as enjoying undeserved advantage over others (Leach et al., 2006; for a review, see Leach et al., 2002). Indeed, people in advantaged positions tend to legitimate the status hierarchy (Sidanius & Pratto, 1999). The implication of this apparent justification is that our manipulations of focus and legitimacy may less easily provoke guilt. If an in-group-focus leads participants to view the inequality as more fair, this will undermine the effect of illegitimacy on guilt in the in-group-focus condition. Thus, our manipulations may generate a conservative test of the basis of group-based guilt. Of course, if in-group-focus leads participants to justify inequality our manipulations will more easily provoke pride.

*Emotion measures: Factor analysis*

To study the structure of the emotional reactions, the thirteen emotion items were submitted to a principal-axis Factor Analysis with Oblimin rotation. A four factor solution was obtained accounting for 58.44% of the common variance. The first factor included
items measuring pity and sympathy (Eigenvalue of 3.66), the second factor included disdain items (Eigenvalue of 2.76), the third factor consisted in the pride items (Eigenvalue of 1.68), and the forth in the guilt items (Eigenvalue of 1.06). Because the pity and sympathy items fall into one factor, this structure did not fully account for the theoretically expected factor solution, with pity and sympathy being discrete factors.

According to previous theorizing, the emotion items that described one emotional concept were aggregated into single scales. The reliabilities of these scales were satisfying: pride, $\alpha = .76$; guilt, $\alpha = .77$, pity, $\alpha = .83$, sympathy, $\alpha = .68$, and disdain, $\alpha = .71$. In addition, some of the emotions were correlated with each others. Pride correlated significantly with disdain, $r = .33$, $p < .01$, but not with the other emotions: guilt, $r = -.11$, $p = .32$, pity, $r = -.11$, $p = .33$, and sympathy, $r = -.10$, $p = .39$. Guilt correlated significantly with pity, $r = .42$, $p < .001$ and with sympathy, $r = .28$, $p < .05$, but not with disdain, $r = .20$, $p = .07$. Finally, pity and sympathy were highly correlated, $r = .73$, $p < .001$; both did not correlate with disdain: pity, $r = -.03$, $p = .79$ and sympathy $r = -.09$, $p = .45$. This indicates that although the emotions are separable from each other on a theoretical level, they still show some overlap.

### 3.1.2 Results

#### Recognition of relative advantage

An important precondition of the study was that participants recognized their relative advantaged position towards a disadvantaged target group. The acknowledgment of being advantaged was high and significantly above the scale mid-point of 4 (on a 7-point scale), $M = 5.62$, $t(81) = 15.66$, $p < .001$. A 2 (focus) by 2 (legitimacy) ANOVA revealed that the acknowledgment was not significantly influenced by the manipulation, all $F$s < 1.9.

#### Identification

As already mentioned, identification with the in-group is a necessary precondition for the experience of group-based emotions. The extend of identification with psychology students in this study was significantly above the scale mid-point of 4 (on a 7-point scale), $M = 4.95$, $t(81) = 7.33$, $p < .001$. Further, for the identification no reliable differences emerged between the experimental conditions, all $F$s < 1.3. This is an indicator for successful randomization of participants and that there was no confound with the manipulation. Since participants identified high with the in-group, stage was set for group-based emotions to occur.


Group-based emotions of relative advantaged group members

Testing hypotheses: Contrast analyses

To investigate our specific hypotheses about the combined impact of focus and legitimacy on group-based pride, existential guilt, pity, and sympathy, four planned contrast analyses were conducted. Contrast analyses are the appropriate method to test specific predictions. Firstly, following the suggestion by Rosnow and Rosenthal (1996), for testing the main hypotheses I treated the 2x2 design as a 1x4. For each of the four theoretical predictions a contrast was created that described the hypothesized rank order of means (A > B = C = D) regarding one group-based emotion, which is represented by the focal contrast with the coefficients 3 -1 -1 -1. For example, feelings of pride should be more intense when the focus of attention lies on the in-group and the status relation is described as legitimate compared to salient IGF illegitimate, OGF legitimate or OGF illegitimate. The condition in which one of the four group-based emotions was expected to be most intense was weighted with +3 and was compared to the other conditions weighted with -1. Secondly, to check whether the expected focal contrast is a reasonable representation of the empirical results, the suggestion by Abelson and Prentice (1997) was followed and orthogonal contrasts were computed in addition. Orthogonal contrasts are important because they provide hints for systematic patterns the researcher did not predict. In other words, orthogonal contrasts check for significant residual variance that is not explained by the focal contrast. Given that there were four experimental groups, two degrees of freedom were left to compute two orthogonal contrasts (0 0 1 -1 and 0 -2 1 1). Niedenthal, Brauer, and Robin (2002) pointed to the fact that the orthogonal contrast test as suggest by Abelson and Prentice (1997) is a relative lenient test of the second condition. Therefore, they proposed and developed a stricter test for the orthogonal contrasts in which the $F$ value for the combination of both orthogonal contrasts is computed “by dividing the sums of squares associated with the two contrasts (as a set) by the mean square of the error term” (2002, p. 424). This procedure was closely followed. Moreover, to account for the inter-correlations between the emotions and a general emotionality due to the manipulation, the non-focal emotions were included as covariates in the contrast analyses. Means and standard deviations can be found in Table 2.

---

7 Formula: Sum of Sums of Squares of all alternative contrasts divided by Sum of Squares of Error divided by degrees of freedom of Error.
Group-based pride

A 3 -1 -1 -1 contrast for the pride scale was computed, which revealed a significant effect, $F(1, 75) = 11.69, p = .001, \eta^2 = .136$. In line with the hypothesis, participants in the in-group focus and legitimate condition reported higher feelings of pride than participants in the other three conditions. Further, the orthogonal contrast test confirmed the residual variance being sufficiently explained by the focal contrast because the combined orthogonal contrast was not significant, $F(1, 75) = 3.10, p = .08$.

Group-based guilt

For the guilt scale, a -1 3 -1 -1 focal contrast was computed, which revealed a significant effect, $F(1,75) = 11.71, p = .001, \eta^2 = .137$. In line with expectations, the descriptive picture shows that participants indicated higher feelings of guilt in the condition in-group focus and illegitimate advantage than participants in the other three conditions. However, the combined orthogonal contrast was significant, $F(1, 75) = 7.85, p = .007$, indicating there is residual variance left which is not fully explained by the predicted pattern.

Group-based pity

A -1 -1 3 -1 contrast was computed for the pity scale, which showed a significant effect, $F(1, 75) = 8.16, p = .006, \eta^2 = .099$. In line with the prediction, participants reported more pity in the out-group focus legitimate condition than in the other three conditions. The combined orthogonal contrast was marginally significant, $F(1, 75) = 3.71, p = .060$.

Group-based sympathy

A -1 -1 -1 3 contrast was computed for the sympathy scale, which revealed a significant effect, $F(1, 75) = 5.84, p = .018, \eta^2 = .073$. As expected, participants in the out-group focus illegitimate condition experienced stronger feelings of sympathy than participants in the other three conditions. The combination of both orthogonal contrasts was not significant, $F(1,75) = 2.05, p = .15$.

Explorative part: Investigating OGF legitimate

To test whether group-based disdain would be an alternative emotion to group-based pity in the OGF and legitimate condition, a 2 (focus) by 2 (legitimacy) ANOVA with disdain as dependent variable was conducted. The ANOVA revealed that neither focus, $F(1, 77) = 1.36, p = .25$, nor legitimacy, $F < 1$, nor the interaction of both variables, $F < 1$ had an
impact on feelings of disdain. Participants in all four conditions reported a similarly low intensity of disdain feelings (see Table 2).

Table 2. Means and standard deviations of reported emotions for Study 1.

<table>
<thead>
<tr>
<th></th>
<th>IGF legitimate</th>
<th>IGF illegitimate</th>
<th>OGF legitimate</th>
<th>OGF illegitimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Group-based pride</td>
<td>5.58</td>
<td>(1.85)</td>
<td>4.50</td>
<td>(1.32)</td>
</tr>
<tr>
<td>Existential guilt</td>
<td>1.92</td>
<td>(1.10)</td>
<td>2.65</td>
<td>(1.72)</td>
</tr>
<tr>
<td>Group-based pity</td>
<td>3.40</td>
<td>(1.78)</td>
<td>3.40</td>
<td>(1.72)</td>
</tr>
<tr>
<td>Group-based sympathy</td>
<td>3.40</td>
<td>(1.349)</td>
<td>3.58</td>
<td>(1.61)</td>
</tr>
<tr>
<td>Group-based disdain</td>
<td>1.58</td>
<td>(1.02)</td>
<td>1.65</td>
<td>(1.36)</td>
</tr>
</tbody>
</table>

Behavior tendencies: Resource distribution

To evaluate the prediction that participants would favor the in-group as a default when allocating the resources between in-group and out-group, both values were averaged and compared with a t-test. In general, participants gave more monetary units to the in-group (M = 56.09) than to the out-group (M = 43.91), t(81) = 7.45, p < .001. Thus, as expected, participants showed in-group favoring behavior when performing the distribution task. A contrast test with the coefficients 3 -1 -1 -1 and the mean of the IG allocation as dependent variable should test whether participants in the IGF legitimate condition showed more in-group favoring behavior in the resource distribution task than participants in the other three conditions. In fact, participants in the IGF legitimate condition allocated significantly more resources to their in-group (M = 60.0), whereas participants in the IGF illegitimate (M = 54.4), OGF legitimate (M = 56.0), and OGF illegitimate condition (M = 54.1) did less so, F(1, 78) = 7.96, p = .006, η² = .093. Both orthogonal contrasts were not significant, F < 1, indicating that the expected pattern was the most reasonable pattern for the results of the resource distribution.

Group-based emotions as predictors of behavior tendencies

To recap, group-based pride should reinforce behavior tendencies favoring the in-group, while existential guilt, pity, and sympathy should be associated with less in-group favoring behavior. A multiple regression analysis was conducted. The four group-based emotions were simultaneously entered as predictors and the difference measure of the resource distribution as criterion. Pride was significantly related to the allocation in the
distribution task, $\beta = .47, p < .001$, indicating that the more pride participants felt about their in-groups advantage the more they benefited their in-group. Feelings of sympathy, however, led to marginally less in-group favoring allocations in the resource distribution task, $\beta = -.27, p = .060$. The more intense feelings of sympathy were, the less resources were distributed towards the in-group. Neither did guilt predict allocation behavior in the distribution task, $\beta = -.04, p = .680$, nor feelings of pity, $\beta = .03, p = .840$.

**Mediation Analysis: Group-based pride**

In line with the prediction, IGF and legitimate advantage led to the experience of group-based pride and was significantly related to in-group favoring behavior in the resource distribution task. It was tested whether the relation between the experimental condition IGF legitimate and in-group favoring behavior was mediated by feelings of pride, following the procedure recommended by Baron and Kenny (1986). As shown with the regression analyses existential guilt, group-based pity, and group-based sympathy did not meet the requirements to conduct mediation analyses. As for the emotion contrast tests, I controlled for existential guilt, pity, and sympathy feelings in the following mediation analysis (see Figure 1 for illustration).

First, a regression analysis with the condition IGF legitimate in contrast to IGF illegitimate, OGF legitimate, and OGF illegitimate as predictor (3 -1 -1 -1) and the difference measure of the resource distribution task as criterion showed that both variables were correlated, $\beta = .30, p = .006$. Second, a regression analysis revealed that feelings of pride were predicted by the condition IGF legitimate compared to the three other conditions (3 -1 -1 -1), $\beta = .35, p = .001$, whereas guilt, $\beta = -.12, p = .30$ was not. Pity and sympathy, however, were negatively associated with the predictor, pity, $\beta = -.28, p = .013$ and sympathy, $\beta = -.31, p = .004$. Third, the allocation measure was regressed on experimental
condition, pride, existential guilt, pity, and sympathy simultaneously. Only the relationship between pride and the behavioral measure was significant, $\beta = .44, p < .001$; the relationship between the experimental condition and the behavioral measure became non-significant, $\beta = .08, p = .47$. Neither guilt, $\beta = -.05, p = .66$, nor pity, $\beta = .04, p = .80$ or sympathy, $\beta = -.25, p = .08$ predicted the allocation behavior.

Shrout and Bolger (2002) suggested that mediation can also be demonstrated by showing that the indirect effect (product of the regression coefficients $a$ and $b$) is significantly different from zero. They recommend a bootstrap technique that has recently been successfully applied in various contexts (see also Preacher & Hayes, 2004). The bootstrapping interval is superior to the Sobel test (Baron & Kenny, 1986) for the indirect effects ($a*b$) because the Sobel test assumes $a*b$ is normally distributed. However, especially in small samples as in the present study, a more narrow and asymmetrical distribution is found. The bootstrap interval converges to the actual distribution of the indirect effect. To test for mediation, a confidence interval is computed around the product term ($a*b$). If zero is not included in the interval, the indirect effect is significant and thus, a mediation effect can be assumed. On their webpage, Preacher and Hayes provide a SPSS syntax to conduct the analysis of indirect effects with this bootstrapping method. I followed the multiple mediator procedure step by step. Here, zero fell outside the bias corrected and accelerated 95% confidence interval around the total indirect effect (1.14 to 4.71). Moreover, the examination of the specific indirect effects indicated only pride as a mediator, as its 95% confidence interval does not contain zero. Neither guilt nor sympathy contributed to the indirect effect above and beyond pride. This provides strong evidence for pride as a mediator between experience of legitimate IGF advantage and in-group favoring behavior.

3.1.3 Discussion

The main aim of Study 1 was to investigate group-based emotions of advantaged group members, particularly pride, existential guilt, pity, and sympathy. Psychology students were confronted with written scenarios describing an unequal situation between psychologist and social pedagogues on the job market. In a first step, before analyzing the data to test the main predictions, it was checked whether participants identified with the group of psychology students and acknowledged the experimentally induced relative advantage over social pedagogues. These preconditions were fulfilled and thus, the situation

8 http://www.comm.ohiostate.edu/ahayes/sobel.htm
9 I will use the bootstrap method instead of the Sobel Test in the following studies.
involved a meaningful inter-group situation for participants; social identity and relative advantage were made salient. Identification as a group member is a necessary basis of emotions that focus on the group-level self (E.R. Smith, 1993). According to the pre-test, focus and legitimacy were successfully manipulated although the conditions of illegitimate inequality led participants to focus slightly more on the out-group, participants tended to focus on both groups irrespective of legitimacy.

It was expected that a combination of the appraisals focus and legitimacy would influence advantaged group members’ emotional experience. Generally, the results of Study 1 were largely consistent with the expectations. More precisely, feelings of group-based pride were most intense when participants focused on the in-groups advantage and perceived this advantage as legitimate, whereas feelings of existential guilt were most intense for participants focusing on the in-group’s illegitimate advantage. The results also affirmed the assumption about group-based pity as being more typical for those who focus on others disadvantage and perceiving inequality as legitimate. Vice versa, group-based sympathy was most intense when the advantaged focused on others disadvantage and perceived inequality as illegitimate. These results were in line with the hypotheses. That said, there were some unexpected findings concerning the emotions as well.

Firstly, when investigating the hypothesis about existential guilt, the combination of the orthogonal contrast was significant, indicating that the expected pattern did not fully account for the variance. It seems as if also participants in the OGF illegitimate condition were quite prone to experience existential guilt. Since existential guilt is expected to be an in-group focus emotion (Iyer et al., 2003), this has to be kept in mind for future studies because the pre-test of the material revealed the focus manipulation as successful. Hence, either the focus manipulation did not work as good during the actual experiment or guilt is more sensitive towards the illegitimacy of the situation as it is to focus of attention. A further study might give a clearer picture about these issues.

Second, group-based pity and sympathy showed a great overlap and both emotions concepts fall off in one factor. All other emotions could be differentiated as hypothetically expected. On a theoretical level, pity and sympathy have a different meaning (e.g., Leach et al., 2002). Group-based pity is understood as a paternalistic emotion that denotes a feeling of sorrow for another person, at the same time emphasizing the status difference between oneself or one’s group and the suffering other. Group-based sympathy, in fact, is also a response to others misfortune but with the wish to alleviate others suffering. In practice, lay people may have a difficulty in distinguishing between these emotion words. In every day
language, people do generally not deliberate in detail between emotions words. Therefore, I would like to emphasize and argue that lay people may intermix the emotion words, but that there is still a difference between the internal emotion states. Whether these inner emotion states are different from each other may be reflected in the behavior tendencies people show (Frijda et al., 1989). In other words, on a semantic level, the words used to describe the emotions pity and sympathy may be interchangeable. Especially in the German language, they are very similar (pity = Mitleid versus sympathy = Mitgefühl). On the inner level, these emotions may differ in their action potential and motivate different behavior tendencies. In the next study, I examine this possibility in more detail (Study 2).

Moreover, it was tested whether disdain, as an alternative to pity, would be the most characteristic response for those advantaged people who focus on others legitimate disadvantage. This was not the case. Even though one would expect also negative emotions in unequal inter-group relation to occur – think about the stereotypes about and prejudice against minority groups - disdain seems not to be typical or diagnostic for this particular context. Probably, additional circumstances may play a role. I will come back to this point in Study 4.

Finally, this study was also set up to shed light on the relation between group-based emotions and behavioral tendencies of members of relative advantaged groups. First of all and in line with the prediction, participants showed in-group favoritism as a general rule when allocating the resources. This replicates the typical finding that group members favor the in-group when allocating positive resources (e.g., Otten, Mummendey, & Blanz, 1996). Besides, especially those who perceived their advantage as legitimate favored the in-group more than participants in the other conditions, which is also in line with findings reported in the literature (Bettencourt et al., 2001). Further tests investigated the emotion behavior link in more detail. It was found that the more participants expressed pride, the stronger was their in-group favoritism. Feelings of guilt did not predict how participants acted in the resource distribution task. Likewise, pity was also not related to the behavior tendency. In contrast, feelings of sympathy seemed to motivate less in-group favoritism but this effect failed to reach significance. Yet, only pride was found to mediate the link between the perception of legitimate relative advantage and in-group favoring tendencies. Considering that in-group favoritism is a self-focus behavior, it is less surprising that pride, but not the other emotions, was the underlying mechanism. Probably, sympathy is more strongly associated with behavioral tendencies having the characteristic of help giving instead of less in-group favoring behavior. It is known from different areas of social psychology that
giving versus taking has different underlying reasons (e.g., Eibach & Keegan, 2006). To better account for the emotion behavior link, more differentiated behavior tendency measures are needed. A further potential limitation of this type of behavior tendency measure is that it is very close to the manipulation. Participants have been told that their group earns more money than the disadvantaged other group, thus allocating more resources to one’s own group could just mirror what they read in the newspaper article before. Hence, one has to reconsider whether interpreting this behavior solely in terms of in-group bias is appropriate. This issue is addressed in the following studies in which different types of behavior tendency items were applied.

Taken together, this study offered a first experimental comparison of the conditions that led to one emotion to those that led to other emotions about inter-group inequality as theorized by Leach and colleagues (Leach et al., 2002). According to the predictions, focus and legitimacy suggested the conditions under which group-based pride, existential guilt, pity, or sympathy occurred. Furthermore, the relationship between the emotions pride and sympathy and inter-group behavior was demonstrated. Sympathy towards the disadvantaged out-group motivated the advantaged to act less in-group favoring. Pride was found to carry the effect of legitimate in-group advantage on in-group favoring behavior.
3.2 Study 2a

In the previous study, focus and legitimacy were found to trigger distinct emotional reactions of relative advantaged group members. More precisely, the group-based emotions pride, existential guilt, pity, and sympathy could be differentiated and occurred as distinct responses to inter-group inequality. There was, however, the problem that pity and sympathy were highly correlated. Consequently, the purpose of the current study was to examine the out-group focus conditions in more detail and to learn more about group-based pity and sympathy. According to the hypotheses, group-based pity should be most intense when out-group-focus is salient and the unequal status relation is perceived to be legitimate, while sympathy should be most intense when out-group-focus is salient and the unequal status relation is perceived to be illegitimate. In addition, this study aimed at testing whether pity and sympathy would predict different behavior tendencies. For this purpose, the study was twofold: in a first step, different kinds of behavior tendency items and their relation to these emotions were pilot-tested. In the second step, these pilot-tested items were used to investigate the emotion-behavior link in an experimental setting. Moreover, this experimental study differed from Study 1 in another aspect: a different target group and context was applied. Students of the Friedrich-Schiller-University of Jena (FSU) were told that they were relatively advantaged compared with young ethnic German immigrants living in Jena in regard to sport opportunities.10

3.2.1 Method

Sample and Procedure

Thirty-two students of the FSU participated in this pilot study (62.5% female, age: $M = 23$ yrs., range: 18-30 yrs). They were approached around campus; if they agreed to participate in the study they were given the questionnaire and worked on it individually. Adopted from a research method, which Scherer described as “imagined responses to criteria-based scenario simulations” (Scherer, 1988, p. 106), a procedure was developed that allowed to find behavior items (see Table 3) corresponding to specific emotions. Participants were informed that the structure of most inter-group relations is hierarchical and that some groups benefit from inequality while others suffer. Then, it was said that

---

10. Resettlers from Eastern Countries, which are Germans in the sense of the Basic Constitutional Law, based on their German ancestry and the maintenance of German cultural heritage.
different emotions are associated with inter-group inequality. Afterwards the idea of relative advantage was introduced and the theoretical difference between group-based pity and sympathy was explained. Also guilt, which was not related to the behavior tendency measure in Study 1, was introduced in order to find adequate behavior tendency measures for future studies.

Table 3. Overview of the behavior tendency statements in Study 2.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Targeting the disadvantaged group and jointly working on an improvement of the situation.</td>
<td>1</td>
</tr>
<tr>
<td>Giving advice to the disadvantaged group in terms of what to do in order to improve its situation.</td>
<td>2</td>
</tr>
<tr>
<td>Engaging in public relations (e.g. writing letters to the editors) in order to call others’ attention to the situation of the disadvantaged group.</td>
<td>3</td>
</tr>
<tr>
<td>Willingness to further long-lasting investment in order to make sure one’s own privileged group continues being well-off.</td>
<td>4</td>
</tr>
<tr>
<td>Engaging in political demands in order to improve the social status of the disadvantaged group.</td>
<td>5</td>
</tr>
<tr>
<td>Willingness of the privileged group to forgo on some benefits in order to improve the situation of the disadvantaged.</td>
<td>6</td>
</tr>
<tr>
<td>Putting the disadvantaged in a position to voice their ideas for improvement.</td>
<td>7</td>
</tr>
<tr>
<td>Participating in a demonstration to point out the disadvantaged situation of another group.</td>
<td>8</td>
</tr>
<tr>
<td>Donating money to the disadvantaged group.</td>
<td>9</td>
</tr>
<tr>
<td>Willingness to resign from one’s own advantage in order make sure the disadvantaged group is granted equal rights.</td>
<td>10</td>
</tr>
<tr>
<td>Signing a petition supporting equal rights of the disadvantaged group.</td>
<td>11</td>
</tr>
<tr>
<td>Not leaving things with one single action, but engaging in action over and over until the disadvantaged group has equal rights.</td>
<td>12</td>
</tr>
<tr>
<td>Demanding that members of the advantaged group who take unfair advantage should be punished in some form.</td>
<td>13</td>
</tr>
<tr>
<td>Starting a campaign collecting signatures supporting the claim of equal rights.</td>
<td>14</td>
</tr>
<tr>
<td>Calling on politicians to publicly acknowledge the situation of certain disadvantaged groups.</td>
<td>15</td>
</tr>
</tbody>
</table>

Participants were then asked to imagine a similar inter-group situation and to think about the group-based emotions guilt, pity, and sympathy. Thereafter, they were asked to imagine which behavior they would show when experiencing this kind of situation and associated emotions. Subsequent to this simulation, participants were asked to decide which of the 15 statements described a behavior tendency that would be the most typical tendency of each of the 3 emotions. In other words, participants had to name 3 behavior items, one for
each emotion. The behavior tendency statements they could choose from were partly taken from the literature (e.g., Iyer et al., 2003; Schmitt & Maes, 2001). Next, participants were asked to do an assignment task. In particular, they had to assign the emotion to each of the 15 behavior tendency items that they considered as fitting best.

### 3.2.2 Results

For the analyses of both tasks descriptive statistics were applied. To investigate which behavior tendency statement is evaluated the most typical for each emotion, the nomination frequency of each statement was checked. For some of the behavior tendency statements the emotion–behavior link seems to be quite clear, because a high percentage of participants did similar assignments. For other statements, this was not the case. The results are summarized in Table 4.

**Table 4.** Step 1 - the most typical behavior tendency statements for each of the 3 emotions.

<table>
<thead>
<tr>
<th>Group-based pity</th>
<th>Most typical behavior tendency statement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Item 9 (25%), 2 (19%), 11 (12.5%)</td>
</tr>
<tr>
<td>Group-based sympathy</td>
<td>Item 12 (22%), 7 (16%), 8 (12.5%), 6 + 14 (9.4%)</td>
</tr>
<tr>
<td>Group-based guilt</td>
<td>Item 9 (47%), 6 (25%), 10 + 13 (9.4%)</td>
</tr>
</tbody>
</table>

*Note. Only those statements that have been picked by at least 3 participants are listed.*

For pity, the most typical behavior tendencies were donating money, give advice to disadvantaged others how to improve, and to sign a petition. The behavior tendencies following sympathy differed from those following pity; rated as most typical was: not leaving things with a single action, putting the disadvantaged in a position to voice their ideas, and to participate in a demonstration. Interestingly, the behavior most characteristic for guilt was the same as for pity, namely to donate money. The other items rated as typical were willingness of the privileged to forgo some benefits in order to improve the situation of the disadvantaged, to resign from one’s own advantage in order make sure the disadvantaged group is granted equal rights, and demanding that members of the advantaged group who take unfair advantage should be punished. Overlapping did only occur for behavior following pity and guilt.

The data of the second task was analyzed by means of descriptive statistics as well. The three group-based emotions were enumerated according to the frequency of their assignment to each behavior statement. Then, the emotion-behavior assignments were ranked. The results are displayed in Table 5. Almost sixty percent of participants assigned
item 2 (giving advice to the disadvantaged) to pity. More than eighty percent of all participants evaluated item 12 (Not leaving things with one single action, but engaging in action over and over until the disadvantaged group has equal rights) as belonging to sympathy, and sixty-nine percent of participants agreed that item 13 (demanding that members of the advantaged group who take unfair advantage should be punished in some form) fits to guilt.

Table 5. Step 2 - assignment of group-based emotions to the behavior tendency statements.

<table>
<thead>
<tr>
<th>Group-based pity fits item…</th>
<th>… 2 (59.4 %), 14 (44%), 9 + 11 (37.5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-based sympathy fits item…</td>
<td>… 12 (81 %), 7 (75 %), 1 (72 %), 5 + 8 (62.5 %), 3 (60 %)</td>
</tr>
<tr>
<td>Group-based guilt fits item…</td>
<td>… 13 (69 %), 9 + 6 (62.5 %), 4 (56 %), 10 (44 %)</td>
</tr>
</tbody>
</table>

Summarizing the results, when the difference between group-based pity and sympathy was salient and participants were directly asked to name typical behavior tendencies for each emotion, there was hardly any overlap of behavior statements. As theoretically expected, the items, which participants regard as most indicative of pity, have a paternalistic touch and imply a status difference, with the disadvantaged being inferior and in need of money or advice. On the contrary, the items, which participants thought of as typical for sympathy have in common that they aim at helping the disadvantaged to get them out of the disadvantaged situation. In doing so, the items emphasize the readiness to put time and effort into this aim and signalize the wish for contact.

Data for the guilt-behavior link was collected as well. Particularly for one item there was an overlap between guilt and pity: for both emotions, participants evaluated item 9 (donate money to the disadvantaged) as most typical. This kind of financial compensation has been reported often for guilt (Doosje et al., 1998), but not for pity. A closer look at the guilt behavior items reveals that the action potential of the statements mainly relays to the advantaged group. To illustrate this, they include statements like punish those who misuse their advantage or defend a groups’ good standing. In other words, the behavioral tendencies are more self-focused. Neither group-based pity nor group-based sympathy has been assigned to any of these items. Taken together, the results of this exploratory study exemplify different forms of (positive) inter-group behavior and demonstrate that specific emotions are associated with specific behavior tendencies. As discussed in Study 1, it is especially important to note that participants did not link pity and sympathy with the same behavior tendency items. Whether this holds in an experimental setting when participants
are not made aware of the theoretical difference between both emotions was the question in Study 2b.

### 3.3 Study 2b

#### 3.3.1 Method

**Design, Sample, and Procedure**

This study was made up as a simple one-factorial study. All participants were in the out-group focus condition, only legitimacy (legitimate vs. illegitimate) was manipulated. The sample consisted of 55 students of the University of Jena (69% female, age: $M = 23$ yrs., range: 19-29 yrs). As outlined above, the cover story differed from the story used in Study 1. This time, students of the University of Jena were told that they were relatively advantaged compared with young ethnic German immigrants living in Jena in regard to sport opportunities. Half of the participants (55%) took part in at least one of the university sport courses before.

A cover story was developed describing the situation between students living in Jena and young ethnic German immigrants living in Jena. Participants read about a project supported by federal ministry called “integration via sports” that aimed at integrating immigrants in the society with the help of public sport clubs. Participants were informed that this project really exists, but had never been realized in the university context. The experiment was disguised as an opinion survey about whether the universities’ sport courses would be a suitable context for the “integration via sports” program. Participants were recruited during the semester and a maximum of 12 participants took part in one experimental session. After participants answered the questionnaires they were debriefed and thanked for their participation with sweets.

**Material**

**Experimental manipulation**

In the beginning, participants got a standardized instruction and were informed about the situation of young ethnic German immigrants in Jena compared with students of Jena regarding opportunities for leisure activities. They were reminded that students have a wide variety of sports for very little money (actually 11 euros per semester) with all facilities in the immediate vicinity. Thus, the students’ relative advantaged position regarding sport
opportunities was emphasized. After this, participants were asked to read an information text, which appeared as official information provided by a federal authority (“Bundeszentrale für Politische Bildung”) about the living conditions of young ethnic German immigrants in East Germany. Some of the sentences were in fact taken from the webpage of the “Bundeszentrale für Politische Bildung”. As in Study 1, the out-group focus was empathized by presenting all sentences in terms of *out-group disadvantage*. Legitimacy of the status relation regarding sport opportunities was manipulated by means of information about the different situations. In the legitimate condition, ethnic German immigrants were described as having problems with the German language, not really willing to engage in public sports clubs, and not taking care of the facilities in their vicinity. Therefore their disadvantage regarding sport opportunities was reasonable. In the illegitimate condition, ethnic German immigrants were described as poor, not being in a position to pay the monthly contribution for sports clubs, and living in districts where hardly any space for sports is available. Thus, their disadvantage regarding sport opportunities was framed as unfair. In short, there were two kinds of manipulation texts, a legitimate version and an illegitimate version. This time, a forced choice paradigm was used; participants had to decide which of two emotions they experienced the most (pity or sympathy) before they filled in the emotion scale and the rest of the questionnaire.

**Legitimacy manipulation check**

The legitimacy manipulation was checked subsequent to the manipulation text. One item asked participants whether they perceived the situation of the ethnic German immigrants as fair or unfair on a 7-point scale (with 1 = *fair* and 7 = *unfair*).

**Forced choice emotions**

After reading the information text, participants had to respond to a forced choice item. They were asked to indicate which of the two emotions (pity or sympathy) would reflect their momentary emotional state best. By means of this task it was expected to find the hypothesized pattern: more pity when out-group disadvantage is perceived as legitimate compared to illegitimate and vice versa for sympathy.

**Emotional reactions**

In addition, emotional reactions were also measured on 9-point scales. Participants had to respond to a list of emotion items and to indicate the extent of their momentary emotional state (“When thinking about the described situation I feel…” from 1 = *not at all*
to \(9 = \text{very intense}\). The same two items as in Study 1 assessed group-based sympathy; an additional item was included in order to use the same items as Iyer and colleagues (Iyer et al., 2003) to measure group-based sympathy (sympathy, compassionate, empathetic). Likewise, the same items as before were used to assess group-based pity (pity, to feel sorry).

**Behavior tendencies**

Study 2a identified behavior tendencies regarded as typical responses to the emotions pity and sympathy. The seven items that differentiated best between group-based pity and sympathy were chosen and used in this study (item 1, 2, 7, 8, 9, 12). These items were rephrased according to the context of the cover story. In addition, one item assessed whether participants would be willing to let the ethnic German immigrants participate in the university sport course (1 = not at all and 7 = yes, absolutely) and a second, reversed item measured the agreement with the statement that externals should not have the same privileges as students (1 = disagree and 7 = agree).

**Identification with the group of students**

Participants’ identification with the ingroup (students) was assessed with 4 items (e.g., “I identify with other psychology students”, \(\alpha = .83\), originally used by Doosje, Ellemers, and Spears (1995) using a 7-point Likert scale, ranging from 1 = not at all to 7 = yes, absolutely.

### 3.3.2 Results

**Manipulation Check**

The manipulation of legitimacy was successful, \(F(1, 53) = 7.30, p = .009, \eta^2 = .121\). Participants in the illegitimate condition rated the situation of the ethnic German immigrants as more unfair (\(M = 5.22\)) than participants in the legitimate condition (\(M = 4.18\)).

**Identification with the group of students**

Participants were highly identified with the group of students. In general, identification was significantly above the scale mid-point of 4, \(M = 5.73, t (54) = 10.87, p < .001\). In addition, an ANOVA with legitimacy as between-subjects factor showed that participants in both conditions (\(M_{\text{legitimate}} = 5.67, M_{\text{illegitimate}} = 5.78\)) did not differ in their
extent of identification with the group of students, \( F < 1 \). This is taken as an indicator for successful randomization.\(^{11}\)

**Forced choice of emotional experience**

To recap, after reading the information text, participants had to respond to the question which of the two emotions (pity or sympathy) would reflect their momentary emotional state best. The results are summarized in Table 6. For the following analyses, cross tabs were used to test with a Chi\(^2\)-test whether the percentages of participants marking one emotion differed from the percentage of participants marking the other emotion. Firstly, comparing between conditions, more participants marked pity in the legitimate (45.8\%) compared to the illegitimate condition (25.9\%). According to the Chi\(^2\)-test, this difference was not reliable, \( \chi^2(1, N = 51) = 2.21, p = .138 \). Regarding sympathy, more participants marked sympathy in the illegitimate (70.4\%) compared to the legitimate condition (50.0\%). Also in this case, the Chi\(^2\)-test indicated this difference as not reliable, \( \chi^2(1, N = 51) = 2.22, p = .137 \). Thus, against expectations, not significantly more participants in the legitimate condition did indicate to feel pity compared to the illegitimate condition. Likewise, not significantly more participants in the illegitimate condition did indicate to feel sympathy compared to the legitimate condition.

Second, the answers within one condition were compared. In the legitimate condition, the amount of participants experiencing pity (45.8\%) corresponds approximately to the amount of participants experiencing sympathy (50.0\%), \( \chi^2(1, N = 23) = .04, p = .084 \). In the illegitimate condition, two third of all participants marked sympathy (70.4\%), while only less than one third of the participants marked pity as most intense emotion (25.9\%). The Chi\(^2\)-test revealed this difference as reliable, \( \chi^2(1, N = 24) = 6.0, p = .014 \), which is in line with the expectation. Summarizing these results, in the illegitimate condition more participants named sympathy as the emotion describing their momentary emotional state best as compared to those who named pity. In the legitimate condition, however, the results did not affirm the expectations. The amount of participants indicating pity was similar to the amount of participants indicating sympathy. Between and within condition, group-based sympathy seems to prevail over pity.

\(^{11}\) No other effects of identification on the emotions or behavior tendencies when included as a moderator variable.
Table 6. Percentage of participants who ticked either pity or sympathy.

<table>
<thead>
<tr>
<th>OG Focus</th>
<th>Legitimate Condition</th>
<th>Illegitimate Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forced Choice Items</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pity</td>
<td>45.8%</td>
<td>25.9%</td>
</tr>
<tr>
<td>Sympathy</td>
<td>50.0%</td>
<td>70.4%</td>
</tr>
</tbody>
</table>

Investigation of the emotion structure

The five emotion items were entered into a principal-axis Factor Analysis with Oblimin rotation and resulted only in one factor, accounting for 41.69% of variance. Hence, as in Study 1, the items measuring pity and sympathy fall in one factor. Even so, the items were put together to compose two emotion scales for theoretical reasons: group-based pity (pity, feel sorry for; $\alpha = .70$) and group-based sympathy (sympathy, compassionate, empathetic; $\alpha = .65$). Group-based pity and sympathy were highly correlated, $r = .547$, $p < .001$.

Testing the main emotion hypotheses

Two one-factorial ANCOVAs with legitimacy as between-subjects factor and group-based sympathy and group-based pity as dependent variables were conducted. In addition, whether participants already attended one of the university sport courses before was included as a covariate. This was to test whether for those who already attended, the topic would be more relevant and therefore, more emotion triggering. In line with the hypothesis, feelings of sympathy were more intense in the illegitimate condition ($M = 5.69$) compared to the legitimate condition ($M = 4.73$), $F(1, 53) = 6.23$, $p = .016$, $\eta^2 = .107$. Participation in university sport did not contribute to this effect, $F < 1$. Against the hypothesis, feelings of pity were also higher in the illegitimate ($M = 6.17$) compared to the legitimate condition, ($M = 4.93$), $F(1, 53) = 9.48$, $p = .003$, $\eta^2 = .152$. Again, participation in university sport had no effect, $F < 1$.

Relation between emotions and behavior tendencies

To investigate whether and how group-based pity and sympathy would predict the behavior intentions, multiple regression analyses were conducted. Each behavior tendency item was regressed on group-based pity and sympathy simultaneously. For reasons of
readability and ease of interpretation, the results of all regression analyses are displayed in Table 7. Note that these are the same items as in Study 2a; abbreviations were used for each item, concentrating on its main message. Interestingly, group-based sympathy did predict every behavior tendency item, except for item 2. This was suggested by Study 2a where item 2 was interpreted to be an indicator for paternalistic behavior. Pity, however, was not related to this specific item and, in addition, was only related to donating money.

Table 7. Results of the regression analyses with sympathy and pity as predictors and the behavior items as criterion.

<table>
<thead>
<tr>
<th>Item</th>
<th>β for sympathy</th>
<th>β for pity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1: jointly working on improvement</td>
<td>.503**</td>
<td>.150 ns</td>
</tr>
<tr>
<td>Item 2: giving advice to the ethnic German immigrants</td>
<td>.156 ns</td>
<td>-.038 ns</td>
</tr>
<tr>
<td>Item 7: encourage ethnic German immigrants to voice their ideas</td>
<td>.482**</td>
<td>.054 ns</td>
</tr>
<tr>
<td>Item 8: participating in a demonstration</td>
<td>.301*</td>
<td>-.029 ns</td>
</tr>
<tr>
<td>Item 9: donating money</td>
<td>.523**</td>
<td>.420**</td>
</tr>
<tr>
<td>Item 12: not leaving things with one single action</td>
<td>.475**</td>
<td>-.044 ns</td>
</tr>
<tr>
<td>New: participation of ethnic G. immigrants in uni sport courses</td>
<td>.365*</td>
<td>.120 ns</td>
</tr>
<tr>
<td>New: non-students should not enjoy same privileges</td>
<td>-.335*</td>
<td>-.151 ns</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01

Relation between perceived legitimacy and behavior tendencies

Whether participants in the two experimental conditions would differ regarding the behavior tendencies was tested with regression analyses. Each behavior tendency item was regressed on the contrast coded experimental condition variable (with 0 = legitimate and 1 = illegitimate). None of the behavior tendencies was predicted by the experimental condition.

Because perceived legitimacy of others’ disadvantage was expected to cause behavior motivation, the legitimacy manipulation check item was used as a predictor and the behavior tendency items served as criteria. In this case, perceived legitimacy was highly predictive for most of the behavior tendency items. The more others’ disadvantage was perceived as illegitimate the higher was the students’ willingness to support the out-group (see Table 8).
Table 8. Regression weights for each regression analysis with perceived legitimacy as predictor and the behavior tendency items as criterion.

<table>
<thead>
<tr>
<th></th>
<th>β for legitimacy MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>New: participation of ethnic German immigrants in university sport courses</td>
<td>.310*</td>
</tr>
<tr>
<td>Item 7: encourage them to voice their ideas</td>
<td>.331*</td>
</tr>
<tr>
<td>Item 8: participating in a demonstration</td>
<td>.257*</td>
</tr>
<tr>
<td>Item 9: donating money</td>
<td>.425**</td>
</tr>
<tr>
<td>Item 12: not leaving things with one single action</td>
<td>.481**</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01

Mediation analyses

To investigate a possible mediation of the emotions group-based pity and sympathy, mediation analyses with the bootstrap method as outlined in Study 1 were conducted. For each analysis, I applied a multiple mediator model (Preacher & Hayes, unpublished) with both group-based pity and sympathy as simultaneous mediators, perceived legitimacy as predictor and the behavior tendencies as criterion (cf. Figure 1 in Study 1). Only those models were tested that met the requirements for a mediation analysis, that is, a direct effect of perceived legitimacy on the behavior item was found in the previous simple regression analyses. In addition, perceived legitimacy was associated with pity, $\beta = .53$, and sympathy, $\beta = .56$. In four of the five mediator models (with the dependent variables: participation, item 7, item 8, item 9, item 12) a significant indirect effect was found. The results of these analyses are summarized in Table 9.12

Firstly, in regard to the question whether young ethnic German immigrants should be allowed to participate in the university sport courses, group-based sympathy predicted this behavior tendency, $\beta = .29$. While sympathy showed a positive relation, pity was negatively related to this item, $\beta = -.21$, indicating that higher levels of pity were related to less willingness to let ethnic German immigrants participate in university sport. Both indirect effects were identified as significant, as the 95% confidence intervals for sympathy (.022 to .440) and pity (-.388 to -.041) did not contain zero. Thus, sympathy was positively and pity negatively related to agreement with participation of ethnic German immigrants. The mediation of sympathy and pity was only partial, because the direct effect of perceived legitimacy dropped, but remained significant, $\beta = .30$.

12 It was controlled whether students participated in university sport before; this had no effect.
Table 9. Regression weights for the multiple mediator analyses with sympathy (S) and pity (P) as mediators and five different behavioral tendencies as criterion.

<table>
<thead>
<tr>
<th>Path B</th>
<th>Criterion</th>
<th>Path A</th>
<th>Path C</th>
<th>Bootstrap interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>S: β = .56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P: β = .53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate</td>
<td>β = .31, p = .01 / β = .30, p = .03</td>
<td>S: β = .29, p = .05</td>
<td>.02 to .44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .33, p = .004/ β = .20, p = .13</td>
<td>P: β = -.33, p = .02</td>
<td>-.38 to -.04</td>
<td></td>
</tr>
<tr>
<td>Item 7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .26, p = .027/ β = .16, p = .26</td>
<td>S: β = .23, p = .14</td>
<td>- - -</td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .33, p = .04</td>
<td>S: β = .33, p = .02</td>
<td>.04 to .34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P: β = -.11, p = .43</td>
<td>P: β = -.11, p = .43</td>
<td>-.22 to .08</td>
<td></td>
</tr>
<tr>
<td>Item 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .43, p &lt; .001/ β = .24, p = .08</td>
<td>S: β = .25, p = .08</td>
<td>.01 to .55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .33, p = .04</td>
<td>S: β = .33, p = .02</td>
<td>.04 to .40</td>
<td></td>
</tr>
<tr>
<td>Item 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .48, p &lt; .001/ β = .44, p = .001</td>
<td>S: β = .31, p = .03</td>
<td>.04 to .40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>β = .43, p &lt; .001/ β = .24, p = .08</td>
<td>S: β = .25, p = .08</td>
<td>.01 to .55</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P: β = -.18, p = .19</td>
<td>P: β = -.18, p = .19</td>
<td>-.21 to .02</td>
<td></td>
</tr>
</tbody>
</table>

Note. See Figure 1 for illustration of paths A, B, C.

Secondly, a similar mediation effect was found for item 7, representing the tendency to put the disadvantaged ethnic German immigrants in a position to voice their ideas for improvement. In this model, the direct effect of perceived legitimacy dropped to non-significance when the multiple mediators were added, β = .21. Group-based sympathy, however, was identified as significant mediator, β = .33, as its 95% confidence interval did not contain zero (.042 to .34). The effect of pity was not significant, β = -.11 (-.224 to .083), but was descriptively in the same direction as in the previous analysis.

Thirdly, a mediation effect of sympathy was found for item 12, stating that students do not want to leave things with one single action. In this mediation model, pity did not predict this behavior tendency, β = -.19. The direct effect of perceived legitimacy dropped, but remained significant, β = .49. Group-based sympathy was again identified as a potent predictor, β = .31, and partially mediating the link between perceived legitimacy and this behavior tendency. The 95% confidence interval confirmed the significance of this effect (.042 to .405).

Finally, the multiple mediator model was applied to check whether pity would mediate the relation between perceived legitimacy and willingness to donate money. Remember, this was the only behavior tendency, which was directly related to pity in both, Study 2a and 2b. In this model, pity did not predict donating money, β = .10. The
relationship between sympathy and the behavioral measure was marginally significant, $\beta = .25$, and the relationship between perceived legitimacy and the behavioral measure dropped, but remained also marginally significant, $\beta = .24$. The 95% confidence interval revealed the indirect effect of sympathy as reliable (.009 to .555).

### 3.3.3 Discussion of Study 2a and Study 2b

Study 2a and 2b were conducted to be responsive to the problem that emerged in Study 1. In Study 1, group-based pity and sympathy were highly correlated. On a theoretical level, group-based pity and sympathy are two distinct emotions motivating different behavior tendencies (e.g., Leach et al., 2002). However, when participants responded to the semantic emotion scale, they seemed not to distinguish between pity and sympathy items. Therefore, in Study 2a, participants got a short description of the emotions and were then asked to decide which behavior tendency belongs to which emotion. On this conscious level, participants associated different behavior tendencies with group-based pity than with group-based sympathy. In line with theoretical considerations, sympathy was linked to helping behavior items, which included the idea of sparing no effort to support disadvantaged others. These items also incorporated willingness for contact and cooperation with the disadvantaged. Concerning pity, participants were more ambivalent about associated behavior tendencies; in terms of numbers, fewer items were allocated to pity and the general agreement on pity characteristic behavior between participants was lower than for sympathy. In general, pity was linked to items such as donating money and giving advice to the disadvantaged, thus, the status difference between advantaged and disadvantaged groups was integrated. Summarizing these findings, Study 2a was successful in identifying specific behavior tendencies that correspond to the specific group-based emotions.

A major concern about this type of research approach is that the method is somewhat artificial and the results represent cultural knowledge or emotion stereotypes and do not display real emotional experience (e.g., Fehr & Russell, 1984). For the purpose of this research, however, the results do support the theoretical assumption and affirm that at least the cultural knowledge about these emotions and their associated behavior tendencies is shared. To dispel the concerns about this method, in a second step, the emotions were induced experimentally by means of manipulation texts. Focusing only on out-group disadvantage, two conditions were compared: legitimate versus illegitimate disadvantage.

In the experimental Study 2b, the pre-conditions for the issue in question were fulfilled: The students acknowledged their advantage compared to same age ethnic German
immigrants regarding choice of leisure activities, particularly sport opportunities. Furthermore, students highly identified with their in-group and thus, the potential for group-based emotions existed.

In accordance with the prediction, group-based sympathy was more intense when the students perceived the ethnic German immigrants’ disadvantage as illegitimate. Contrary to the prediction, feelings of pity were stronger when the ethnic German immigrants’ disadvantage was described as illegitimate compared to legitimate. Summarizing this, both out-group focus emotions were more intense in the illegitimate situation. In the legitimate condition, people reported pity and sympathy to an almost equal amount in the forced choice task. Perceiving others disadvantage as illegitimate seems much more straightforward in causing emotions in general and sympathy in particular.

As in Study 1, group-based pity and sympathy were highly correlated. Hence, considering only these results, group-based pity and sympathy appear almost identical. Yet, as suggested by the first part of Study 2, pity and sympathy were expected to motivate different behavior tendencies. Indeed, this effect was replicated in the experimental study. Group-based sympathy caused behavior tendencies that aimed at out-group support and included willingness to share resources, namely the university sport courses with ethnic German immigrants. Group-based pity did only predict one of the behavior tendencies that were proposed by Study 2a (i.e., donating money to the disadvantaged ethnic German immigrants).

Unexpectedly, the experimental manipulation of legitimacy of out-group disadvantage did not predict any of the behavior tendencies. Therefore, the measured legitimacy variable, that is the manipulation check item, was used as a predictor for the mediation analyses. Measured perceived legitimacy was indeed predictive for behavior tendencies. The more the situation of the disadvantaged ethnic German immigrants was perceived as illegitimate, the more likely were the advantaged students to share their resources and support the ethnic German immigrants. Moreover, mediation analyses revealed that group-based sympathy is one of the underlying mechanisms. Interestingly, group-based pity was on a descriptive level even negatively related to these behavior tendencies. Particularly the relation between legitimacy and endorsement of participation of ethnic German immigrants was mediated by sympathy and pity, but these emotions had opposing effects. In other words, while apparently both include a feeling of sorrow for other persons, feelings of sympathy triggered out-group support, but feelings of pity motivated the advantaged to vote against sharing resources with the disadvantaged. Yet, it is to note that
these effects are not interpretable in a strict causal sense, because the measured rather than manipulated legitimacy perception acted as predictor.

To sum up, the hypothesis regarding group-based sympathy was confirmed. Focusing on the disadvantaged out-group and perceiving their situation as illegitimate did elicit feelings of sympathy in the advantaged. This was true when participants were forced to choose an emotion and also when they were asked to report the intensity of their emotional state on an emotion item scale. This is in line with emotion research on the individual level, revealing feelings of sympathy as strongly correlated with the perception of a negative incident as undeserved (Rudolph et al., 2004). Moreover, corresponding to Leach and colleagues’ (2002) theorizing, group-based sympathy motivated the advantaged to aid the disadvantaged others. For group-based pity, the hypothesis was not corroborated. Overall, the combination of the appraisals out-group focus and legitimate disadvantage seems ambiguous in terms of subsequent emotions. Group-based pity did motivate donating money but no willingness for contact or cooperation. The nature of pity remains unclear. Probably, further appraisals are necessary to specify the emotions in case of others legitimate disadvantage. As a last comment on pity and sympathy for now, especially the different and to some extent even reversed relations to the behavior tendencies suggest treating both emotions as distinct emotions, despite their great overlap on the semantic level.
3.4 Study 3

This study extended both previous studies on several aspects. As Study 2 has shown, the differentiation between group-based pity and sympathy on the semantic level is difficult for participants. Especially the idea of group-based pity seems to be intangible. While the results for sympathy were in line with expectations, the results for pity were quite inconsistent and more problematic. Thus, testing whether the hypotheses for the other emotions, group-based pride, existential guilt and group-based sympathy would hold in a different setting and with a different target group compared to Study 1, the present study concentrated only on these three emotions and left out the condition in which pity was expected to occur. From Study 2 the cover story was taken, because it was assumed to display a relevant context for the student community. Moreover, a different kind of manipulation was used. Instead of manipulating focus through the wording of the manipulation text, the manipulation of focus was realized via direct instruction and intensified with the sentence completion task as used by Neumann (2000).

3.4.1 Method

Sample, Design, and Procedure

A sample of 84 Jena University students participated in this study (gender: 76% female, age: $M = 21$, range: 18–36 yrs.). Participants were randomly assigned to the three experimental conditions (IGF legitimate, IGF illegitimate, OGF illegitimate) resulting in almost equal cell sizes and a minimum $n \geq 27$ in each condition. As in Study 2b, the cover story described the situation between students living in Jena and young ethnic German immigrants living in Jena. The experiment was disguised as the second wave of an opinion survey about whether the university’s sport courses would be a suitable context for the “integration via sports” program. One item checked whether participants answered a questionnaire related to this topic before. Two participants agreed to this question and therefore, they were removed from the data analyses.

As mentioned above, the manipulation of focus was realized via direct instruction. Participants in the IGF and OGF conditions got the same text, but were instructed to focus either on the situation of the in-group (students) or on the situation of the out-group (ethnic German immigrants). To ensure that participants followed the focus-instruction they had to complete a sentence by summing up the situation of the group they should focus on. This technique was adapted from Neumann (2000) who used it to prime self- versus other-related
attributions. The sentence in the IGF condition started with “The students of the University of Jena …” and the sentence in the OGF condition started with “The young ethnic German immigrants in Jena …“. Both, the manipulation text and the sentence completion task were arranged on the first page of the questionnaire so that participants could read the text twice if needed to complete the sentence.

Legitimacy of the status relation regarding sport opportunities was manipulated as before. In the legitimate condition, ethnic German immigrants were described as having problems with the German language, not really willing to engage in public sports clubs, and not taking care of the facilities in their vicinity. The students were described as very engaged and committed to the sport courses, and to taking care of the sport facilities. In the illegitimate condition, ethnic German immigrants were described as poor, not being in a position to pay the monthly contribution for sports clubs, and living in districts where hardly any space for sports is available. Students were described as coming from families that are relatively well off. To summarize, two versions of manipulation texts were used: a legitimate and an illegitimate version. Participants were then instructed to either focus on the in-group (IGF legitimate and IGF illegitimate condition) or on the out-group (OGF illegitimate condition). After participants read the text, they were asked to answer the subsequent items. Participants were debriefed thoroughly at the end of the study and were thanked with sweets and a ticket for a lottery that could win them up to 15 Euros.

Even though this cover story and parts of the material were used in Study 2b already, a pre-test was conducted to ensure that the material would also work for the in-group focus conditions (N = 76, gender: 55% female, age: M = 21.50, range: 18-28 yrs.). It was checked whether this text would be useful in manipulating legitimacy of status relation. Participants were randomly assigned to the legitimate or illegitimate condition. Two items were used asking participants whether they think that the situation of the (1) students and (2) ethnic German immigrants regarding leisure activities, particularly sport opportunities is fair or unfair on a 7-point scale (1 = unfair and 7 = fair). Both were combined into an index of perceived legitimacy. Participants in the legitimate condition perceived the situation as more fair (M = 4.40) than did those in the illegitimacy condition (M = 3.77), F(1, 75) = 7.44, p = .008, η² =.09. This result suggested the material to be useful to manipulate legitimacy of status relation between students and ethnic German immigrants living in Jena.
Measures

Recognition of relative advantage and identification

A single item stated “in regard to leisure activities, we students are relatively advantaged compared to young ethnic German immigrants” (7-point scale with 1 = not at all and 7 = absolutely). Identification with students of the Jena University was assessed with the same four items as in Studies 2 (“I’m glad to be a student …” on a 7-point scale with 1 = absolutely not, 7 = absolutely; α = .81).

Focus manipulation check

Participants had to indicate at the end of the questionnaire whether they followed the instruction and focused on the situation of either the in-group or the out-group (1 = out-group, 2 = both groups, 3 = in-group).

Emotional reactions

Participants’ emotional reactions were measured on 9-point scales. After reading the information text, participants directly had to answer a list of emotion items and to indicate the extent of their momentary emotional state (“When thinking about the described situation I feel…” from 1 = not at all to 9 = very intense). As in Study 1, group-based pride was measured with three items (proud, successful, superior). Three items concerned the emotion existential guilt (guilty, have a bad conscience, ashamed) and two further items assessed sympathy (sympathy, compassion). A principal-axis Factor Analyses with Oblimin rotation was performed. A three-factor solution accounting for 51% of variance was obtained. The first factor represented the emotion “guilt” (guilty, ashamed, have a bad conscious; α = .76), the second “pride” (proud, successful, superior; α = .65) and the third “sympathy” (sympathy, compassion, α = .62). Guilt and pride were negatively correlated, r = -.259, guilt and sympathy were positive correlated, r = .147; sympathy and pride showed no correlation, r = -.078.

Behavior intentions

In line with the cover story, several items were presented, asking participants how they would like to act. As in Study 2b, it was assessed whether participants would be (1) “willing to let the ethnic German immigrants participate in the university sport course” (1 = not at all and 7 = yes, absolutely). In addition, it was asked (2) “how much money they would pay in the case of Ethnic German immigrants being allowed to participate” (1 = less
than 8 € and 9 = more than 14 €) and (3) “if they would sign a petition in favor of the project” (yes/no). For details see the Appendix. The items were z-transformed and combined into an index of behavioral tendencies, $\alpha = .70$. A positive value indicates support of the integration project and a negative value displays that participants refused to support it.

### 3.4.2 Results

#### Preliminary Analyses

**Recognition of relative advantage and identification**

Students’ acknowledgment of being advantaged in respect to leisure activities was significantly above the mid-point of the scale (on a 7-point scale), $M = 5.71$, $t(82) = 13.78$, $p < .001$. A one-way ANOVA showed that the experimental manipulations had no significant impact on this judgment, $F(2,80) = 1.71$, $p = .19$. The level of identification with students of the University of Jena in this study was high ($M = 5.76$ on a 7-point scale). The mean was well above the mid-point of the scale, $t(81) = 16.24$, $p < .001$. Hence, group identification as a basis for the experience of group-based emotions existed and did not differ between the experimental conditions, $F < 1$, tested with a one-way ANOVA.

**Focus manipulation check**

Generally, participants followed the instruction. A one-way ANOVA was conducted, revealing that those in the OGF condition reported that they focused more on the out-group ($M = 1.48$) than participants in the IGF condition ($M = 1.95$), $F(1,79) = 9.08$, $p < .01$.

**Testing main hypotheses: group-based emotions**

To test our specific hypotheses regarding the contrast between the emotions group-based pride, guilt, and sympathy, I conducted planned contrast analyses as in the previous studies. Because this study focused only on three conditions, the contrast coefficients $2 -1 -1$ were used to describe the expected pattern of means. Given that there were three experimental groups, it was just one degree of freedom left to conduct an orthogonal contrast testing whether there was any additional systematic variance besides the expected pattern ($0 -1 1$). As in the previous studies, the non-focal emotions were entered as covariates. Means and standard deviations can be found in Table 10.
Group-based pride

Participants in the IGF legitimate condition showed stronger feelings of pride than participants in the IGF illegitimate and OGF illegitimate condition. However, in this study this pattern was not significant, $F(1,79) = 1.73, p = .19, \eta^2 = .021$; neither was the orthogonal contrast, $F < 1$.

Existential guilt

As predicted, participants indicated significantly more intense feelings of guilt in the condition IGF illegitimate than participants in the IGF legitimate and OGF illegitimate conditions, $F(1,79) = 9.18, p = .003, \eta^2 = .104$. The orthogonal contrast test was not significant, $F(1, 79) = 1.17, p = .28$.

Group-based sympathy

Feelings of sympathy were significantly stronger for participants in the OGF illegitimate condition compared with participants in the IGF legitimate and illegitimate conditions, $F(1,79) = 5.05, p = .027, \eta^2 = .060$. The orthogonal contrast test was not significant, $F < 1$.

Table 10. Means and standard deviations of reported emotions for Study 3.

<table>
<thead>
<tr>
<th></th>
<th>IGF legitimate</th>
<th>IGF illegitimate</th>
<th>OGF illegitimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-based pride</td>
<td>3.78 (1.29)</td>
<td>3.15 (1.75)</td>
<td>2.89 (1.64)</td>
</tr>
<tr>
<td>Existential guilt</td>
<td>2.64 (1.31)</td>
<td>4.13 (1.92)</td>
<td>3.42 (1.38)</td>
</tr>
<tr>
<td>Group-based sympathy</td>
<td>5.50 (1.41)</td>
<td>5.88 (1.26)</td>
<td>6.43 (1.43)</td>
</tr>
</tbody>
</table>

Testing main hypotheses: behavior tendencies

To analyze the impact of the manipulation on behavior intention index, a contrast analysis with the coefficients -2 1 1 was performed. These coefficients display the assumption that participants in the IGF legitimate condition should disapprove of the project, whereas participants in the IGF illegitimate and OGF illegitimate condition should support it. The experimental manipulation significantly influenced the participants’ behavior intentions, $F(1,81) = 9.42, p = .003, \eta^2 = .104$. The behavior index in the IGF legitimate condition was negative ($M = -.36$), indicating that these participants did not support the idea
of ethnic German immigrants participating in university sport. The index in the IGF illegitimate condition \((M = .11)\) and OGF illegitimate condition \((M = .25)\) was positive, indicating a general tendency to support the project. Both values did not statistically differ from another, \(F < 1\).

**Link between Emotions and Behavior Tendencies**

To investigate whether and how the emotions would predict behavior intentions, a multiple regression analysis was conducted. The behavior intention index was regressed on pride, existential guilt, and sympathy simultaneously. Stronger feelings of pride predicted less support of the idea of ethnic German immigrants taking part at university sport courses, \(\beta = -.28, p = .007\). Existential guilt did not predict behavioral intentions, \(\beta = .08, p = .420\), but feelings of sympathy turned out to be a strong predictor for participants behavioral tendencies, \(\beta = .34, p = .001\). Participants who indicated intense feelings of sympathy were more willing to support the idea of opening up university sport for young ethnic German immigrants.

**Mediational Analysis**

The core of this research was to investigate the emotions of members of advantaged groups and whether they motivate behavior that affirms or challenges inequality. Therefore, I was interested whether the emotions would mediate the link between the perception of relative advantage and behavior tendencies. To test this idea, multiple mediation analyses were conducted. Concluding from the emotions’ predictive power for the behavioral index, pride and sympathy were considered as potential mediators, but not existential guilt.

**The IGF legitimate contrast condition**

First, the manipulation of IGF and legitimate advantage (2-1-1) had a negative effect on the behavioral index, \(\beta = -.32, p = .003\). The second regression analysis demonstrated that pride was triggered by this experimental manipulation, \(\beta = .22, p = .04\). Both, guilt, \(\beta = -.32, p = .003\) and sympathy, \(\beta = -.21, p = .05\) showed a negative relation with the predictor. Third, the regression analysis revealed pride, \(\beta = -.25, p = .01\) and sympathy, \(\beta = .31, p = .003\) as significant predictors for the behavioral index, while controlling for the experimental manipulation. The contribution of the experimental manipulation dropped to non significance, \(\beta = -.18, p = .10\). Guilt did not predict the behavior intention, \(\beta = .03, n.s.\). As in both previous studies, the bootstrap technique was used to see whether the indirect effects are significant. Again, zero falls outside the 95% interval for the total indirect effect.
Besides, both specific indirect effects, through pride (-.081 to -.006) and through sympathy (-.112 to -.002), were significant. Thus, both emotions were identified as mediators.

**The OGF illegitimate contrast condition**

The experimental condition OGF illegitimate in comparison to both other conditions (-1 -1 2) was first regressed on the behavioral index. This relation was significant, $\beta = .22, p = .04$. The second regression showed that the experimental condition influenced feelings of sympathy, $\beta = .25, p = .02$, but neither pride, $\beta = -.17$, nor guilt, $\beta = .01$, both n.s. Third, the behavioral index was regressed on sympathy, pride, guilt and the experimental condition. The contribution of sympathy remained significant, $\beta = .32, p = .003$ while the relationship between experimental condition and behavioral index became non-significant, $\beta = .10, p = .35$. Pride maintained its negative relation to the behavior tendencies, $\beta = -.22, p = .01$. Existential guilt had no predictive power, $\beta = .09, p = .40$. The bootstrap interval revealed the indirect effects of both, sympathy (.007-.098) and pride (.005-.078) as significant. Hence, both emotions did mediate the relationship between perceived inequality and behavior tendencies.

In addition, a multiple mediation analysis with the contrast coded condition IGF illegitimate as predictor was conducted to see whether guilt or one of the other two emotions would contribute something in this specific condition. Neither a specific nor a total indirect effect was significantly different from zero.

**3.4.3 Discussion**

The results of Study 3 largely replicated the findings of Study 1 for the emotions pride, existential guilt, and sympathy in another context and with other social groups. Independent of the experimental condition, students acknowledged their advantaged position compared with ethnic German immigrants. Aside from that, the combination of the direct focus instruction with the sentence completion task (Neumann, 2000) was successful in manipulating in-group and out-group focus. As predicted, when students received information about illegitimate in-group advantage, they reported existential guilt; when illegitimate out-group disadvantage was salient, students reported feelings of sympathy. Hence, these effects were neither limited to the particular inter-group situation of Study 1 nor to the particular manipulation of the appraisals. Even though the pattern of means for group-based pride reflected the predicted pattern, the focal contrast, however, was not significant. One explanation may concern aspects of performance. To illustrate this thought, in Study 1, participates were told that they are advantaged on the job market. Legitimacy of
status relation was due to quality of education, which may be associated with performance, and as known from emotion research in general, performing better than others elicits pride. (Personal) achievement has been found as important pride antecedent (Rodriguez Mosquera, Manstead, & Fischer, 2000). This third study, on the contrary, used a sports context and the manipulation of status legitimacy included aspects that were not directly related to achievement or performance and therefore less explicitly related to pride. One could speculate about pride – in this case – being a kind of existential pride, similar to the concept of existential guilt; that is pride about one’s advantaged situation without being responsible for it. This could also explain the rather low mean level of pride compared to Study 1. Presently however, this is just a speculation and a possible target of future research.

Participants had the choice to either support the disadvantaged or to constrain them from equal opportunities. Since overall the effects of the group-based emotions on these behavioral tendencies were similar, a behavioral index was computed. Generally, the behavior tendencies following pride had in common that they refused the idea of ethnic German immigrants taking part in university sport. Conversely, feelings of sympathy were associated with affirmative behavior tendencies. Students agreed with the idea of ethnic German migrants as taking part in university sport and were also willing to pay more fees to make this possible. Again, existential guilt did not predict behavior tendencies. The multiple mediator analyses revealed pride and sympathy, but not guilt, as mediating the relationship between perceptions of inequality with subsequent behavior tendencies.

In essence, this study captured the phenomenon of relative advantage in the context of unequal sport opportunities of University students compared with young ethnic German immigrants living in the same town. Study 3 provided further support for the hypothesis that focus and legitimacy are appraisals of an unequal status relation that trigger different emotions about social inequality. Because the study was disguised as a University opinion poll, the measured behavioral intentions can be taken as good estimator for real behavior. Legitimate in-group advantage strengthened feelings of pride about this advantage, and pride activated the tendency to refuse opening university sport courses for ethnic German immigrants. Illegitimate out-group advantage triggered feelings of sympathy for ethnic German immigrants and sympathy, in turn led students to agree to share the university sport courses with the ethnic German immigrants.
3.5 Study 4

So far, I aimed at investigating how inequality is experienced in terms of emotions by those who benefit from it. The studies presented established relative advantage by constructing a particular social comparison situation. Depending on the focus of comparison as well as on legitimacy of the status relation, being relatively advantaged resulted in different group-based emotions. In support of the hypotheses, group-based pride, existential guilt, and sympathy were distinguishable from another. More negative emotions, such as disdain (Study 1) however, did not occur. Social desirability concerns may well inhibit expression of these negative emotions towards another group (see Mackie et al., 2000). The means of disdain in Study 1 were generally quite low and the variance was restricted. Thus, it was especially difficult to find an effect between the experimental conditions. In addition, the out-group was never explicitly introduced as a threat to the status hierarchy. Probably, more unstable inter-group situations with negative interdependence and competition between both groups would be necessary to trigger negative, even hostile, emotions. The fourth study addressed this issue. According to Realistic Group Conflict Theory (RCT; Sherif, 1967), competition for access to limited resources leads to conflicts between groups. Sherif (1967) argued that the quality of intergroup relations is a function of the perceived goal interdependence between groups. A negative interdependence of the groups involved (one group can achieve its goals only to the detriment of the other group's goals) is the basis for derogating the out-group. For instance, if psychologists believe social pedagogues take away jobs that would have otherwise gone to psychologists, they would be expected to have more negative attitudes towards those social pedagogues. More to the point, Fiske and Ruscher (1993) suggested interdependence as a source of emotions, with negative interdependence triggering negative affect. They hypothesized that a competitive out-group is assumed to hinder one’s goal and hence, provokes negative reactions.

In Leach and colleagues’ (2002) taxonomy of downward comparison, perceived stability of the status relations is mentioned as an additional important dimension to focus and legitimacy, with unstable advantage being directly associated with downward competition. Specific hypotheses regarding the negative emotions fear/worry and disdain can be derived from this taxonomy.

Fear/worry of loosing privilege was expected to be especially intense under IGF, when advantage is perceived as illegitimate and unstable.
Disdain was expected to be especially intense under OGF, when others’ disadvantage is perceived as legitimate and unstable.

In addition, in case of unstable status relations, under OGF when other disadvantage is perceived as illegitimate, moral outrage is expected to be especially intense. Moral outrage can be understood as a form of empathic anger (Montada & Schneider, 1989).

### 3.5.1 Method

**Design, Sample, and Procedure**

A scenario study with four experimental conditions was conducted (IGF legitimate, IGF illegitimate, OGF legitimate, OGF illegitimate). One-hundred and eight psychology students of the Friedrich-Schiller University (FSU) participated in this study (age: $M = 21$ yrs., range: 19-40 yrs; 76% female, five participants did not indicate gender). They were given the opportunity to partake in the study after a lecture for psychology undergraduates for a chocolate bar. Participants were randomly assigned to one of four conditions, resulting in almost equal cell sizes of $n > 25$. All instructions were given via the questionnaires. The same procedure was carried out as in Study 1. Participants were asked to read the scenario first and to answer the subsequent questions. Debriefing took part in the following lecture a week later.

**Material**

**Experimental manipulation**

The scenarios, fake newspaper articles, applied in this study were to a large extent identical with those used in Study 1 to manipulate the appraisal focus and legitimacy, with the exception that in all conditions a negative interdependence between psychologists and social pedagogues was salient. The articles described the job situation for social scientists in Germany. Psychology students were told to be advantaged compared with students of social pedagogy regarding job opportunities. Extending Study 1, sentences were added highlighting the competition between psychologists and social pedagogues. Jobs were referred to as rare resources and the article stressed that one group can have these jobs only to the detriment of the other group's jobs. For instance, it was said that decision makers would discuss whether social pedagogues should also get the admission to become psychotherapist. So far, this is only allowed for psychologist having a diploma. Again, all four articles were the same except for the sentences by means of which the independent
variables, focus and legitimacy, were manipulated. The manipulation of focus and legitimacy did not differ from the manipulation in Study 1. In the in-group-focus condition the sentences were phrased in terms of *in-group advantage*, while in the out-group-focus condition the sentences were phrased in terms of *out-group disadvantage*. In addition, the sentence completion task was used as in Study 3 to intensify the focus manipulation (e.g., Neumann, 2000). As in Study 1, legitimacy of inequality was manipulated through quality of education. In the legitimate conditions the education of psychologists was described as *excellent* and the education of social pedagogues as *poor* and vice versa in the illegitimate condition.

**Manipulation checks**

**Focus of attention and legitimacy**

A 3-point scale checked whether the focus manipulation was successful. Participants had to indicate whether they focused more on 1 = "social pedagogues", 2 = "both groups of social scientists" or 3 = "psychologists" while reading the manipulation text. Furthermore, the legitimacy manipulation was checked with an item that asked “while thinking about quality of education, how fair or unfair do you perceive the situation on the job market?” (1 = unfair and 7 = fair).

**Relative advantage and identification**

Whether the perception of relative advantage was successfully established was checked by a single item on a 7-point scale “Regarding the job situation, psychologists are relatively advantaged compared to social pedagogues” (1 = absolutely not, 7 = absolutely). Identification was measured with the same 4 items as in Study 1 (e.g., “I am glad to be a psychology student”, \( \alpha = .83 \)) on a 7-point Likert scale.

**Perceived stability**

A single item checked whether the manipulation of negative interdependence influenced participants’ perception about the stability of the job situation between psychologists and social pedagogues “The job situation between both occupation groups will change soon” (1 = I fully disagree, 7 = I fully agree).
Main dependent variables

Group-based emotions

After reading the article, participants indicated to which degree they felt the following emotions upon reading of the unequal job situation on rating scales ranging from 1 (not at all) to 9 (strongly): pride, feeling superior, feeling successful, guilty, ashamed, having a bad conscience, contempt, disdain, disgust, anger about psychologists (as an indicator of moral outrage), anger about social pedagogues, fear of future, worry. Anger about social pedagogues was included to delimit this kind of anger from empathetic anger. In addition, we asked for sympathy (sympathetic, compassionate) and pity (pity, feel sorry) even though these emotions were expected to be a more typical reaction to stable out-group disadvantage. The order of the emotion items in the scale was varied randomly within the experimental conditions.

Behavior tendencies

Subsequent to the emotion items, participants had to answer ten behavior tendencies items, which were compiled to cover different facets of potential behavior (see Appendix). Specifically, items were included related to reluctance to share resources, preferential treatment of the disadvantage, paternalistic behavior towards the disadvantage, and inaction. Most of the items were taken from items used in the previous studies and adapted to the context of the study, such as “I don’t support the idea of social pedagogues being allowed to become psychotherapists” (reluctance to share resources), or “In future, social pedagogues should be favored when it comes to recruitment” (preferential treatment) and could be answered on 7-point scales anchored by 1 (I disagree) to 7 (I fully agree).

Preliminary analyses

All emotion items were submitted to a principal-axis Factor Analyses with Oblimin rotation. A five factor solution was obtained accounting for 56.89 % of the common variance. The first factor was indicated by the guilt items (Eigenvalue 4.06), the second factor included pride items (Eigenvalue 3.39), the third factor was indicated by fear/worry items (Eigenvalue 1.82), the forth factor was indicated by positive emotion items (Eigenvalue 1.27), and the fifth factor was indicated by disdain items (Eigenvalue 1.08).
Empathetic anger loaded on the positive out-group focus emotion factor, while anger about social pedagogues loaded on the disdain factor.

According to the results of the Factor Analyses, the following scales were put together: Pride (proud, successful, superior; $\alpha = .73$), fear (fear of future, worry; $\alpha = .90$), guilt (guilty, bad conscience, ashamed; $\alpha = .73$), and disdain (disdain, contempt, disgust, $\alpha = .72$). Even though the pity and sympathy items again fall off in one factor, they were put together to separates scales: Pity (pity, feel sorry for someone; $\alpha = .86$), sympathy (sympathetic, compassionate; $\alpha = .66$). The reliabilities were all satisfying. Besides, some of the emotions were correlated with each other (see Table 11). Pride correlated positively with disdain and negatively with moral outrage, but not with the other emotions; guilt correlated positively with all emotions except for pride, pity correlated positively with fear, with sympathy, and with moral outrage, sympathy also correlated positively with fear and moral outrage. Fear and moral outrage were also correlated.

Table 11. Correlations between the emotion concepts.

<table>
<thead>
<tr>
<th></th>
<th>Pride</th>
<th>Guilt</th>
<th>Pity</th>
<th>Sympathy</th>
<th>Fear/Worry</th>
<th>Disdain</th>
<th>M. outrage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guilt</td>
<td>.101</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Pity</td>
<td>.126</td>
<td>.439**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Sympathy</td>
<td>-.031</td>
<td>.329**</td>
<td>.588**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fear/Worry</td>
<td>-.187</td>
<td>.294**</td>
<td>.293**</td>
<td>.337**</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Disdain</td>
<td>.530**</td>
<td>.197*</td>
<td>.124</td>
<td>-.112</td>
<td>.033</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>M. outrage</td>
<td>-.226**</td>
<td>.255**</td>
<td>.251**</td>
<td>.293**</td>
<td>.314**</td>
<td>.015</td>
<td></td>
</tr>
</tbody>
</table>

Note. Two asterisks indicate a significant correlation on the 0.01 (2-tailed) level.

3.5.2 Results

Manipulation checks

Focus manipulation and legitimacy

As intended, participants in both IGF conditions reported to focus more on the situation of the ingroup ($M = 2.68$) than participants in the OGF condition ($M = 2.06$). A 2 (focus) by 2 (legitimacy) ANOVA revealed this difference as significant, $F(1, 104) = 26.46$, $p < .001$, $\eta^2 = .203$. There was no further main or interaction effect, both $F < 1$. Furthermore, another 2 (focus) by 2 (legitimacy) ANOVA with perceived legitimacy as the dependent variable showed that participants in the legitimate condition perceiving the situation to be
more fair ($M = 4.60$) than those in the illegitimate condition ($M = 4.07$), $F(1, 104) = 5.46$, $p = .020$, $\eta^2 = .050$. Besides, participants in the IGF condition generally judged the situation to be fairer ($M = 4.91$) than participants in the OGF conditions ($M = 3.66$), $F(1, 104) = 28.12$, $p < .001$, $\eta^2 = .213$. The same effect was found and discussed in Study 1 (p., ; see also the general discussion). The interaction of focus and legitimacy was not significant, $F(1, 104) = 1.80$, $p = .181$, $\eta^2 = .017$.13

Recognition of relative advantage

The psychology students’ acknowledgment of being advantaged was significantly above the mid-point of the scale, $M = 5.09$, $t(106) = 7.93$, $p < .001$. Besides, a 2 (focus) by 2 (legitimacy) ANOVA revealed significant differences between the four experimental conditions. There was a marginally significant effect of focus, $M_{OGF} = 5.33$ and $M_{IGF} = 4.83$, $F(1, 103) = 3.40$, $p = .086$, $\eta^2 = .028$; there was also a significant main effect of legitimacy, $M_{leg} = 5.40$ and $M_{ill} = 4.79$, $F(1, 103) = 4.75$, $p = .032$, $\eta^2 = .044$, and a significant interaction, $F(1, 103) = 7.85$, $p = .006$, $\eta^2 = .071$. Means and standard deviation for all four cells are displayed in Table 12. Interestingly, when in-group advantage was perceived as legitimate, participants felt more advantaged compared to those who were in the illegitimate advantage condition. Vice versa, perceiving others’ disadvantage as legitimate resulted in lower ratings of acknowledged advantage compared to perceiving others disadvantage as illegitimate. This was the first study where the experimental condition had an impact on participants’ acknowledgement of relative advantage.

<table>
<thead>
<tr>
<th></th>
<th>IGF legitimate</th>
<th>IGF illegitimate</th>
<th>OGF legitimate</th>
<th>OGF illegitimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of relative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advantage</td>
<td>5.52 (1.03)</td>
<td>4.26 (1.78)</td>
<td>5.25 (1.19)</td>
<td>5.41 (0.88)</td>
</tr>
</tbody>
</table>

13 In this study, I measure perceived responsibility for inter-group inequality since achievement, which seems akin, seems to play a role for pride (cf. Study 3). A 2 (focus) by 2 (legitimacy) ANOVA with perceived responsibility as the dependent variable revealed that perceived responsibility was independent from focus and legitimacy, all $F < 1$. 

Table 12. Means and standard deviations of acknowledgement of relative advantage.
Identification with the in-group

Psychology students identified highly with their in-group, the mean was above the mid-point of the scale, $M = 5.46$, $t(99) = 11.88$, $p < .001$. According to the 2 (focus) by 2 (legitimacy) ANOVA, the level of identification did not differ between conditions, all $F < 1$.

Stability of the situation

Psychology students seem to be uncertain regarding the future job situation between psychologist and social pedagogues, overall they chose the mid-point of the scale. The overall mean did not differ from the scale mid-point of four, $M = 3.90$, $t(105) = -1.09$, $p = .276$. A 2(focus) by 2 (legitimacy) ANOVA with stability perception as dependent variable revealed no significant effect, all $F < 1.05$.

Group-based emotions of relative advantaged group members

Testing the main four hypotheses with planned contrasts

Note that in this study the same contrast pattern could describe the expected pattern for different emotions. The $-1\ 3\ -1\ -1$ contrast, for instance, illustrates the expectation that guilt should be more intense under illegitimate in-group advantage compared to the other conditions. In addition, the same contrast described the pattern for fear/worry, because fear/worry was expected to be most intense in the illegitimate in-group focus conditions as well. As a reminder, Table 13 depicts the hypotheses again.

Table 13. Numerical depiction of hypotheses for group-based emotions of downward comparison from relative advantage (focal contrasts).

<table>
<thead>
<tr>
<th></th>
<th>IGF leg</th>
<th>IGF illeg</th>
<th>OGF leg</th>
<th>OGF illeg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group-based pride</td>
<td>3</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Existential guilt</td>
<td>-1</td>
<td>3</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Group-based fear/worry</td>
<td>-1</td>
<td>3</td>
<td>-1</td>
<td>-1</td>
</tr>
<tr>
<td>Group-based pity</td>
<td>-1</td>
<td>-1</td>
<td>3</td>
<td>-1</td>
</tr>
<tr>
<td>Group-based disdain</td>
<td>-1</td>
<td>-1</td>
<td>3</td>
<td>-1</td>
</tr>
<tr>
<td>Group-based sympathy</td>
<td>-1</td>
<td>-1</td>
<td>-1</td>
<td>3</td>
</tr>
<tr>
<td>Group-based moral outrage</td>
<td>-1</td>
<td>-1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

The additional variable needed to further differentiate between these emotions, perceived control, as suggested by Leach and colleagues (2002), was not manipulated in this
study. However, perceived stability of the situation was entered as covariate. Moreover, the impact of the non-focal emotions was controlled for by adding them as further covariates in the analyses. Orthogonal contrasts were computed as well (see Table 14).

*Group-based pride*

In line with the hypothesis, participants in the IGF legitimate condition reported more intense feelings of pride than participants in the other conditions. The contrast analyses revealed this pattern as significant, $F(1, 98) = 20.81, p < .001, \eta^2 = .180$. Furthermore, the orthogonal contrasts confirm the residual variance being sufficiently explained by the main contrast. The combined orthogonal contrast was not significant, $F < 1$.

*Existential guilt*

Against expectations, the test of the focal contrast was not reliable, $F(1, 96) = 2.16, p = .15, \eta^2 = .022$. Participants in the condition IGF illegitimate did not report significantly more intense feelings of guilt than participants in the other conditions. In addition, the combination of both orthogonal contrasts was significant, $F(1, 95) = 5.95, p = .016$, also indicating there is residual variance left which is not explained by our predicted pattern.

*Group-based fear/worry*

In line with the hypothesis, participants in the IGF illegitimate condition reported more intense feelings of fear than those in the other conditions; the focal contrast was significant, $F(1, 96) = 5.01, p = .027, \eta^2 = .050$. Moreover, the combined orthogonal index was not significant, $F(1, 95) = 1.42, p = .236$, thus, the data pattern was best explained by the predicted pattern.

*Group-based pity*

Corresponding to the hypothesis, the contrast analyses yielded a significant result, $F(1, 96) = 5.43, p = .022, \eta^2 = .053$, with participants reporting more pity in the OGF legitimate condition than in the other conditions. The combined orthogonal contrast, however, was significant, $F(1, 95) = 4.54, p = .035$, and as a consequence, the predicted pattern can not be treated as the most parsimonious one.

*Group-based disdain*

Contrary to the hypothesis, participants did not report the strongest feelings of disdain in the OGF legitimate condition. The contrast analyses was not significant, $F(1, 96)$
In addition, the combined orthogonal contrast reached significance, $F(1, 95) = 5.52, p = .02$. A closer inspection of Table 14 shows that disdain was especially high in the condition IGF and illegitimate advantage. Besides, there was a general tendency of disdain being higher under IG focus than OG focus.

**Group-based sympathy**

The focal contrast for sympathy delivered a marginally significant result, $F(1, 96) = 3.45, p = .067, \eta^2 = .035$, with participants in the OGF illegitimate condition experiencing stronger feelings of sympathy than participants in the other conditions. The combination of both orthogonal contrasts was marginally significant, $F(1,95) = 3.02, p = .086$. In other words, the data pattern reflected the predicted pattern, but some additional residual variance was left.

**Group-based moral outrage**

The focal contrast for moral outrage did not reach significance, $F < 1$, even though on descriptive level participants in the OGF illegitimate condition reported more intense feelings of outrage than participants in the other conditions. The combination of both orthogonal contrasts was not significant, $F < 1$.

To summarize the result to this point, this study partly replicated previous findings: The hypotheses for group-based pride, group-based pity, and also for sympathy were corroborated. In addition and in line with the hypothesis, group-based fear was greatest when in-group advantage was perceived as illegitimate. The findings for moral outrage showed a tendency in the expected direction, but were far from being significant. Yet, this study did not provide evidence for the hypotheses regarding disdain and guilt. Besides, perceived stability of the job situation had no unique impact on any of the emotions in all the analyses.
Table 14. Means and standard deviations of reported emotions for Study 4.

<table>
<thead>
<tr>
<th></th>
<th>IGF leg</th>
<th></th>
<th>IGF illeg</th>
<th></th>
<th>OGF leg</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Pride</td>
<td>6.02</td>
<td>(1.29)</td>
<td>4.51</td>
<td>(1.86)</td>
<td>4.43</td>
<td>(1.69)</td>
</tr>
<tr>
<td>Existential guilt</td>
<td>1.93</td>
<td>(0.93)</td>
<td>2.27</td>
<td>(1.46)</td>
<td>2.14</td>
<td>(1.31)</td>
</tr>
<tr>
<td>Fear/worry</td>
<td>3.80</td>
<td>(1.71)</td>
<td>4.53</td>
<td>(1.80)</td>
<td>3.04</td>
<td>(1.80)</td>
</tr>
<tr>
<td>Pity</td>
<td>4.09</td>
<td>(1.83)</td>
<td>3.13</td>
<td>(1.90)</td>
<td>4.60</td>
<td>(1.91)</td>
</tr>
<tr>
<td>Disdain</td>
<td>2.19</td>
<td>(1.14)</td>
<td>2.32</td>
<td>(1.30)</td>
<td>2.04</td>
<td>(1.24)</td>
</tr>
<tr>
<td>Sympathy</td>
<td>4.86</td>
<td>(1.48)</td>
<td>4.55</td>
<td>(1.73)</td>
<td>5.30</td>
<td>(1.37)</td>
</tr>
<tr>
<td>Moral outrage</td>
<td>1.69</td>
<td>(1.08)</td>
<td>2.10</td>
<td>(1.23)</td>
<td>2.04</td>
<td>(1.29)</td>
</tr>
</tbody>
</table>

The behavioral tendencies

Because it was assumed that the items that were selected for this study would cover four facets of behavior, a principal-axis Factor Analysis was conducted, which I asked to extract four factors. The four factor solution accounted for 51.44% of the variance. The first factor was indicated by items related to positive behavior towards the disadvantaged group (Eigenvalue of 3.39), the second factor was indicated by items related to reluctance to share resources (Eigenvalue of 1.55), the third by one item related to preferential treatment of the disadvantaged (Eigenvalue of 1.14), and the fourth by one item indicating inaction (Eigenvalue of 0.94). The items of the first factor (paternalistic behavior, $\alpha = .79$) and the second factor were put together to behavioral scales (reluctance to share resources, $\alpha = .60$). Preferential treatment of social pedagogues and the inaction tendency were both measured with a single item, since no other items were reliable measures for these behavioral tendencies.

In a next step, I conducted as series of 2 (focus) by 2 (legitimacy) ANOVAs with the behavior tendencies as dependent variable. For the purpose of readability, the results are displayed in Table 15. In line with expectations, reluctance to share resources was especially pronounced when in-group advantage was legitimate. Both, the effects of focus, $F(1, 104) = 3.14, p = .079, \eta^2 = .029$ and legitimacy were marginally significant, $F(1, 104) = 2.90, p = .067, \eta^2 = .091$. On the contrary, paternalistic behavior was especially strong in the OGF legitimate condition; however, there was no significant effect of focus, $F(1, 104) = 2.62, p = .108$, legitimacy, $F(1, 104) = 2.04, p = .156$, or their interaction, $F < 1$. Participants’ willingness for preferential treatment of the disadvantaged was greatest in the OGF
illegitimate condition, only the interaction of focus and legitimacy was marginal significant, \( F(1, 104) = 3.11, p = .081, \eta^2 = .029 \). Furthermore, focus and legitimacy or their interaction had no significant effect on “inaction”, all \( F < 1 \).

**Table 15. Means and standard deviations of the behavioral tendencies in Study 4.**

<table>
<thead>
<tr>
<th></th>
<th>IGF leg</th>
<th>IGF illeg</th>
<th>OGF leg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Reluctance to share res.</td>
<td>5.48</td>
<td>(1.00)</td>
<td>4.83</td>
</tr>
<tr>
<td>Paternalistic behavior</td>
<td>4.78</td>
<td>(1.33)</td>
<td>4.39</td>
</tr>
<tr>
<td>Preferential treatment</td>
<td>2.08</td>
<td>(1.07)</td>
<td>1.77</td>
</tr>
<tr>
<td>Inaction</td>
<td>2.72</td>
<td>(1.45)</td>
<td>2.42</td>
</tr>
</tbody>
</table>

**Group-based emotions as predictors of behavior tendencies**

To recap, it was expected that the negative interdependence between the groups of psychologists versus social pedagogues would trigger negative emotions (Fiske & Ruscher, 1993) and that these negative emotions would lead to negative inter-group behavior. To get a general idea about the relation between the emotions and the behavior tendencies, see Table 16, which shows the partial correlations between the emotions and the four types of behavior tendencies. In line with the findings of the studies presented earlier in this thesis, group-based pride motivated participants to favor their advantaged in-group and to refuse sharing resources with disadvantaged social pedagogues. Disdain was also related to reluctance to share resources and in addition, disdain was negatively related to positive inter-group behavior. On the contrary, moral outrage showed a negative relationship with reluctance to share resources with the disadvantaged social pedagogues and a positive with preferential treatment of social pedagogues. As in the previous studies, guilt was not related to any behavior tendency. Pity was positively related to paternalistic behavioral tendencies towards the social pedagogues and negatively with inaction. Interestingly, fear was only related to inaction. Like in the previous studies, sympathy was positively related to preferential treatment and paternalistic behavior tendencies.
Table 16. Simple regression analyses with emotions as predictors and inter-group behavioral tendencies as criterion in Study 4.

<table>
<thead>
<tr>
<th></th>
<th>reluctance to share resources</th>
<th>paternalistic behavior</th>
<th>preferential treatment</th>
<th>inaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pride</td>
<td>.520**</td>
<td>-.090</td>
<td>-.227*</td>
<td>.119</td>
</tr>
<tr>
<td>M. Outrage</td>
<td>-.192*</td>
<td>.016</td>
<td>.207*</td>
<td>.023</td>
</tr>
<tr>
<td>Disdain</td>
<td>.329**</td>
<td>-.244**</td>
<td>-.171 (*)</td>
<td>.098</td>
</tr>
<tr>
<td>Fear/Worry</td>
<td>-.119</td>
<td>.013</td>
<td>.121</td>
<td>-.177(+)</td>
</tr>
<tr>
<td>Guilt</td>
<td>-.066</td>
<td>.135</td>
<td>.075</td>
<td>-.153</td>
</tr>
<tr>
<td>Pity</td>
<td>.050</td>
<td>.194*</td>
<td>.088</td>
<td>-.219*</td>
</tr>
<tr>
<td>Sympathy</td>
<td>-.130</td>
<td>.450**</td>
<td>.285**</td>
<td>-.118</td>
</tr>
</tbody>
</table>

Note. * p < .05 and ** p < .01

Mediation Analysis

For some of the constellations, specific mediation predictions were possible, given the precondition that the experimental condition was related to the behavior tendency and the emotion affected the behavioral tendency. It was expected that the effect of the focus and legitimacy manipulation on the behavioral measures would be mediated by feelings about inter-group inequality.

The IGF legitimate contrast condition

In line with expectations, IGF and legitimate advantage led to the experience of group-based pride. In addition, reluctance to share resources was especially strong for participants in the IGF legitimate condition. Therefore, it was tested whether this relationship was mediated by feelings of pride. It was found that the IGF legitimate condition contrasted to the other conditions (3 -1 -1 -1) affected participants’ reluctance to share resources, β =.219, p = .023. Second, IGF legitimate (3 -1-1 -1) led to greater pride, β = .391, p < .001, but not to any of the other emotions, ps > .10. Third, the behavior tendency was regressed on all variables simultaneously. Only the effect of pride remained, β = .482, p < .001, while all other predictors were non-significant, ps > .10. The indirect effect of pride was significant, tested with the bootstrap method (.082 to .263), which suggests full mediation of group-based pride.

The OGF legitimate contrast condition

According to expectations, OGF and legitimate disadvantage led to the experience of group-based pity. Moreover, the same condition influenced participants’ preference for
paternalistic behavior towards the disadvantaged out-group; the OGF legitimate condition contrasted to the other experimental conditions (-1 -1 3 -1) had a marginal significant impact on paternalistic behavioral tendencies, $\beta = .171$, $p = .078$. A second step showed that the OGF legitimate condition contrasted to the other experimental conditions (-1 -1 3 -1) influenced participants feelings of pity, $\beta = .205$, $p = .033$ and was also related to less fear, $\beta = -.177$, $p = .067$. The other emotions were not affected by this specific experimental condition. When in a third step the paternalistic behavior tendency was regressed on all the emotions and the experimental condition at the same time, the effect of pity disappeared. Also the effect of the experimental manipulation did no longer reach significance. Only sympathy had a significant, positive effect on paternalistic behavior, $\beta = .418$, $p < .001$, while disdain had a significant, negative effect, $\beta = -.227$, $p = .040$. The other emotions were not significant, all $ps > .10$. According to the bootstrap interval, however, the indirect effects of sympathy and disdain were not reliable.

The OGF illegitimate contrast condition

It was tested whether the relation between OGF and illegitimate disadvantage and preferential treatment tendencies would be mediated by feelings of sympathy for the disadvantaged. Firstly, the OGF illegitimate condition contrasted to the other conditions (-1 -1-1-3) affected participants’ willingness for preferential treatment of the disadvantaged, $\beta = .208$, $p = .031$. Second, OGF illegitimate (-1 -1 -1 3) caused intense feelings of sympathy, $\beta = .299$, $p = .002$, less disdain, $\beta = -.229$, $p = .017$, less pride, $\beta = -.189$, $p = .051$, but had no impact on moral outrage, fear, pity, or guilt. Third, when the behavior tendency was regressed on all variables simultaneously, the effect of condition IGF legitimate dropped to non-significance, while sympathy remained significant, $\beta = .265$, $p = .038$. The bootstrap interval revealed the indirect effect of sympathy as reliable (.011 to .131). All other emotions did not contribute to the effect.

Because the manipulation of IGF and illegitimate disadvantage had no specific effect on any of the behavioral tendencies, no mediation analysis was conducted for this specific condition.

3.5.3 Discussion

This study attempted to investigate negative emotions about inter-group inequality when negative interdependence (e.g., Sherif, 1967) between two groups was salient. More specifically, negative interdependence was established in form of scarce job opportunities between the advantaged group of psychologists versus the disadvantaged social pedagogues.
It was assumed that negative interdependence would lead to the perception of unstable status relation between both groups. The result of the manipulation check was somehow ambiguous. When participants were asked whether they believed that the status relation between psychologists and social pedagogues regarding job opportunities was stable or would change in the near future, they did not decide for one or the other. This can be interpreted as uncertainty about the development on the job market and thus, even if it is not absolute clear due to the answers given on the scale, I conclude that the relative advantaged psychologists did not think of their advantage as stable. An additional factor might be that undergraduate students participated in this study. They have to study for approximately more than two years before they enter the job market and given this fact, they might expect the job market to change in the meantime anyway. The fundamental preconditions for studying group-based emotions about inter-group inequality were fulfilled: the psychologists acknowledged the established advantage of their group compared with social pedagogues and overall, they identified high with their in-group. Besides, this was the first study where the experimental manipulation had an effect on whether advantage was recognized. Especially when advantage was described as illegitimate, acceptance of in-group advantage was lowest. This might be interpreted as a further hint that the advantaged position of the in-group was perceived as insecure. Since both, legitimacy and stability are assumed to define the security of the status relation (Tajfel & Turner, 1979), it is not surprising that both interact. Tajfel and Turner (1979) regarded especially the combination of unstable and illegitimate intergroup relation as the most powerful cause for inter-group conflict.

According to Leach and colleagues’ (2002) taxonomy, a self-focused type of negative emotion, fear of losing advantage, was expected in case of illegitimate and unstable in-group advantage. Moreover, competitive downward comparison should result in a negative feeling towards the disadvantaged out-group, such as disdain, when the disadvantaged group is believed as undeserving better. However, when others’ disadvantage is perceived as illegitimate and unstable, the relative advantaged should experience moral outrage. Summarizing the results, Study 4 provided evidence for the fear hypotheses; the results for moral outrage where also in the expected direction, but not reliable. Regarding disdain, however, the results did not support the hypothesis. Contrary to the expectation, disdain was strongest when in-group advantage was perceived as illegitimate. Coming back to the point that especially the combination of unstable and illegitimate intergroup relation is suggested to highlight inter-group conflict (Tajfel and Turner, 1979), it makes sense that
participants expressed negative emotions about the out-groups. For the greater part of the group-based emotions, already investigated in the previous studies, pride, pity, and partly for sympathy, the results were replicated and the hypotheses confirmed. Regarding guilt, however, participants did not differ in their extend of experiencing guilt.

The relationship between the emotions and inter-group behavior tendencies was also examined. Regarding the negative emotions, fear was only negatively related to “inaction”. Reformulating this, the more fear psychologists experienced about loosing status, the less did they agree with the idea that psychologist should not do anything, because those who are better will succeed on the job market anyway. Participants might have felt they should do something to hold up the change, at the same time not feeling able to do so. Leach and colleagues assumed that although advantage is illegitimate and unstable, fear as a self-focused emotion should inhibit the motivation to improve inequality (Leach et al., 2002). Likewise, according to Appraisal Theories of Emotion (e.g. Roseman et al., 1990), fear involves a readiness for an action that can reduce the possibility of a drawback, but often, action is actually not undertaken. The negative relationship between fear and inaction in this study could represent exactly this; participants might have felt the need to act, but actually they neither acted in an in-group favoring way nor did they make any attempt to change inequality. Disdain was associated with reluctance to share resources with social pedagogues and negatively with positive inter-group behavior. Disdain also partly mediated the link between the perception of social pedagogues’ legitimate disadvantage and paternalistic behavior tendencies; the greater psychologists feelings of disdain about social pedagogues was the less did they agree to donate money or to inform employers about the improved education of social pedagogues. Montada and Schneider (1989) found moral outrage to be related to willingness to reduce inequality. In their correlation study, moral outrage was a better predictor for prosocial action tendencies than guilt or sympathy. Study 4 showed the opposite. Moral outrage affected psychologists’ willingness for preferential treatment of social pedagogues and was negatively related to refusal to share resources, but when sympathy and the other emotions were added as covariates, the effect of moral outrage disappeared. This may be due to the validity of the measure. Anger about psychologist was used as a measure of moral outrage. Montada and Schneider (1989) stated that the target of moral outrage is the transgressor or those who are responsible for the existing inequality. In the present study, the psychologists were not said to be responsible for inequality and therefore, anger about psychologists was not the most appropriate measure. In future
studies, moral outrage should include anger about a third party or specific agent, who is to blame for unjust behavior.

As in Study 1 and Study 3, pride mediated the effect of legitimate advantage on in-group favoring behavior tendencies. The more proud the psychologists were about their advantage, the less willingness they showed to share resources with social pedagogues, for instance, they wanted to keep the privilege to become psychotherapists for the psychologists. By contrast, sympathy mediated the effect of perceiving the social pedagogues as disadvantaged for undeserved reasons on positive inter-group behavior. The greater sympathy for the social pedagogues was, the more did they agree to treat them on the job market in a preferential way. Basically, both pride and sympathy were the only significant mediators in this study. Group-based pity, compared to sympathy, was also positively associated with paternalistic behavioral tendencies, and negatively with inaction, but not with preferential treatment of social pedagogues. This can be taken as an additional sign for the difference between sympathy and pity. While sympathy was followed by the strong tendency to improve the situation of the disadvantaged, pity was not. Pity, similar to fear, seems to involve the readiness and desire to act - in a paternalistic inter-group manner - but in fact, pity is not the right emotion to motivate inequality reducing behavior. Given that advantage did not appear as highly secure, pity was not sufficient to support the disadvantaged. Following Leach et al. (2002), given instability of advantage, the privileged are more likely to experience disdainful emotions rather than pity. Guilt, as in the previous studies, was not associated with any of the behavioral tendencies.

The interpretation of the results of Study 4 might be restricted by an operational flaw. As mentioned above, the efficacy of the negative interdependence manipulation remains unclear. This may be due to the fact that participants, psychology students, knew about the actual job market situation of both groups and did not belief in all the information given by the fake articles. Generally, the stereotype about social pedagogues comprises attributes like warm and good hearted\(^4\). For that reason, the job situation between psychologists and social pedagogues was not the ideal situation to establish competition and negative interdependence and to study negative and hostile emotions, such as disdain. Future research should examine whether a different and more negative intergroup setting would be appropriate to investigate hostile emotions of the advantaged towards disadvantaged competitive others.

\(^4\) Pre-test of Study 1 that is not reported in detail in this thesis; see also Fiske et al., 2000.
Taken together, Study 4 extended the previous studies and investigated further emotions, particularly negative emotions, to get a more complete image about how inequality is experienced. This study yielded further evidence that focus, legitimacy, and additionally, competition between resources lead to distinct emotions about inequality. The study was set up in the context of job opportunities for psychologists and social pedagogues. The hypotheses for group-based pride and group-based pity were replicated and there was also the tendency that sympathy was greatest when other disadvantage was described as illegitimate. Moreover, in line with the hypothesis, fear about loosing advantage was greatest when in-group advantage was perceived as illegitimate. Unfortunately, the hypotheses for the emotions moral outrage, disdain, and guilt could not be confirmed. Pride about legitimate advantage of psychologists caused reluctance to share resources with the competing social pedagogues, while sympathy for the illegitimately disadvantaged social pedagogues motivated the endorsement of preferential treatment of this group on the job market. In support of the theoretical distinction between pity and sympathy, pity did not lead psychologist to treat the social pedagogues in a preferential manner, but motivated more paternalistic behavioral tendencies. Fear about loosing one’s advantaged position was only related to inaction.
3.6 Study 5

Currently, there is a vivid discussion among emotion researchers about the role of group-based guilt for inter-group behavior. While some researchers argue that guilt can result in socially desirable outcomes, such as compensation of the disadvantaged in the form of monetary allocation (Doosje et al., 1998) or affirmative action policy support (Branscombe et al., 2004) other researchers see guilt as limited in its explanation of efforts to change inequality between groups (Iyer et al., 2003; Leach et al., 2006).

In the studies presented earlier in this thesis, group-based pride and sympathy were found to be potent motivators for inter-group behavior tendencies; guilt, however, was more passive and did not trigger any behavioral tendency. There may be two reasons for this. Firstly, as pointed out by Steele (1990), guilt, as an in-group-focus emotion, seems to motivate positive behavior towards a disadvantaged out-group only insofar as it provides redemption from the unpleasant guilt feeling. The in-group-focus may constrain relatively advantaged groups to be interested in equal opportunity support for the disadvantage. Instead, members of these groups might focus more on one’s own (group) well-being. Providing compensation may therefore be a form of coping behavior to restore one’s wellbeing - instead of being a sign for interest in improving others’ situation.

Second, as outlined in the introduction, existential guilt was measured (Hoffman, 1976), which is conceptualized as negative affect towards oneself as a consequence of facing illegitimate advantage. In contrast to “actual” guilt, existential guilt is experienced without being responsible for harm done towards others. Nevertheless, it could well be that a sense of responsibility is the missing link to explain behavior tendencies. I would speculate that if guilt is experienced about a wrongdoing, people may be more motivated to compensate for it. If guilt is experienced about an unbalanced relationship, there are more ways to legitimize one’s position. In line with this, a sense of responsibility is also likely to strengthen the intensity of guilt feelings. According to the data presented in this thesis hitherto, existential guilt seems not the right emotion to support equality.

Study 5 aimed at finding the link between group-based guilt and behavior tendencies by manipulating responsibility. It was hypothesized that the appraisals in-group focus, illegitimate advantage, and a sense of responsibility for others disadvantage, trigger feelings of guilt. Under these conditions guilt is expected to motivate behavior tendencies aiming at reparation. According to Leach et al. (2002), in-group focus, legitimate advantage, and high responsibility or perceived control of the means by which the advantaged gained their
position should lead to pride. A test of these hypotheses was undertaken in Study 5. A different advantaged versus disadvantaged group as well as a new inter-group setting was chosen. Concretely, the study was set up in the context of environmental issues and globalization. Written scenarios in form of fake newspaper articles were used in order to establish the inter-group inequality and to manipulate the appraisals, focus, legitimacy, and responsibility. Germany, as a rich and industrialized country was confronted with poorer, developing countries.

3.6.1 Method

Design and Sample

An experimental study with two conditions (IGF legitimate vs. IGF illegitimate) was conducted, whereby in both conditions in-group responsibility was salient. Students of the FSU of Jena were recruited on campus. Participants ($N = 67$, 45% female, age: $M = 21$ yrs., range: 18-29 yrs.) were randomly assigned to one of two conditions and a maximum of 12 participants could take part in one session.

Material and Procedure

Fake newspaper articles (DIE ZEIT, Wissen) were used to manipulate the variables focus, legitimacy, and responsibility. The two fake article versions described the global environmental situation. It was said that – as a rule of thumb – 20% of mankind would produce 80% of all damage caused to the environment. Hence, global inequality was mentioned and in both article versions inequality was framed as in-group advantage. It was emphasized that especially the rich industrialized nations don’t suffer from climate catastrophes as the poor nations do. Legitimacy of in-group advantage was manipulated by telling that Germany is one of the leading nations in environmental protection, supporting the Kyoto-Protocol, and spending millions of Euro on modern technologies to avoid further pollution. Illegitimate in-group advantage was manipulated by telling that nowadays Germany is one of the main polluters and is not interested in changing environmental policies. In addition, it was told that other countries are far more engaged in environmental protection. Responsibility for legitimate in-group advantage was manipulated by stating that the government has worked since years to develop environmental awareness in Germany and that this campaign was fruitful. Examples were given, like the amount of households changing to alternative energy systems with financial support by the German government.
Responsibility for illegitimate in-group advantage was manipulated by stating that political parties in Germany pay just lip service to the ideal of environmental protection, and that Germans rest on this lip service, while they are actually the main users of water and energy resources. Examples were given, such as cars which are being used as status symbols; the indispensable daily shower, and so on.

To intensify the focus manipulation, the sentence completion task (Neumann, 2000) was applied as in the previous studies. Participants were instructed to think of the content of the newspaper article while completing the following sentence “Thinking about the environmental situation, the role of the Germans …”. Then, participants were asked to answer the questionnaire. After returning the questionnaire they were thanked, given a candy bar for compensation and debriefed by the experimenter.

Preliminary analyses: Pre-test

A pre-test should clarify whether the fake newspaper articles would be appropriate for manipulating legitimacy and whether participants would consider the articles as trustworthy. Thirty-one students of the FSU took part in the pre-test and were assigned to either the legitimate or illegitimate condition. One item stated “I think it is legitimate that we in Germany are impaired less by the consequences of environmental pollution than others nations” and could be answered on a 7-point scale, ranging from 1 (I disagree) to 7 (I agree). A one-way ANOVA with legitimacy as independent variable revealed that participants in the legitimate condition ($M = 3.40$) agreed to a larger extent to this items than those in the illegitimate condition ($M = 2.00$), $F(1, 29) = 9.25, p = .005, \eta^2 = .242$.

Because currently, world climate and environmental catastrophes are under public debate, I wanted to check whether participants would believe in the (fake) newspaper articles. One item stated “I trust in the information provided by the article”, ranging from 1 (I disagree) to 7 (I agree). Participants in the two conditions did not differ in the evaluation of the article ($M_{leg} = 5.00, M_{illeg} = 4.50$), $F(1, 29) = 1.17, p = .288$. Generally, participants reported to believe to a high degree in the article, the mean ($M = 4.74$) was significantly above the mid-point of the scale, (on a 7-point scale), $t(30) = 3.20, p = .003$. Given these results, I considered the fake articles as appropriate for the subsequent study.

Relative advantage and identification

The establishment of an inter-group inequality regarding environmental aspects was checked by a single item presented with a 7-point rating scale “Comparing the
environmental situation, we in Germany are better off than people in poor countries” (1 = I don’t agree and 7 = I fully agree). Five items were taken from Cohrs et al. (2004) to measure national identification (e.g., “I like to live in Germany”, α = .79) using a 7-point scale.

**Perceived responsibility**

Two items checked whether a sense of responsibility was recognized, ranging from 1 (I disagree) to 7 (I fully agree): “We in Germany are committed to save our environment and we are conductive to having the benefit of not suffering environmental catastrophes” (responsibility\_benefit) and “Living in an industrial country, I feel responsible for the environmental damage in poorer countries caused by our nation” (responsibility\_damage).

**Emotional reactions**

Immediately after the sentence completion task, participants had to respond to a list of emotion items and to indicate the extent of their momentary emotional state (“When thinking about the described situation I feel…” from 1 = not at all to 9 = very intense). Group-based pride was measured with three items (proud, successful, superior) and further three items captured the emotion guilt (guilty, have a bad conscience, ashamed).

**Behavioral tendencies**

Six behavior tendency items (BT) were listed and could be answered on a 7-point scale ranging from 1 (I disagree) to 7 (I fully agree): (1) I think I should contribute to repair the damage that we Germans have caused in other countries [BT\_repair]. (2) I can imagine volunteering in an environmental protection association [BT\_volunteering]. (3) I would like to donate money to environmental protection associations primarily concerned with environmental protection in Germany [BT\_support\_Germany]. (4) I would like to donate money to environmental protection associations primarily concerned with environmental reconstruction in affected countries [BT\_support\_poor\_country]. (5) Environmental sinners should be punished harsher; companies as well as private persons [BT\_punish]. (6) To compensate for pollution caused by air planes, there is now the opportunity to pay an additional fee on a voluntary level when buying a ticket. This fee is used for compensatory activities. Would you pay such a voluntary fee [BT\_ticket]?
3.6.2 Results

Recognition of relative advantage and identification

Students’ perception of inter-group inequality concerning environmental issues was significantly above the scale mid-point of 4, $M = 5.76$, $t(66) = 11.59$, $p < .001$. A one-factorial ANOVA revealed that recognition of advantage was not influenced by the legitimacy manipulation, $F(1, 65) < 1$. The level of national identification in this study was also significantly above four, the mid-point of the scale, $M = 5.65$, $t(66) = 14.08$, $p < .001$. A one-factorial ANOVA with identification as the dependent variable revealed no reliable differences between the experimental conditions, $F < 1$. Thus, both preconditions, acknowledged advantage and group-identification, were satisfied.

Responsibility perception

Since responsibility was established in relation to legitimacy of advantage, a confound between the variables perceived responsibility and legitimacy was expected. Responsibility for legitimate in-group advantage (responsibility\textsubscript{benefit}) should be higher in the legitimate compared to the illegitimate condition and vice versa for perception of responsibility for illegitimate in-group advantage. The overall mean of responsibility\textsubscript{benefit} did not differ from the mid-point of the scale, $M = 3.72$, $t(66) = -1.51$, $p = .135$. Thus, participants neither fully agreed with, nor did they reject this (rather daring) statement. Moreover and as expected, participants in the legitimate condition agreed to a greater extent to this statement than participants in the illegitimate condition ($M_{\text{leg}} = 4.12$, $M_{\text{illeg}} = 3.32$), $F(1, 65) = 4.78$, $p = .032$, $\eta^2 = .068$.

Concerning the second item, responsibility\textsubscript{damage}, participants overall agreed to this statement ($M = 4.41$); the mean differed significantly from four, the mid-point of the scale, $t(65) = 2.07$, $p = .043$, indicating that participants felt responsible for the environmental damage caused in other countries. Participants in both legitimacy conditions differed only marginally significant in their responsibility agreement, ($M_{\text{leg}} = 4.06$, $M_{\text{illeg}} = 4.74$), $F(1, 65) = 2.98$, $p = .089$, $\eta^2 = .044$.

Group-based emotions

All six emotions items were submitted to a principal-axis Factor Analysis with Oblimin rotation. The factor solution obtained accounted for 61.35 % of the common variance. The first factor was indicated by items measuring guilt and the second was indicated by items measuring pride. The items were put together to scales and showed
satisfying reliabilities: Group-based pride \((\text{proud, successful, superior, } \alpha = .75)\), existential guilt \((\text{guilty, bad consciousness, ashamed, } \alpha = .87)\). Pride and guilt were negatively correlated, \(r = -.358, p = .003\).

**Group-based emotions**

To test the hypotheses for pride and guilt, one-factorial ANCOVAs were conducted with legitimacy as independent factor and the corresponding responsibility item as covariate. Since there was a confound of both variables, the ANCOVA was conducted to control for the impact of responsibility and to test whether legitimacy still had an effect after removing the variance for which the covariate accounts.

**Group-based pride**

In accordance with the pride hypothesis, participants in the legitimate condition reported more intense feelings of group-based pride \((M = 4.14)\) than participants in the illegitimate condition \((M = 2.92)\). The ANCOVA revealed a significant main effect of legitimacy, \(F(1, 64) = 7.69, p = .007, \eta^2 = .107\), as well as a significant effect of responsibility benefit, \(F(1, 64) = 6.87, p = .011, \eta^2 = .097\). Besides, no interaction effect occurred, \(F < 1\).

**Group-based guilt**

In accordance with the guilt hypothesis, participants in the illegitimate condition reported more intense feelings of group-based guilt \((M = 4.25)\) than participants in the legitimate condition \((M = 3.13)\). The main effect of legitimacy remained significant, \(F(1, 65) = 5.34, p = .024, \eta^2 = .077\), while controlling for responsibility damage, \(F(1, 64) = 8.30, p = .005, \eta^2 = .115\). Between legitimacy and responsibility damage no interaction occurred, \(F < 1\).\(^{15}\)

To summarize these findings, group-based pride was stronger in case of legitimate in-group advantage and illegitimate in-group advantage led to feelings of guilt. Moreover, responsibility perception added to these effects. When participants perceived the in-group as responsible for their advantage they reported more pride. On the contrary, when participants perceived the in-group as responsible for others disadvantage, guilt was stronger. Because there were no significant interactions between legitimacy and responsibility neither for pride nor for guilt, it can be concluded that the appraisals had unique effects and should not be treated as moderators.

---

\(^{15}\) I also analyzed the items separately, to account for the distinction between shame and guilt as discussed before. There was no reason to analyze them separately, because the patterns were almost identical.
Behavior Tendencies

To analyze the impact of the manipulation on the behavioral tendencies (BT), a set of one-factorial ANCOVAs were performed with legitimacy as factor and both responsibility items as covariates. Based on the results as depicted in Table 17 it can be concluded that except for BT\textsuperscript{punish}, participants in both legitimacy conditions did not differ in regard to the behavior tendencies. When controlling for responsibility perception, legitimacy had no unique significant effect, all $F$s < 1.2. In the following I therefore describe only the effects of the two responsibility items.

For the first ANCOVA with BT\textsuperscript{repair} as the dependent variable, there was a marginally significant main effect of responsibility\textsubscript{benefit}, $F(1, 63) = 3.68, p = .60, \eta^2 = .055$ and significant effect of responsibility\textsubscript{damage}, $F(1, 63) = 5.11, p = .027, \eta^2 = .075$. Thus, whether participants wanted to repair the damage was strongly affected by the perception that the in-group was responsible for it. For the second ANCOVA with BT\textsuperscript{volunteering} as the dependent variable a marginally significant main effect of responsibility\textsubscript{benefit} emerged, $F(1, 63) = 3.35, p = .072, \eta^2 = .051$, but no effect of responsibility\textsubscript{damage}, $F(1, 63) = 1.64, p = .204, \eta^2 = .025$. Those who perceived the in-group’s advantage as due to efforts of the in-group members were willing to volunteer in an environmental protection association. Third, when BT\textsuperscript{supportGermany} was the dependent variable, a significant main effect of responsibility\textsubscript{benefit}, $F(1, 63) = 4.11, p = .050, \eta^2 = .061$ emerged, but no significant effect of responsibility\textsubscript{damage}, $F < 1$. Likewise, for BT\textsuperscript{supportpoorcountry} as dependent variable, responsibility\textsubscript{benefit} had a significant effect on this behavioral tendency, $F(1, 63) = 5.11, p = .027, \eta^2 = .075$, while responsibility\textsubscript{damage} had no effect, $F(1, 63) = 2.45, p = .281, \eta^2 = .018$. In other words, willingness to donate money to environmental protection associations either in Germany or in poor countries was influenced by the perception that the in-group is responsible for its advantaged situation. Interestingly, responsibility for damage caused in other countries had no effect on this behavioral tendency.

Legitimacy only affected the tendency to punish environmental sinners, BT\textsuperscript{punish}, $F(1, 63) = 17.37, p < .001, \eta^2 = .216$. Those who believed in-group advantage was legitimate agreed less with the idea of punishment of environmental sinners ($M_{\text{leg}} = 5.30$) than those, who believed advantage was illegitimate ($M_{\text{illeg}} = 6.38$). In addition, responsibility\textsubscript{benefit}, $F(1, 63) = 5.98, p = .017, \eta^2 = .087$, as well as responsibility\textsubscript{damage}, $F(1, 63) = 4.77, p = .033, \eta^2 = .070$, had significant effects. The ANCOVA with BT\textsubscript{ticket} as the dependent variable revealed no significant effects; all $F < 1.30$. 
Taken together, an ANCOVA with legitimacy as independent variable and both responsibility perceptions as covariates revealed that responsibility\textsubscript{damage} only affected participants’ willingness for reparation and their agreement to punish environmental sinners. Responsibility\textsubscript{benefit} was associated with financial support of environmental associations in Germany as well as in poor countries, and was also related to the idea of punishing environmental sinners.

Table 17. Means and standard deviations of behavioral tendencies as dependent variables in Study 5.

<table>
<thead>
<tr>
<th></th>
<th>IGF legitimate</th>
<th>IGF illegitimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>BT\textsubscript{repair}</td>
<td>4.39</td>
<td>(1.41)</td>
</tr>
<tr>
<td>BT\textsubscript{volunteering}</td>
<td>4.03</td>
<td>(1.74)</td>
</tr>
<tr>
<td>BT\textsubscript{support Germany}</td>
<td>3.24</td>
<td>(1.73)</td>
</tr>
<tr>
<td>BT\textsubscript{support poor country}</td>
<td>3.45</td>
<td>(1.71)</td>
</tr>
<tr>
<td>For BT\textsubscript{punish}</td>
<td>5.30</td>
<td>(1.42)</td>
</tr>
<tr>
<td>For BT\textsubscript{ticket}</td>
<td>3.73</td>
<td>(1.58)</td>
</tr>
</tbody>
</table>

Note. Higher values indicate higher endorsement of the respective behavioral tendency.

Emotions and behavioral tendencies

Regression analyses were conducted with the behavioral tendency items as criterion and the emotions as predictors. To get a general idea about the relation between the emotions and behavioral tendencies, single regression analyses were conducted. Pride predicted the tendency to donate money to environmental associations located in Germany, BT\textsubscript{support Germany}, $\beta = .295$, $p = .016$, and also to disagree with the idea of punishing environmental sinners who belong to the in-group, BT\textsubscript{punish}, $\beta = -.282$, $p = .021$. In addition, greater pride led to less willingness to pay a fee on a voluntary level when buying a flight ticket, BT\textsubscript{ticket}, $\beta = -.242$, $p = .048$. The other behavioral tendencies were not affected by pride, all $ps > .10$.

Guilt predicted willingness to repair the damage caused by one’s in-group, BT\textsubscript{repair}, $\beta = .341$, $p = .005$. Furthermore, the more guilt participants reported, the more willing they were to volunteer in an environmental association, BT\textsubscript{volunteering}, $\beta = .254$, $p = .038$. Guilt had a marginally significant effect on agreement to punish environmental sinners, BT\textsubscript{punish}, $\beta = .237$, $p = .053$. Likewise, guilt had a marginally significant effect on the participants’ willingness to pay a fee on a voluntary level when buying a flight ticket, BT\textsubscript{ticket}, $\beta = .233$, $p$
Surprisingly, both behavioral tendencies related to donating money were not significantly influenced by feelings of guilt, all ps > .10.

**Mediation Analysis**

Considering the mediating role of the emotions in the previous studies presented in this thesis, mediation analyses were conducted. Since legitimacy had no unique, direct effect on the behavioral tendencies, I wanted to test whether the direct effect between perceived responsibility and the behavior tendencies as reported above was mediated by the emotions. As a consequence, the responsibility manipulation check items were used as predictors. Hence, mediation tests were only conducted for those constellations where a direct effect was observed and in addition, where the expected mediating emotion was related to the behavioral tendency (see above). For each analysis, I applied a multiple mediator model with group-based pride and guilt as potential mediators. The bootstrap method (Preacher & Hayes, 2004) was used to test for significance of the indirect effects.

(1) **Responsibility\textsubscript{damage}**

First - as already shown above - responsibility\textsubscript{damage} was associated with BT\textsubscript{repair}, $\beta = .249, p = .042$. Second, responsibility\textsubscript{damage} led to feelings of guilt, $\beta = .400, p = .001$, but not to feelings of pride, $\beta = -.178, p = .152$. In a next step, when BT\textsubscript{repair} was regressed on all three variables simultaneously, feelings of guilt remained predictive, $\beta = .270, p = .045$, while the relation between responsibility\textsubscript{damage} perception and BT\textsubscript{repair} became non-significant, $\beta = .210, p = .110$. Pride, $\beta = .103$ had no unique effect on BT\textsubscript{repair}, all ps > .10. According to the bootstrap interval, the indirect effect of guilt was reliable (.009 to .319). Thus, the link between the perception that one’s in-group is responsible for environmental damage caused by the in-group and reparation tendencies was fully mediated by feelings of guilt.$^{16}$

---

$^{16}$ Also for the behavioral tendencies I conducted the analyses on single item level for the items shame, guilty, bad conscience and I didn’t find reliable differences in the relation of these items with the behavior tendencies.
(2) Responsibility\textsubscript{benefit} 

This mediation analyses should test whether the association between responsibility\textsubscript{benefit} and financial support of research in Germany, $\beta = .226, p = .031$, was mediated by pride. Regression analyses showed that responsibility\textsubscript{benefit} perception led to greater pride, $\beta = .379, p = .002$, but led to less guilt, $\beta = -.336, p = .005$. When the BT\textsubscript{support Germany} was regressed on all three variables simultaneously, pride still had a significant effect, $\beta = .319, p = .016$. The impact of responsibility\textsubscript{benefit} dropped to non-significance, $\beta = .220, p = .080$. Guilt had no effect on the behavioral measure, $\beta = .131, p = .139$. According to the bootstrap interval, the indirect effect of pride was reliable (.028 to .267). As a result, the relation between the perception of being responsible for the in-group’s advantage in environmental terms and the tendency for financial support of environmental protection associating in Germany was fully mediated by feelings of pride.

3.6.3 Discussion

The study reported here focused mainly on the relation between guilt and responsibility. As an extension of previous studies, Study 5 did not only manipulate focus and legitimacy of in-group advantage, but also responsibility for inequality. Overall, participants were highly identified with the advantaged in-group, people living in Germany, and acknowledged that people in Germany are better off concerning environmental aspects compared to people living in poorer countries. Due to topicality of the subject - climate and environment are very sensitive topics - I was not sure whether participants would agree with and, respectively, believe that people in Germany are advantaged regarding environmental problems because they are so engaged in environmental protection. Social desirability should have led participants to disagree with this statement. In fact, neither did participants strongly agree with the notion of Germans being responsible for their relatively good environmental situation, nor did they disagree. Thus, given the “difficulty” of this item, as well as the reliable difference between the experimental conditions, I assume that the responsibility manipulation worked.

It was hypothesized that a sense of responsibility for the unequal inter-group relation would increase feelings of guilt about illegitimate in-group advantage. Also, it was hypothesized that a sense of responsibility for in-group advantage should trigger group-based pride. Study 5 provided evidence for both hypotheses: Responsibility for others’ disadvantage and focus on illegitimate in-group advantage evoked feelings of guilt, while responsibility for legitimate in-group advantage evoked group-based pride. There was no interaction between these appraisals, responsibility added to the effect of legitimacy and
focus; legitimacy, focus, and responsibility formed specific appraisal patterns that triggered either pride or guilt.

A major aim of this study was to test whether guilt would motivate inter-group behavior if one’s in-group would be responsible for harm done to others. More precisely, in this study it was said that people in Germany cause environmental pollution that people in other, especially poorer countries, have to suffer. Perceiving the in-group as being responsible for others suffering led to participants’ willingness to engage in action. This effect was mediated by heightened feelings of guilt. The greater participants’ guilt, the greater was their willingness to repair the damage that the in-group caused in other countries. This is generally in accordance with research showing that group-based guilt arises from the concern that one's own group is responsible for the harm done to another group and that group-based guilt predicts support for restitution of this wrongdoing, such as apology (e.g., McGarty et al., 2005). Study 5 was the only of the studies presented in this thesis in which experimentally induced feelings of guilt motivated behavior tendencies. It was also found that the effect of responsibility for in-group advantage on behavior tendencies supporting the in-groups standing was driven by feelings of pride about in-group advantage. However, one should bear in mind that the predictor, perceived responsibility was measured and thus, a causal interpretation of these effects is not allowed.

Generally, however, guilt rather than pride resulted in behavioral intentions. This is insofar surprising in that group-based pride motivated in-group favoring behavior in the previous studies and seemed to be a potent factor when it comes to inter-group behavior. One explanation leads to a material error: there were additional behavioral tendency items, also more in-group favoring items in the questionnaire. Participants were asked to answer these items in a forced choice manner, with agreement to one item should lead to a specific other item. Apparently, the instruction was not clear enough, because almost half of the sample did not follow the instruction. Hence, I could not analyze these items. In other words, items reflecting real in-group favoritism were missing. The question remains, however, whether it is possible to behave in an in-group favoring manner in terms of environmental issues. In the end, everybody has to suffer from the consequences. Therefore, the context in which this study was set up was appropriate to study group-based guilt, but probably less adequate to investigate group-based pride and subsequent behavior.

A further limitation of Study 5 was that the legitimacy manipulation did not contribute to the explanation of behavior tendencies. But, legitimacy of inter-group inequality led to different group-based emotions, and according to the manipulation check,
the manipulation was successful. Thus, responsibility perception may have overridden legitimacy in regard to behavior tendencies.

Taken together, Study 5 replicated the effects of focus and legitimacy and extended the previous studies by providing evidence for responsibility as a further meaningful appraisal for pride and guilt about in-group advantage. Compared to the previous studies presented in this thesis, actual guilt instead of existential guilt was manipulated and measured. Study 5 confirmed the assumption that perceived responsibility for harm done to others by one’s group is linked to reparation tendencies. Moreover, it was demonstrated that this effect was mediated by feelings of guilt. By contrast, responsibility for in-group advantage was linked to behavioral tendencies that aimed at maintaining the advantage situation. This effect was carried by feelings of pride.
4 General Discussion

4.1 Overview of the presented studies

The present work investigated how inequality is experienced in terms of emotions by those who benefit from it. So far, only few studies examined the phenomenon of relative advantage (e.g., Montada & Schneider, 1989; Leach, Iyer, & Pedersen, 2007). Especially a theoretical elaboration of the concept is lacking. In bringing together research on Relative Deprivation Theory (e.g., Smith & Kessler, 2004), Social Identity Theory (Tajfel & Turner, 1979), and Theory of Group-Based Emotions (Smith, 1993; 1999), it has been reasoned that there are different ways how the relative advantaged experience inequality in terms of emotions. Moreover, concerning these theories, I have argued that emotions, rather than just cognitive or motivational determinants (cf. SIT, Tajfel & Turner, 1979), may play a fundamental role for how the advantaged might act in relation to the inter-group inequality, especially for social change. As a consequence, not only the relative deprived may instigate social change, but also the relative advantaged, when stimulated by their emotions. Furthermore, research hitherto focused mainly on negative inter-group emotions as explanations of negative inter-group behavior, while there are only few studies dealing with positive inter-group emotions. This thesis aimed at investigating negative as well as positive group-based emotions and their impact on inter-group relations.

Based on a typology of downward comparison (Leach et al., 2002), it was possible to investigate relative advantage systematically. As argued by these authors, four appraisal dimensions are of particular importance to learn how individuals feel about inter-group inequality. Two of these proposed dimensions, focus and legitimacy, were chosen for the presented studies. This thesis enlarged previous research by combining appraisal dimensions to investigate specific features of emotional experiences of relative advantage. A combination of both appraisals was assumed to determine the conditions under which members of advantaged groups will feel pride, guilt, pity, and sympathy about inter-group inequality. Pride was hypothesized to be especially intense when in-group advantage was described as legitimate, whereas existential guilt was hypothesized to be especially intense when in-group advantage was described as illegitimate. Pity was hypothesized to be especially intense when out-group disadvantage was described as legitimate, whereas sympathy was hypothesized to be especially intense when out-group disadvantage was described as legitimate. Besides testing these hypotheses as the first objective, this thesis also aimed at exploring more negative emotions as reactions to inequality, such as fear.
about losing status and disdain about the disadvantaged.

Moreover, I wanted to show that these emotions would motivate different inter-group behavior, either affirming or challenging inequality. Pride was expected to trigger in-group favoring behavior, guilt was expected to trigger compensatory behavioral tendencies, and pity was expected to trigger paternalistic tendencies, whereas sympathy was expected to trigger support of the disadvantaged, challenging inequality.

In more technical terms, inequality between two groups was established by constructing a particular social comparison situation with one group being relatively advantaged compared to another group. Furthermore, the appraisals of the situations were manipulated. Five studies were conducted to test the hypotheses. Since the effects of emotions in experimental research are often relatively small, similar paradigms were used throughout this thesis to replicate the expected effect over several studies. In the following, I will give an overview of the main findings.

Study 1 was set up to provide first evidence that the relative advantaged experience different emotions about inter-group inequality, given they recognize their structural advantage (Leach et al., 2002). Relative advantage was established by making the advantaged job situation of psychology students’ salient, compared to the disadvantaged job situation of social pedagogy students. The appraisals focus and legitimacy were manipulated. As predicted, when the in-group's advantage was framed in a self-focused way and made legitimate, participants experienced more pride; when the in-group's advantage was framed in a self-focused way and made illegitimate more guilt was experienced. Pity was increased when the others’ disadvantage was salient and legitimate, while sympathy was greatest when the others’ disadvantage was salient and illegitimate. Furthermore, Study 1 delivered first insights into the emotion behavior link. The more sympathy for the disadvantaged out-group was experienced, the less in-group favoring behavior was shown. Pride was found to mediate the association between perception of legitimate in-group advantage and in-group favoring behavioral tendencies in a resource distribution task. Pity and guilt did not predict behavioral tendencies.

Study 2 was conducted as a response to Study 1, in which pity and sympathy were highly correlated and aimed at investigating the nature of pity versus sympathy. In a first step, a pilot study identified specific behavior tendencies corresponding either to pity or to sympathy. In a second step, out-group focus was salient for all participants and legitimacy of the out-groups’ disadvantage was manipulated. Students of the FSU were told that they were relatively advantaged compared with young ethnic German immigrants living in Jena.
Overview of the presented studies

in regard to sport opportunities. As expected, sympathy was most intense when the out-groups’ disadvantage was illegitimate. Contrary to the expectation, also pity was greater when the out-groups’ disadvantage was perceived as illegitimate compared to being perceived as legitimate. Participants were asked whether they would agree to the participation of young ethnic German immigrants in university sport courses. Interestingly, while feelings of sympathy triggered out-group support and willingness to let ethnic German immigrants participate, feelings of pity motivated the advantaged to vote against sharing resources with the disadvantaged. Thus, even though pity appears as a synonym for sympathy or vice versa on the semantic level, both emotions resulted in contrary behavioral tendencies. Overall, the results for sympathy were in line with the predictions, whereas the nature of pity remained unclear. Therefore, pity was excluded from the next study.

The main aim of Study 3 was to replicate the effects of focus and legitimacy on the emotions pride, existential guilt, and sympathy, using the same inter-group context as in Study 2. Unlike the previous studies, the focus of attention was manipulated via direct instruction and intensified with the sentence completion task (Neumann, 2000). Legitimacy was manipulated with the same material as in Study 2. Moreover, several behavioral measures specific to the inter-group context were applied. Study 3 provided further support for the hypothesis that focus and legitimacy are appraisals of an unequal status relation that trigger different emotions about social inequality. Legitimate in-group advantage strengthened feelings of pride about this advantage, and pride activated the tendency to refuse opening university sport courses for ethnic German immigrants. Illegitimate out-group advantage triggered feelings of sympathy for ethnic German immigrants and sympathy, in turn, led students to agree to share the university sport courses with the ethnic German immigrants. In line with the prediction, guilt was most intense when illegitimate in-group advantage was salient. However, as in Study 1, guilt was not related to any behavioral tendencies.

Study 1 and Study 3 provide evidence for the hypotheses that the emotional experiences of inequality, especially the emotions pride, existential guilt, and sympathy, occur as a function of focus of attention and legitimacy of the status relation. Study 4 extended the scope by adding a further dimension; that is negative interdependence (Sherif, 1967) between two groups. This was done in order to cover a more complete picture of relative advantage. Fiske and Ruscher (1993) suggested negative interdependence triggering negative affect. By establishing negative interdependence, the inter-group relation was assumed to appear more unstable. Based on the typology of downward comparison (Leach
et al., 2002), stability was added as a supplementary dimension to focus and legitimacy. As a consequence, specific hypotheses for the emotions fear of loosing advantage, disdain, and moral outrage could be tested. Because the cover story regarding relative advantage for psychologists on the job market worked well in the first study, Study 4 was set up in the same context. Firstly, except for guilt, the results for the emotions already investigated in the previous studies, namely pride, pity, and sympathy, were replicated and the hypotheses largely confirmed. Moreover, Study 4 provided evidence for the fear hypotheses. Fear of loosing privilege was especially intense when in-group advantage was perceived as illegitimate and unstable. The results for moral outrage were also in the expected direction, but not reliable; moral outrage was greatest when others disadvantage was perceived as illegitimate and unstable. Regarding disdain, however, the results did not support the hypothesis. Contrary to the expectation, disdain was strongest when in-group advantage was perceived as illegitimate. Second, the relationship between the emotions and inter-group behavior was examined. As in Study 1 and Study 3, pride and sympathy fully mediated the link between perceptions of inequality with inter-group behavior tendencies: the greater pride about in-group advantage was, the less willing psychologists were to share resources with social pedagogues. By contrast, the greater sympathy for the disadvantaged was, the more did the advantaged agree to treat social pedagogues on the job market in a preferential way. Some of the other emotions showed simple associations to behavioral tendencies. Pity motivated paternalistic behavioral tendencies targeted toward the disadvantaged, moral outrage affected psychologists’ willingness for preferential treatment of social pedagogues and was negatively related to refusal to share resources. Disdain was positively associated with reluctance to share resources with social pedagogues and negatively with positive inter-group behavior. Fear about loosing status was only negatively related to the statement that psychologists should wait and see what will happen on the job market. When controlling for all emotions in the analyses, only pride and sympathy remained as significant predictors of behavior tendencies.

Finally, Study 5 focused on guilt and sought to find explanations why guilt, contrary to findings in the literature (Doosje et al., 1998; Branscombe et al., 2004), was not related to any behavioral tendencies in Study 1, 3, and 4. Existential guilt, in contrast to actual guilt, is experienced without being responsible for harm done towards others. It was assumed that a sense of responsibility is needed to trigger behavior. I speculated that guilt experienced about a wrongdoing would motivate compensatory behavior tendencies. To test this idea, responsibility was manipulated in addition to legitimacy. Inequality was framed for all
participants as in-group advantage, using a new inter-group setting. The study was set up in the context of environmental issues and globalization. German inhabitants were said to be relatively advantaged concerning environmental issues compared to people living in poorer, developing countries. Responsibility was introduced as the in-group being responsible for in-group advantage, as well as the in-group being responsible for causing environmental problems for others. Study 5 provided evidence for the main emotion hypotheses: Responsibility for legitimate in-group advantage evoked group-based pride, whereas in-group responsibility for harm done to an out-group and focus on illegitimate in-group advantage evoked feelings of guilt. Pride was associated with behavioral tendencies aiming at support of environmental associations located in Germany, with disagreement of the idea of punishing environmental sinners belonging to the in-group, and with less willingness to pay an environmental fee voluntarily when buying a flight ticket. In addition, the effect of responsibility for ingroup-advantage on in-group supporting tendencies was carried by feelings of pride. As the key finding in this study, guilt motivated behavioral tendencies. Guilt predicted the willingness to repair the damage caused by one’s in-group, to volunteer in an environmental association, and to punish environmental sinners. Moreover, the effect of perceived responsibility for harm done to others by one’s in-group on reparation tendencies was mediated by feelings of guilt. Thus, this study provided evidence that a sense of responsibility matters when it comes to guilt motivated reparation tendencies.

4.2 Emotional experience of inequality

4.2.1 Pride

So far, the direct measurement of group-based pride has scarcely received attention in inter-group research. In the emotion literature, pride (on an inter-individual level) is understood as a pleasant and ego-focused feeling that is gained through successful comparison with others, attributed to ones legitimate superiority (Weiner, 1985; Zammuner, 1996). Thus, in this thesis, it was hypothesized that group-based pride is stronger when those benefiting from inequality focus on the in-group’s legitimate advantage, compared to focusing on illegitimate advantage or legitimate or illegitimate out-group disadvantage. All studies that manipulated and measured pride (Study 1, 3, 4, and 5) concordantly provided evidence for this hypothesis; pride was especially pronounced when in-group-focus was salient and when the in-groups’ advantage was perceived as legitimate. An exception was Study 3, where the empirical support of this hypothesis was relatively weak. The statistical significance test revealed the empirical pride pattern as not reliable. On a descriptive level,
however, the empirical pattern matched the expected one. As discussed above, this may be due to a material error, since the operationalization of relative advantage in Study 3 lacked a sense of achievement, which is known as an important antecedent of pride (Rodriguez Mosquera et al., 2000). To demonstrate this, in Study 1, participants were told that they are advantaged on the job market. Legitimacy of status relation was due to quality of education, which is likely to be associated with accomplishment. Study 4 was set up in almost the same context. Study 5 was established in the context of global environmental issues and did not only manipulate focus and legitimacy, but also responsibility of in-group advantage. More concretely, in-group advantage was attributed to the in-groups’ efforts in the environmental sector. In short, quality of education and environmental protection both include the notion of achievement. Study 3, on the contrary, used the university sports context. Being advantaged regarding sport opportunities may less likely lead to pride than being advantaged in regard to job opportunities. Of course, one could have reasoned that students needed to achieve something to visit the university and therefore being allowed to benefit from its attractions such as university sports, but this was apparently less obvious. Thus, the operationalization in Study 3 contained a flaw that hampered pride.

This discussion may also hint at a potential relationship between achievement and responsibility of in-group advantage and may arouse suspicion whether the material used in Study 1 and 2 produced a sense of responsibility for in-group advantage in the legitimate condition. Unfortunately, I did not check for perceived responsibility in the first studies. In Study 4, however, this control item was added in the questionnaire. As mentioned in the footnote in the result section, responsibility and legitimacy were independent from another. Likewise, pride and perceived responsibility did not correlate, \( p > .10 \). Since the manipulation material in Study 4 was almost identical with the material used in Study 1, it is assumed that the manipulation of legitimacy did not affect the responsibility perception in Study 1.

A second major aim of this thesis was to investigate the emotion behavior link in regard to inter-group inequality. One of the strongest findings throughout this thesis was the effect of pride on the behavioral intentions of the members of the relative advantaged groups. The stronger pride was, the stronger were in-group favoring tendencies. More precisely, pride led participants to allocate more resources to their in-group (Study 1), led participants to exclude members of the disadvantaged out-group from common activities, led participants to refuse investment in favor of the disadvantaged out-group (Study 3), motivated reluctance to share authorizations in terms of work (Study 4), and led to support
of the in-groups’ standing concerning environmental aspects (Study 5). Albeit the in- 
groups’ privileged and good position and the possibility to show a kind of generous 
behavior towards the disadvantaged others, prideful group members were consistently 
unsupportive of efforts to challenge inequality.

Previous studies in inter-group research have shown that in-group favoritism is 
especially pronounced for those who perceive their in-groups’ advantage as legitimate 
(Bettencourt et al., 2001). The studies reported in this thesis provided strong support for 
pride as one psychological process underlying this effect. Thus far, in the inter-group 
literature, self-esteem has been discussed as a possible underlying cause for in-group 
favoritism. The so called Self-Esteem Hypothesis (e.g., Abrams & Hogg, 1988; Rubin & 
Hewstone, 1998) consists of two parts: First, it is proposed that successful inter-group 
discrimination enhances social identity and thus, self-esteem. Second, threatened self-
estee m should promote inter-group discrimination. In their review on the Self-Esteem 
Hypothesis, Rubin and Hewstone (1998) found support for the first part of the hypothesis. 
However, according to these authors, the review of the literature did not support the idea of 
inter-group discrimination being motivated by a need for self-esteem. Thus, findings were 
contrary to the motivational explanation as suggested by Social Identity Theory (Tajfel & 
Turner, 1986). One explanation was that there are different types of self-esteem, but that 
many studies failed to account for these dimensions. Another criticism was that diverse 
scales have been used to measure self-esteem in these studies. In addition, I argue that 
situation variables, such as legitimacy, have not been taken into account. By definition, 
collective self-esteem denotes aspects of identity that have to do with membership in social 
groups and the affective value placed on that group (Luhtanen & Crocker, 1992). Thus, 
collective self-esteem and group-based pride seem to be akin. Pride, however, is much more 
specific to the situation of one’s group than collective self-esteem. Pride is felt because the 
focus lies at one’s legitimate group advantage. As emphasized and proven throughout this 
work, specific emotions allow for more precise predictions of inter-group behavior, since 
they include how the social situation is evaluated.

Previous research mainly focused on negative emotions as explanations of negative 
inter-group behavior. Especially group-based anger is the emotion that researchers 
conceptualize and empirically found to be associated with aggressive inter-group behavior 
(e.g., Mackie et al., 2000; Yzerbyt et al., 2003). Interestingly, group-based pride is described 
as an emotion with positive valence, a pleasurable feeling for those who experience it. Pride, 
as a positive emotion, resulted in positive behavior towards the in-group, but had negative
consequences for an out-group. Maybe people are not aware of the negative consequences for the out-group, since the focus is directed toward the in-group. As a matter of conjecture, pride as a positive emotion may evoke positive behavior and focus determines who benefits from it. Rather than measuring negative or positive valence, specific emotions and aspects about the social situation should be asked for in future research. The object as well as the target of the emotion in the social context seems to be meaningful for predictions of inter-group behavior.

4.2.2 Existential guilt

While hardly any published study measured group-based pride, research on group-based guilt boomed over the last decades (Branscombe et al., 2003; Doosje et al., 1998; Iyer et al., 2003; Leach et al., 2006; McGarty et al., 2005; Powell et al., 2005; Steele, 1990; Swim & Miller, 1999). In contrast to most of these studies, however, this thesis was mainly concerned with existential guilt (cf., Hoffman, 1976; Schmitt et al., 2000), which is based purely on one’s existence within a group that has illegitimate advantages. Hence, existential guilt, as manipulated and measured in Study 1, 3, and 4, does not include the individual or the in-group being responsible for wrongdoings towards others. By contrast, Study 5 explicitly investigated the role of responsibility in guilt.

Although previous research has examined the role of legitimacy or self-focus on group-based guilt, no prior research has examined their combination. It was hypothesized that existential guilt would be most intense when in-group advantage was salient and described as illegitimate. The empirical evidence for this hypothesis was mixed. Study 1 confirmed this prediction, yet, the combined orthogonal contrast was also significant, indicating, that the predicted pattern was not the most parsimonious one. Study 3 provided strong support for the guilt hypothesis, whereas Study 4 did not. Study 4 differed from the other studies, because a negative interdependence between the advantaged and disadvantaged group was made salient, and as a consequence, the stability perception of the inter-group situation was affected. To explain why Study 4 failed to provide evidence for the guilt hypothesis, I would like to point out that (only) in this study, the experimental manipulation of focus and legitimacy had an effect on participants’ evaluation of their status compared to a disadvantaged out-group. Especially those in the unstable, illegitimate in-group advantage condition rated their in-group’ advantage as lower than participants in the other conditions; the difference between conditions amounted about one standard deviation. Moreover, the mean in this specific condition ($M = 4.26$) did not differ from the midpoint of
the scale, $t(30) < 1, p = 4.28$. Apparently, these group members did not recognize their structural advantage compared to the other group, and hence, why should they experience existential guilt. It seems as if the precondition, acknowledgement of relative advantage, was not successfully established for all participants in the same way. This can either be due to an error of the material or to the situation itself. As argued above, especially the combination of unstable, illegitimate advantage frames the status relation as highly insecure (Tajfel & Turner, 1979). As a consequence, this may add to the fact that the advantaged generally tend to downplay their advantage; it may be especially pronounced in situations of insecurity, where in-group advantage is less obvious. Moreover, this result gives reason to question the idea of instability as a typical appraisal leading to feelings of guilt (Leach et al., 2002), in particular, of existential guilt. Rather, one could speculate whether it is the stability of the relative advantage that causes feelings of existential guilt. Hence, the role of stability for guilt is a possible target for future research. To my knowledge, this has so far not been investigated empirically.

The importance of guilt for inter-group behavior is controversial. Guilt’s beneficial consequences for inter-group relations are emphasized by some researchers (Doosje et al., 1998; Lickel, Schmader, Curtis, Scarnier, & Ames, 2005), showing that guilt motivates people to repair wrongdoings. Other researchers are more doubtful and argue that guilt is limited in its explanation of efforts to change inequality between groups and predicts more abstract goals of compensation to the disadvantaged group. To illustrate this, collective guilt has been found to predict support of compensatory affirmative action policies but did not lead to support of equal opportunity policies (e.g., Iyer et al., 2003). Of course, financial compensation is not negative for the disadvantaged in the first place, but it is not the same as providing the opportunity to equal chances. The disadvantaged are fobbed off with money, but do not get what they really want. Hence, guilt seems not the appropriate emotion to challenge the unequal inter-group structure. As outlined above, guilt is probably too self-focused and thus, motivates positive behavior towards the disadvantaged only insofar as it provides redemption from the unpleasant guilt feeling (cf Steele, 1990). In this thesis, existential guilt, as measured in Study 1, 3, and 4, did not predict any behavioral tendency. In general, there was a tendency that existential guilt was positively related to paternalistic behavioral tendencies and negatively to reluctance to share resources (Study 4), but these findings were far from statistical significance. In Study 2a, that pilot-tested the emotion behavior link, guilt was associated with financial compensation of the disadvantaged, as

---

17 The means of the other three conditions were significantly above the mid-point of the scale.
Emotional experience of inequality

well as with in-group focused behavioral tendencies, such as punishment of in-group members misusing their advantage. This is in line with the argument of guilt as a self-focused emotion, as mentioned above. As such, the behavioral tendencies are primarily concerned with the in-group. Probably, the negative valence in guilt triggers negative behavior, such as punishment, aiming at the in-group when in-group focus is salient. In Study 5, in-group responsibility for harm done to another group was manipulated to test whether guilt about this wrongdoing would trigger compensatory behavioral tendencies. In fact, perceiving the in-group as responsible for others suffering led to willingness to engage in action. More precisely, the greater the participants’ guilt, the greater their willingness to repair the damage that the in-group caused in other countries. Hence, this fifth study showed that the effect of responsibility perception on compensatory behavior was mediated by feelings of guilt. This replicates a similar process reported in the literature, in which the relation between negative behavior of one’s in-group toward another group and compensatory behavior was mediated by guilt (e.g., Doosje et al., 1998).

In some studies presented in the literature, a sense of responsibility was already included in the guilt items itself, such as my in-group should feel guilty about the negative things done to the out-group. In these cases, group-based guilt has been found to be a predictor of behavior (e.g., McGarty et al., 2005). Recently, Mallett and Swim (2007) conducted a correlation study that pointed out that responsibility, justification, and inequality are each unique and significant predictors of group-based guilt. In my view, when in-group responsibility for harm done to an out-group is salient, the out-group comes to the fore, because this situation per se involves an inter-group interaction. In other words, this type of responsibility is not only in-group focused, but brings the out-group into play. Considering these issues, future research should be more precise in describing what kind of guilt is measured and what kind of appraisals and social situations are involved, because these aspects may determine whether and how guilt is related to inter-group behavior.

4.2.3 Sympathy versus Pity

Until now, research on group-based sympathy is rare (except for Iyer et al., 2003). Moreover, the terms sympathy, pity, and even empathy are often used synonymously (Batson et al., 1997). In this thesis, sympathy is understood as a specific emotional response based on an out-group focus, as a feeling with others and as an inclination to put them out of their disadvantaged situation. All four studies (Study 1, 2, 3, and 4) measuring group-based sympathy provided strong support for the hypothesis that sympathy is especially strong when perceiving the out-group’s disadvantage as illegitimate. Weakest empirical support
came from Study 4, in which negative interdependence between psychologists and social pedagogues was salient. Leach and his colleagues (2002) stated that the role of stability in sympathy is not very clear. They discussed the role of stability for the behavioral consequences of sympathy, but not as a sympathy antecedent. Generally, they argue that a stable inequality would be less likely to motivate the advantaged to support the disadvantaged, because they would not see the possibility for change. Thus, sympathy may not lead to out-group support. If the disadvantaged, however, would start to take matters in their hands and try to change the situation, the advantaged are likely to support them. As can be seen from their typology (Leach et al., 2002), sympathy is expected under the conditions of illegitimate, stable out-group disadvantage. Hence, an explanation of the somewhat weak sympathy pattern in Study 4 may be due to the manipulation of the inter-group situation as unstable.

Because sympathy correlated highly with pity in Study 1, Study 2 was conducted to analyze the nature of both group-based emotions. Pity is understood as a feeling of sorrow for the misfortunes of others. In comparison with sympathy, Fiske described pity as “combining sympathy with derogation” (Fiske et al., 2003, p. 247). Similarly, in this thesis, pity is seen as a paternalistic emotion towards inferior groups. Overall, the results for pity were much more inconsistent than the results for sympathy. Firstly, in Study 1, the results were in accordance with the hypothesis. Pity was most intense when the others disadvantage was described as legitimate, but there was additional systematic deviation beyond the expected pattern. Then, in Study 2b, using the forced choice paradigm, more people in the legitimate compared to the illegitimate condition tended to mark pity, whereas more people in the illegitimate compared to the legitimate condition tended to mark sympathy. Yet, these tendencies were not significant. Moreover, contrary to the hypothesis, pity as measured with the semantic emotion scale, was stronger in case of illegitimate disadvantage. Finally, in Study 4, the result was very similar to that of the first study, with a significant focal pity contrast, but also significant residual variance.

Study 2a identified behavior tendencies regarded as typical responses to the emotions pity and sympathy. The items, which participants regard as typical for pity, had a paternalistic touch, implying a status difference, with the disadvantaged being inferior and in need of money or advice. On the contrary, the items which participants thought of as typical for sympathy aimed at helping the disadvantaged to put them out of the poor situation. Using an experimental setting, Study 2b replicated these associations between sympathy and specific behavioral tendencies and between pity and behavioral tendencies.
Although both emotions have been rated as similar on a semantic level, they triggered different and even contrary behavioral tendencies. At this point, I come back to the beginning of this thesis, where some theoretical approaches to emotion research have been mentioned. Probably the difficulty with sympathy and pity are associated with Russell’s (e.g., Russell, 2003) theorizing about the use of language in emotion research. He stated that semantic differences can correspond not to emotional differences, but to differences in lay people’s understanding of language and their beliefs about what emotions are. In the same way, emotion words that share semantic similarities like Mitgefühl (sympathy) and Mitleid (pity) and which, in addition, share further aspects, for instance a focus on suffering others, may be used by lay people in the same way. The underlying emotional states, however, may differ. That’s why in all studies presented, behavioral tendency measures have been used in addition to semantic emotion scales. The more indices of emotions are measured, the closer one may come to the emotion itself. With regard to this thesis, whether others’ disadvantage is perceived as legitimate or illegitimate triggers different emotional reactions that are reflected in behavioral motivations towards the disadvantaged.

As one of the strongest findings throughout this thesis, sympathy was related to positive inter-group behavior. More precisely, sympathy motivated support of the disadvantaged, not only in terms of compensatory behavior, but also in terms of support of preferential treatment of the disadvantaged. Similar results have been found earlier: Montada and Schneider (1989) showed that Germans who sympathized with foreign workers tended to support prosocial activities; Iyer (Iyer et al., 2003) demonstrated that sympathy predicts different affirmative action policies, and recently, Verkuyten showed that participants who sympathize with asylum seekers in the Netherlands strongly supported immigrant policies (Verkuyten, 2004). In contrast to the experimental studies in this thesis, these studies were either correlative or quasi-experimental. Furthermore, in the studies presented in this thesis it turned out that sympathy was a key mediator of the effects of the perception of others’ unfair disadvantage on supportive behavioral tendencies. Framing the situation in terms of illegitimate out-group disadvantage triggered sympathy. The more intense sympathy was, the more were students willing to let ethnic German immigrants take part in university sports (Study 3). Likewise, the more psychology students sympathized with disadvantaged social pedagogues, the more did they agree to treat them in a preferential way on the job market (Study 4). In Study 1, where a resource distribution task was applied as behavioral measure, the sympathy behavior link was less pronounced. It was superposed by a general in-group favoring tendency. The more sympathy was felt toward
the disadvantaged social pedagogues, the less in-group favoring behavior in terms of resource allocation occurred.

The behavioral tendencies following pity throughout this work share paternalistic aspects. Pity was not related to the resource distribution task in Study 1. Study 2 revealed pity as motivating monetary donations and advice to disadvantaged others as of how to improve their situation. In Study 4, pity predicted paternalistic behavioral tendencies, such as financial support and willingness to inform potential employers about the improved education of social pedagogues. In other words, the advantaged condescended to the disadvantaged, they intended to be paternalistic, but they did not tend to challenge the inequality. In a way, this type of behavior is sensible and I do not think that the advantaged acted in bad faith. If legitimate reasons for disadvantage exist, such as poor education, then the disadvantaged have to improve and take matters in their own hands. The advantaged can not do this for them. In my view, the critical point is the evaluation of legitimacy. Who decides what is legitimate and what is not? That, however, is another story.

4.3 The role of identification

This thesis did not attach great importance to identification. Nevertheless, group identification is a key factor for group-based emotions to occur (Smith, 1993, 1999). All over, preference was given to manipulating the salience of meaningful social identities and not to experimental group identities. It was assumed that socially meaningful identities would enhance the intensity of the emotions and would allow for the observation of behavioral tendencies closely related to real behavior. I evaluate this as important since it is known that generally, a rather broad discrepancy between intention to act and real behavior is found (e.g., Ajzen, 1991). In all studies, a social comparison situation was established, making social inequality salient. Participants always belonged to the social group that was advantaged compared to the other group. They were asked whether they identify with this group to ensure that the precondition for group-based emotions was fulfilled. Generally, identification with the chosen in-group was high.

One drawback of using natural social groups is that knowledge about the groups may exist, which is difficult to control for. In addition, as Ellemers and colleagues pointed out (1993), the status of natural groups is not only the result of a comparison on a single dimension, but the result of a complex comparison process including several dimensions. Being aware of this problem, comparison situations were established that were uncommon for the participants so that they mainly had to rely on the information given by the
Another point that has to be mentioned refers to identification as a moderator of group-based emotions. In an often-cited study, Doosje and colleagues (1998) found that Dutch people who were highly identified with their in-group expressed the least group-based guilt when the history of Dutch colonial occupation was presented in an ambiguous manner. Low identifiers acknowledged the negative aspects and felt more guilt. Since this study was published, it has been cited by almost 100 other papers on group-based emotions (according to EBSCO research database). However, to my knowledge, no published study has replicated the effect of identification on guilt or other emotions. Nevertheless, knowing about the potential impact of identification, I checked whether the results in this thesis were moderated by identification with the in-group. Generally, there were two possibilities: Either the effect from the experimental manipulation on the emotion could have depended on identification; hence, moderation in the sense of intensifying the group-based emotion or secondly, the effect of the mediator on the behavioral tendency could have been moderated by identification. Generally, no consistent or reliable moderation effects were found over all studies. As a single result, in some studies, identification and pride correlated positively. As Kessler and Hollbach (2005) demonstrated, there are two likely mechanisms for this association. Identification may either influence the intensity of the group-based emotion, or the experienced emotion may determine changes in identification. As a consequence, I can make no precise statement about the direction of this effect for the presented studies. However, it is interesting that only pride was associated with identification, whereas the other emotions - generally - were not. Taking this further, one could speculate about pride as a form of affective in-group identification (e.g., Jackson, 2002). But this may be a target of future research.
4.4 Conclusion

While writing this thesis, I was confronted with the lack of theoretical work on the phenomenon of relative advantage. As outlined in the theoretical chapter and in contrast to the well elaborated concept of relative deprivation, the two research groups that dealt with relative advantage so far, Montada and colleagues (Montada & Schneider, 1989; Schmitt et al., 2000) versus Guimond and colleagues (Guimond & Dambrun, 2002; Dambrun et al., 2006) have dissimilar approaches and conceptualizations of the concept. In addition, very few studies can be singled out that investigated specific forms of relative advantage, such as race (Steele, 1990; Swim & Miller, 1999) or gender privilege (Miron et al., 2006). Therefore, the typology offered by Leach and his colleagues (2002) is of great value, because it provides a useful integration of different areas of research and a testable model of how inequality is experienced by the relative advantaged. Yet, open questions remain and new questions emerged. What are the conditions or mechanisms responsible for making the advantaged a) taking their good standing as granted, b) minimizing their advantage, and finally c) acknowledging it? Leach and colleagues wrote that “recognition of advantage is typically based in a downward comparison with the unfortunate” (Leach et al. 2002, p. 140). How does this downward comparison happen? Generally, we do not know much about spontaneous group comparisons; in particular, there is little research on comparison choice on part of the advantaged. Wills (1981) explanation of downward comparison as self-enhancing strategy delivers no satisfying answer for this question.

Similarly, the typical strategies that explain how people deal with inequality, namely individual mobility, social creativity, and social competition, according to Social Identity Theory (Tajfel & Turner, 1979), mainly apply to low status groups and are not directly transferable to high status or relatively advantaged groups. What are typical strategies for high status groups in view of inequality? The Social Identity Approach does not specify or discuss this issue. Yet, in view of growing social disparity, it seems important to learn how the structural advantaged deal with this situation.

As a general strategy, the advantaged tend to legitimize their status. This is known from Social Dominance Theory (Sidanius & Pratto, 1999), as well as from System Justification Theory (Jost & Banaji, 1994). Both theories suggest that ideologies and stereotypes legitimate the social hierarchy. In a similar vein, in Study 1 and in Study 4, participants in the in-group advantage condition evaluated inequality as more legitimate than those in the out-group disadvantage condition. There was an interaction of the
independent variables, focus and legitimacy. Of course, the non-orthogonality of the independent variables is a limitation of these studies, because the interpretation of the effects is restricted. Focus of attention seems to explain already parts of the legitimacy perception. Nevertheless, it is also an interesting result inherently by itself. It points out peoples’ status legitimizing tendency when focusing on one’s privileged situation; or, vice versa, that out-group focus, similar to perspective taking, can reduce the self-serving bias in fairness evaluations (Drolet, Larrick, & Morris, 1998).

In addition, this raises the question about the role of the structural dimensions per se. Evaluations of legitimacy and stability are not independent from people’s perceptions. How people appraise these dimensions in the social context give rise to specific emotions (Frijda, 1986). The Belief In A Just World (Lerner, 1980), indicating the desire to believe that people get what they deserve, has already been considered in Montada’s (Montada & Schneider, 1989; Schmitt et al., 2000) approach in which this belief is treated as a personal disposition that shapes the cognitions about social situations.

Although these ideologies are held individually, they gain power to legitimate the social structure through their collective endorsement. In turn, society may play a major role in the development of such beliefs by setting norms. In our history, there have been many shifts in what is right and what is wrong. Today, for example, child labor is forbidden, women have the right to vote, and in some countries, same-sex marriage is possible. This brings us back to Social Dominance Theory. According to this theory, society develops ideologies that promote, or to the contrary, attenuate group inequality. These ideologies are called "legitimizing myths" and are divided into two categories: "hierarchy-enhancing legitimizing myths," which accentuate inequality and social hierarchy, and "hierarchy-attenuating legitimizing myths," which legitimate equality. However, within the scope of this thesis, I would like to emphasize that especially those “on top” of inequality have the power to develop these ideologies and norms. Even though equity is anchored in the Basic Constitutional Law, legitimizing myths may legitimize unequal treatment of people. The consideration of legitimizing myth in connection with relative advantage may provide further insights into how the structural advantaged deal with inequality.

This thesis was successful in demonstrating emotions as important parameters in the context of social inequality. The findings may be relevant for media representation of disadvantaged groups or for charity campaigns. How inequality is framed in media coverage may determine utterly different reactions. Charity advertising campaigns, for example, try to develop posters that arouse public awareness of inequality and stimulate pro-social
behavior. In order to produce successful posters in charity terms it seems necessary to play on people’s feelings (Eayrs & Ellis, 1990). According to the findings of this thesis, simply highlighting social inequality may not be sufficient to motivate positive inter-group behavior. In fact, it appears effective to draw the attention of those who benefit from inequality to the needs of those in disadvantaged positions and identify their disadvantage as unfair. This seems to be a good strategy to evoke sympathy for the disadvantaged, and sympathy appears as the most promising emotion for reducing social inequality.
References


Dubé, L., & Guimond, S. (1986). Relative deprivation and social protest: The personal-group issue. In J.M. Olson, C.P. Herman, M.P. Zanna (Eds.), *Relative Deprivation and


Summary

This dissertation dealt with the question how members of relative advantaged groups experience inter-group inequality in terms of emotions. To date, research has mainly documented how members of relatively deprived groups react to their disadvantage (e.g., Kessler & Mummendey, 2001; for a review, see Simon & Klandermans, 2001). Only few studies examined the phenomenon of relative advantage (e.g., Montada & Schneider, 1989; Leach, Iyer, & Pedersen, 2007). In bringing together research on Relative Deprivation Theory (e.g., H.J. Smith & Kessler, 2004), Social Identity Theory (Tajfel & Turner, 1979), and Theory of Group-based Emotions (E.R. Smith, 1993, 1999) it has been reasoned that there are different ways in which the relative advantaged experience inequality. Moreover, it has been argued that this emotional experience, rather than just cognitive or motivational determinants (cf. SIT, Tajfel & Turner, 1979), may play a fundamental role for how the advantaged might act in relation to the inter-group inequality. It is assumed that emotions serve as explanations of whether the advantaged are likely to promote or hinder social change. Based on the conceptual model of Leach and colleagues (2002), this thesis applied the dimensions of (self- vs. other) focus and legitimacy to distinguish the group-based emotions of pride, existential guilt, pity, and sympathy about inter-group inequality. By combining appraisal dimensions to investigate specific features of emotional experience of relative advantage, this thesis extended previous research.

The aim of the present thesis was twofold. First, it intended to test the following hypotheses about group-based emotions as a function of focus and legitimacy: Pride was hypothesized to be especially intense when in-group advantage is described as legitimate, whereas existential guilt was hypothesized to be especially intense when in-group advantage is described as illegitimate. Pity was hypothesized to be especially intense when out-group disadvantage is described as legitimate, whereas sympathy was hypothesized to be especially intense when out-group disadvantage is described as legitimate. Further emotions, especially more negative ones, have been investigated in a more explorative manner. Second, this thesis aimed at testing whether these emotions motivate specific inter-group behavior, either affirming or challenging inequality. Pride was expected to trigger in-group favoring behavior, existential guilt was expected to trigger compensatory tendencies, and pity was expected to trigger paternalistic tendencies, whereas sympathy was expected to trigger support of the disadvantaged, challenging inequality.
Five scenario studies were conducted to test the outlined hypotheses. Different from previous studies in this area, inequality between two groups was established by constructing a particular social comparison situation with one group being relatively advantaged compared to another group. Furthermore, the appraisals of the situations have been manipulated. Since the effects of emotions in experimental research are often relatively small, similar paradigms were used throughout this thesis to replicate and thus validate the expected effect over several studies.

Study 1 was conducted to test the main four emotions hypotheses and deliver first insights into the emotion-behavior relationship. Study 2 aimed at differentiating between the out-group focus emotions pity and sympathy in more detail. Study 3 replicated the results of Study 1 for the emotions pride, existential guilt, and sympathy in a different social context. In addition, more sophisticated behavioral measures have been used. Study 4 added a negative interdependence (Sherif, 1967) between the social groups as a further dimension. Thus, it was possible to compile additional emotion hypotheses. Finally, Study 5 concentrated on the in-group focus emotions pride and guilt. Supplementary to focus and legitimacy, responsibility perception was manipulated.

All studies that manipulated and measured pride (Study 1, 3, 4, and 5) concordantly provided evidence for this hypothesis; pride was especially pronounced when in-group-focus was salient and when the in-group’s advantage was perceived as legitimate. The results for existential guilt were mixed. Results of Study 1 and Study 3 largely confirmed the hypothesis, whereas Study 4 did not. In Study 5, again, with responsibility as additional dimension, guilt was greatest under illegitimate in-group advantage, being responsible for others misfortune. Throughout this thesis, the nature of pity remained unclear. There was a tendency for pity being most intense when others disadvantage was framed as legitimate in Study 1 and 4, but not in Study 2. On a semantic level, pity and sympathy showed great overlap, but all studies measuring sympathy (Study 1, 2, 3, and 4) provided strong support for the hypothesis that sympathy is especially strong when perceiving the out-group’s disadvantage as illegitimate.

Regarding inter-group behavior, pride was identified as a strong predictor of in-group favoring behavior, mediating the effect of situation perception on behavioral tendencies, thereby supporting affirmation on inequality. Existential guilt was weakly related to the intention to act. However, when responsibility of the in-group for harm done to an out-group was salient, guilt predicted reparation tendencies. Pity was related to paternalistic tendencies targeting at the disadvantaged, but did not predict willingness for
cooperation or abolition of inequality. Sympathy, in contrast, motivated support of the disadvantaged, not only in terms of compensatory behavior, but also in terms of support of preferential treatment of the disadvantaged. Thus, sympathy goes along with approval of social change.

Summing up, this thesis was successful in that it expanded hitherto existing knowledge about the phenomenon of relative advantage. The presented studies provide some insights about the importance of emotions for the behavior of members of advantaged groups and their intention to either affirm or challenge inequality. The results offer practical implications about how to present inequality in the media or how aid organizations can allude to the disadvantage of specific groups to enhance people’s willingness to reduce inequality.
Zusammenfassung


Die vorliegende Arbeit verfolgt zwei Ziele. Als erstes sollen die Hypothesen getestet werden, die annehmen, dass gruppenbasierte Emotionen als Funktion von Fokus und Legitimität auftreten: Es wurde erwartet, dass Stolz dann besonders ausgeprägt sei, wenn der Vorteil der eigenen Gruppe als legitim beschrieben wird, während existentielle Schuld besonders intensiv erlebt werden sollte, wenn der Vorteil der eigenen Gruppe als illegitim beschrieben wird. Es wurde erwartet, dass Mitleid dann besonders intensiv sei, wenn der Nachteil der Fremdgruppe als legitim beschrieben wird, während Sympathie dann am intensivsten sein sollte, wenn der Nachteil der Fremdgruppe als illegitim beschrieben wird. Weitere Emotionen, im Besonderen negative Emotionen, wurden eher explorativ erforscht. Zweitens sollte untersucht werden, in wie weit diese Emotionen spezifisches Intergruppenverhalten vorhersagen, welches entweder zur Stärkung oder Schwächung der Ungleichheit beiträgt. Stolz sollte dazu motivieren, die eigene Gruppe zu favorisieren,
existentielle Schuld sollte Ausgleichsmaßnahmen auslösen, Mitleid sollte paternalistisches Verhalten gegenüber den Benachteiligten verursachen, während Sympathie dazu führen sollte, die Benachteiligten zu unterstützen und die Ungleichheit anzufechten.

Fünf Szenariostudien wurden durchgeführt, um die genannten Hypothesen zu testen. Im Unterschied zu bisherigen Studien in diesem Forschungsgebiet wurde die Ungleichheit zwischen den Gruppen experimentell hergestellt, indem eine soziale Vergleichssituation konstruiert wurde, bei der die Experimentalgruppe relativ zu einer anderen Gruppe im Vorteil war. Ferner wurden die Bewertungsdimensionen manipuliert. Da experimentelle Emotionsforschung generell relativ kleine Effekte aufweist, wurde über alle Studien hinweg ein ähnliches Paradigma angewandt, so dass die erwarteten Effekte repliziert und somit validiert werden konnten.


Die Studien, in denen Stolz manipuliert und gemessen wurde (Studie 1, 3, 4 und 5) liefern durchgängig Hinweise, welche die Hypothese stützen. Stolz war besonders ausgeprägt wenn der Fokus auf dem eigenen Vorteil lag und dieser als legitim wahrgenommen wurde. Die Daten für existentielle Schuld sind nicht durchweg konsistent. Die Ergebnisse der Studie 1 und Studie 3 unterstützen die Hypothese weitgehend, die Ergebnisse von Studie 4 hingegen nicht. In Studie 5 wiederum, mit Verantwortung als zusätzlicher Dimension, war Schuld dann besonders intensiv, wenn der eigene Vorteil als illegitim und die eigene Gruppe als verantwortlich für das Schicksal der benachteiligten Gruppe wahrgenommen wurde. Über die Emotion Mitleid kann keine eindeutige Aussage getroffen werden. In den Studien 1 und 4 trat die erwartete Tendenz auf, dass Mitleid am
stärksten empfunden wurde, wenn der Nachteil der anderen als legitim beschrieben wurde. In Studie 2 war dies nicht der Fall. Auf semantischer Ebene gab es große Überschneidung zwischen Mitleid und Sympathie, doch alle Studien, in denen Sympathie erfasst wurde, liefern starke Evidenz für die Hypothese, dass Sympathie dann besonders stark ist, wenn der Nachteil der Fremdgruppe als illegitim erlebt wird.


Curriculum Vitae

Persönlich Angaben

Name    Harth, Nicole Syringa
Geburtsdatum:  09.10.1977
Geburtsort:    Homburg/ Saar
Familienstand:  ledig

Bildungsweg

08/84 – 06/88    Grundschule Glan-Münchweiler
09/88 – 07/97    Gymnasium Kusel
07/97           Allgemeine Hochschulreife

10/97 – 10/03  Studium der Psychologie an der
               Universität Mannheim und im Nebenfach
               Studium der Soziologie
10/03          Diplom in Psychologie

06/03 – 06/07  Forschungsstipendium zur Promotion am
               International Graduate College, FSU Jena
               „Conflict and Cooperation between groups“
Ehrenwörtliche Erklärung

Ich erkläre hiermit, dass mir die Promotionsordnung der Fakultät für Sozial- und Verhaltenswissenschaften bekannt ist.


Die Arbeit wurde weder im In- noch im Ausland in gleicher oder ähnlicher Form einer anderen Prüfungsbehörde vorgelegt. Weder früher noch gegenwärtig habe ich an einer anderen Hochschule eine Dissertation eingereicht.

Ich versichere, dass ich nach bestem Wissen die reine Wahrheit gesagt und nichts verschwiegen habe.

____________________________  ______________________________
Ort, Datum                        Unterschrift