Prejudice against and discrimination of asylum seekers:
Their antecedents and consequences
in a longitudinal field study

Dissertation

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Acknowledgements

Before I started my PhD in Jena I knew better what I did not want for my future professional life, than what I actually wanted to do. After more than three years of studying here I now know that research and teaching in social psychology or neighbouring disciplines are what I would like to do for the next years, or possibly decades. Several people strongly impacted on me by inspiring or supporting me during the past years and those people I want to thank here.

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1. Introduction

1.1. More versus less prejudice after citizens encounter migrants?

Our modern globalised world has seen increasing numbers of migrants during the last decades. In the year 2005, according to a United Nations Organisation publication (Annan, 2006) all over the world 191 million people lived outside their countries of origin. This means that groups of new people with different geographic, cultural and ethnic backgrounds keep on entering and thereby changing many if not most societies. The traditional inhabitants of these societies have to cope with this new situation, with new intergroup constellations and with changing cultural and ethnic diversity in their countries.

When citizens and migrants[1] come into contact this mingling of the different groups can lead to rather harmonious or alternatively to rather problematic relations between them. On one hand, intergroup contact has repeatedly been shown to lead to improved attitudes towards members of the other group (Pettigrew & Tropp, 2000; 2006). Therefore, intergroup contact is, under certain conditions, widely regarded as one way to improve intergroup attitudes. On the other hand, such intergroup situations often lead to increased prejudice and other negative attitudes, malevolent behavioural intentions or actual discriminatory behaviour. In fact, these are phenomena migrants are often confronted with in Germany and other European countries (European Monitoring Centre on Racism and Xenophobia, 2005; Klink & Wagner, 1999). One horrible and extreme example of discrimination are the fire bomb attacks on asylum seekers refuges that happened in Germany throughout the 1990s and also recently. Since 1993 the deaths of 67 asylum seekers (and injuries of 744) after such attacks have been documented (Antirassistische Initiative e.V., 2007). These crimes were committed by right wing extremists. However, prejudice and discrimination intentions against migrants are also harboured by average citizens (Heitmeyer, 2006). Moreover, average people's prejudice and discrimination intentions create a social and societal climate which enhances the likelihood of such horrible attacks.

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[1] This categorisation of the inhabitants of a country according to their citizenship into citizens and non-citizens is a common, but socially constructed differentiation and by no means a "natural" distinction. In the understanding of Sidanius and Pratto (1999) it is one of several "arbitrary set systems" that function to stabilize or enhance the hierarchichal stratification between social groups.

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Thus, both are possible, improved, but also worse attitudes and behavioural intentions after contact of citizens with migrants. Therefore, the general question that guided the present research project is: Which circumstances lead members of the majority to harbour prejudice and to discriminate against and exclude members of minorities such as migrants or asylum seekers[2] from their society?

1.2. Context: Opening of an asylum seekers refuge

The planned opening of an asylum seekers refuge in a neighbourhood in the small-town Jena in the Eastern part of Germany in the summer of 2004 constituted the event around which I conducted a longitudinal field study. This happened to be an ideal situation to study prejudice, discrimination intentions and contact behaviour of the local citizens towards the newly arriving asylum seekers. I timed the study such that I was able to compare majority members' *expectations* before the moving in of the asylum seekers with their *assessment* of the situation six months later. In the beginning there was strong opposition of many locals against the opening of the refuge in their neighbourhood. Demonstrations were organised and petitions signed. Moreover, before the asylum seekers arrived, the building for the future refuge had been set on fire (that could be extinguished quickly) and graffiti had been sprayed saying "We will set you on fire!" ("Wir zünden Euch an!"; Braun, director of the refuge, personal communication, June 27, 2005). The demonstrations and petitions lead to broad coverage in the local media and made issues of relations between members of mainstream society and migrants highly salient. After the opening of the refuge around 75 migrants were moved in. They were not surveyed, but were just the "targets" for majority members' opinions. The asylum seekers formed quite a diverse group, with age ranging from 1 to 70, their countries of origin all over the world and differing family and legal statuses (Braun, personal communication, June 27, 2005). The location of the refuge centre on the outskirts of Jena city and the location of participants' houses around the refuge are depicted in Figures 4 and 5 in the appendix.

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[2] The term migrants is used to refer to people that are not born in Germany, but live here. The term asylum seeker refers to migrants that came here to apply for political asylum. Whereas all asylum seekers are migrants, not all migrants are asylum seekers.

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1.3. Contact, threat and acculturation orientations in relation to prejudice

This hot and very naturalistic context for the study was consciously chosen, because it lends high ecological validity to the answers of the studied questions. These questions are organised into three parts. First, because study participants had not been in contact with the asylum seekers before the opening of the refuge it was possible to accredit changes in their attitudes and behavioural intentions towards the migrants to the new changed neighbourhood situation. Thus, the chosen context enabled me to study the effects of intergroup contact between citizens and migrants on citizens' attitudes towards the newcomers. Besides studying effects of the mere opportunity for contact with the asylum seekers, I could also relate participants' personal contact experiences and knowledge of their neighbours' (so called "extended") contact with the asylum seekers on participants' attitudes towards the migrants.

Secondly, such encounters with members of a different social group often lead to perceptions of threat from this alien group. Threat can be defined very generally as an anticipation of negative consequences for either oneself or one's ingroup (Stephan & Renfro, 2002). It can be realistic, that is endangering the availability of scarce realistic resources such as land, water, jobs or personal security to the individual or the ingroup (Campbell, 1965; LeVine & Campbell, 1972; Sherif, 1966). However, when groups with different cultures meet, perceptions of symbolic threat are also very likely (Stephan & Renfro, 2002). These endanger the individual's or ingroup's symbolic resources, such as culture and language, but also the norms, habits and identity (Branscombe, Ellemers, Spears, & Doosje, 1999) of those who feel threatened. In the chosen intergroup situation it was highly likely that at least some of the surveyed participants would feel threatened by the asylum seekers being moved into their neighbourhood. Accordingly, I could relate their realistic and symbolic threat perceptions to their attitudes and behaviour towards the asylum seekers.

Furthermore, because most migrants come from countries with a different cultural background they also culturally change the receiving societies. Citizens are members of mainstream society and often have opinions about how these cultural changes should ideally occur and which changes are less desired. For instance, many members of mainstream society have clear cut attitudes to whether migrants in their country should maintain their traditional cultures, ways of living and languages and whether or not they should adopt the ways of living of

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mainstream society. Additionally, people also have opinions on how much they want their own traditional mainstream culture to be changed or not by new cultural influences brought about by migrants. Such "changes in the original culture patterns of either or both groups" that occur after "groups of individuals having different cultures come into continuous first-hand contact" have been labelled "acculturation" (Redfield, Linton, & Herskovits, 1936, p. 149). Attitudes on how this process of acculturation should ideally occur or how it is actually occurring are called acculturation orientations. These acculturation orientations have been connected to the quality of intergroup relations between migrants and members of mainstream society, both theoretically and empirically. Therefore, in the context chosen for this study I could also link participants' acculturation orientations to their attitudes and behaviour towards the newly arrived asylum seekers.

I will focus on three specific theoretical backgrounds for the present study: contact research, approaches with perceptions of intergroup threat in the centre of attention, and finally, approaches studying acculturation orientations. These theories are concerned with or can be related to the quality of the relations between different social groups. They can be applied, more specifically, to the relations between citizens and migrants as indicated by citizens' attitudes and behaviour towards the migrants. In the following chapter I will give a brief general outline of the theoretical perspectives used. Then, in the respective chapters (2, 3 and 4) these theories will be elaborated further.

1.4. Theoretical background

1.4.1. Prejudice and discrimination

As depicted above, citizens' prejudice against and discrimination of migrants and asylum seeker are serious problems in many countries. Prejudice can be defined as an attitude towards a social group, that encompasses three components (e.g. Duckitt, 2003). First, there is a cognitive component, such as negative (or seldom positive) group stereotypes. Secondly, there is an affective component to prejudice in the form of negative (or seldom positive) feelings towards the members of a certain social group. Thirdly, there is a behavioural component, that is, an

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inclination to behave negatively (or seldom positively) to outgroup members, as for instance expressed in intentions for or actual discrimination. In the present study I will analyse the prevalence of participants' prejudice towards asylum seekers, its change over time as well as its antecedents and consequences.

A classical definition of discrimination is that it "… comes about only when we deny to individuals or groups of people equality which they may wish. … Discrimination includes any conduct based on a distinction made on grounds of natural or social categories, which have no relation to either individual capacities or merits or to the concrete behaviour of the individual person." (Allport, 1954, p. 51). The discrimination of migrants by citizens can take several forms. Beside the murderous attacks described above, there are many less deadly but much more frequent forms of discrimination. To demand, for instance, that "all asylum seekers be sent back where they come from" is a form of discriminatory exclusion. To demand that "their allowances be reduced" or "they be denied citizens' rights" is discriminatory too. Avoidance of contact due to someone's group membership can be another kind of discriminatory behaviour. It will be analysed, whether the study participants endorse such statements, how these discrimination intentions develop over time, what determines them and what follows from them.

1.4.2. Contact and prejudice

Over the last 50 years numerous social psychological theories have been developed to explain such negative attitudes and behaviour towards minority groups like migrants or asylum seekers. One of the classic and most researched theories focuses on the effects of intergroup contact on improving attitudes towards outgroups (Contact Hypothesis, Allport, 1954; Intergroup Contact Theory, Pettigrew, 1998). The basic idea is that contact under certain optimal conditions (cf. chapter 2.1) leads to improved attitudes towards outgroups. However, in spite of decades of research, longitudinal studies on contact effects are rare still rare (but see Binder, Zagefka, Brown, Funke, Kessler, et al., 2007; Eller & Abrams, 2003, 2004; Levin, van Laar, & Sidanius, 2003; van Laar, Levin, Sinclair, & Sidanius, 2005). Additionally, optimal contact conditions are not very likely in the "real world". Therefore, effects of contact on attitudes and behaviour towards the asylum seekers will be studied here.

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Different contact effects can be distinguished. Effects of *mere* contact arise from the bare opportunity of intergroup contact. This opportunity of contact suddenly arose after the asylum seekers were moved into the neighbourhood and it was theoretically identical for all surveyed locals. Furthermore, there could be effects of *personal* contact experiences that are more active and personally involving. When participants personally engage in contact with asylum seekers this might improve their attitudes towards them. Moreover, recent theoretical developments have lead to an *Extended* Contact Hypothesis (Wright, Aron, McLaughlin-Volpe, & Ropp, 1997). It is proposed that mere knowledge of ingroup members having a close friendship with outgroup members leads to improved attitudes towards the outgroup. Thus, participants' knowledge that their neighbours had contact with the asylum seekers might improve their attitudes towards the newcomers. These three different contact effects will be further explained, then tested and compared in chapter 2. Contact with outgroup members is often accompanied by certain emotions such as irritation, anger and fear or feelings of threat, because some people tend to be afraid that negative outcomes might be expected from the encounter with the others.

1.4.3. Intergroup threat and prejudice

Intergroup threat is an anticipation of negative consequences for either oneself or one's ingroup (Stephan & Renfro, 2002) expected to be caused by members of an outgroup. Threat has been central in several theories in relation to attitudes and behaviour towards outgroups. Furthermore, it has been shown over a wide range of studies that prejudice and threat are indeed positively related (Riek, Mania, & Gaertner, 2006). The more threatened people feel from a certain group, the more negative the attitudes towards that group. The theories can be categorised into two general theoretical orientations. The first orientation sees prejudice as a stable personality characteristic. From within this *prejudiced personality approach* perceptions of intergroup threat are seen as an outcome of prejudice, in that a prejudiced person is more likely to perceive an intergroup situation as threatening personal or ingroup interests. The second, more recent theoretical orientation, labelled *threat causes prejudice approach*, conceptualises threat as a causal antecedent of outgroup prejudice (e. g. Stephan & Renfro, 2002). Lack of longitudinal studies or experimental tests of both causal directions calls for more research on these contradicting causal claims. With the present study it is aimed to contribute to this issue, by

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causally relating participants' threat perceptions to their prejudice, as shall be detailed in chapter 3.

1.4.4. Acculturation orientations and prejudice

As described above, contact between culturally different groups leads to processes of acculturation. Because most asylum seekers stem from different cultures, changes in their traditional cultures are to be expected, after they come here. However, they also insert an influence on the mainstream culture of the new place they live in. This may be more or less desired by the locals, depending on the acculturation orientations they hold. Acculturation orientations have been conceptualised in many different ways. Rudmin (2003) provided a comprehensive catalogue of acculturation theories and constructs by collecting and describing an impressive 126 taxonomies dealing with the phenomenon. The gist of these approaches will be introduced in chapter 4. Interactive Acculturation Models (Bourhis, Moiese, Perreault, & Senecal, 1997; Piontkowski, Rohmann, & Florack, 2002) theoretically relate attitudes about the process of acculturation to the quality of intergroup relations, as for instance indicated by citizens' prejudice and discrimination towards asylum seekers. Also empirically such relations could be shown (Zagefka & Brown, 2002; Zagefka, Brown, Broquard, & Martin, 2006; Zick, Wagner, van Dick, & Petzel, 2001). Those theoretical approaches and empirical findings that are most influential in modern scientific discourse of acculturation and most useful in dealing with my research questions will be discussed in chapter 4. In the literature on acculturation the majority side of the interactive process of acculturation is understudied and longitudinal studies are rare. Therefore, in the chosen context, it will be analysed in detail how majority members' acculturation orientations are structured, how they relate to prejudice, discrimination intentions and contact behaviour, and how the causal directions of these relations are.

1.5. Expected benefits of this research

For this study I am applying and testing several theoretical approaches in a real life context using a longitudinal design. Thus, analyses of directional causality will be possible, while the chosen field context provides a very realistic setting for the study. My research focus is on members of

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the native majority that are personally affected by migration influx. I aim at relating their prejudice and discriminatory intentions towards asylum seekers to their contact experiences, threat perceptions and acculturation orientations. I chose a field situation (different from most social psychological research that is conducted with student populations) and a longitudinal design (different from the many available correlational studies). Thus, I intend to improve the theoretical understanding of some of the reasons for native citizens' negative attitudes and behavioural intentions towards asylum seekers. Through a combination of several theoretical approaches their different contributions shall be made visible. These theories will not be pitted against each other as competitors, but it shall be attempted to show how their different perspectives complement each other in the explanation of outgroup derogation and discrimination (cf. chapter 5) that are serious societal problems. Finally, from the results of this study I should be able to make some practical recommendations on how to improve the intergroup situation between citizens and migrants, a situation that is often highly problematic.

2. How does contact relate to prejudice towards the outgroup?

2.1. Theoretical background: Contact hypotheses

Since the 1950s social psychological theorising and research has strongly focused on the proposed relation between intergroup contact and a reduction in prejudice (Allport, 1954). Four optimal conditions have been outlined as necessary for contact to decrease negative attitudes towards outgroups. These conditions are: 1.) equal status of the groups, 2.) common goals of the groups, 3.) intergroup cooperation and 4.) authority sanctions for the contact. Later, 5.) friendship potential of the situation was added as another condition (Intergroup Contact Theory, Pettigrew, 1998) proposed to lead to improvements of intergroup attitudes and behaviour due to intergroup contact.

Three kinds of contact are differentiated for the present study and related to participants' prejudice. First, the mere opportunity to meet the asylum seekers might have positive effects on participants' attitudes towards them (*mere* contact effect). If, for instance, feared outgroup members move to your neighbourhood, but nothing bad happens, this might reduce the original negative feelings (Hamilton & Bishop, 1976). Secondly, the amount of *personal* contact experiences might improve the attitudes. When you personally meet some members of the outgroup, it might become obvious, that after all they are just humans like you and me, and negative attitudes might decline. Thirdly, Wright, Aron, McLaughlin-Volpe and Ropp (1997) have further developed the idea of positive contact effects in their *Extended* Contact Hypothesis. They proposed that mere knowledge about other ingroup members having close relationships with outgroup members can already result in more positive attitudes toward outgroups, independent of personal (direct) contact experiences. Such extended contact has several advantages over personal contact. First, it is more likely than personal contact, especially when the minority group is small. Secondly, extended contact lacks the anxiety arousing qualities of personal contact (Stephan & Stephan, 1985), which makes it easier to develop positive effects (e.g. Turner, Hewstone, & Voci, in press). Thus, knowledge of my neighbours' contact with the newcomers might improve my attitudes towards the latter.

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2.1.1. Empirical evidence: Contact leads to improved attitudes

Contact Hypothesis and Theory have been empirically tested in hundreds of studies with over 250.000 subjects altogether. A concise summary of this rich body of research can be found in a meta-analysis by Pettigrew and Tropp (2000; 2006). They report that on average there is a positive effect of contact with outgroup members, in that it reduces prejudice towards the outgroup as a whole. The average correlation over all studies was reported as $r = -.21$ ($p < .0001$). The first four optimal contact conditions, originally proposed to be essential for such positive effects to develop, were found to facilitate positive effects, but did not seem to be essential. The fifth condition, intergroup friendship (understood as requiring a situation that approaches the other four optimal conditions) led to slightly bigger positive effects. In addition, it was found that contact that did not take place under the optimal conditions had similar, yet slightly weaker, positive effects on outgroup prejudice. Contact effect sizes were reported to vary, depending on contextual factors, such as type of contact, type of group, but also with methodological factors such as research rigor, or choice of prejudice measure.

The Extended Contact Hypothesis (Wright et al., 1997), that was proposed relatively recent, has received empirical support in several studies. Wright and colleagues (1997) reported empirical evidence from several survey and experimental studies. Since then, several other studies (e.g. Liebkind & McAlister, 1999; Paolini, Hewstone, Cairns, & Voci, 2004) have found evidence supporting the notion that mere knowledge of ingroup members having outgroup friends goes along with more positive attitudes towards the outgroup. In sum, the general conclusion of this body of research is that both personal and extended contact can reduce outgroup prejudice.

2.1.2. Critical points: Causal direction and realism of contact effects

In spite of this strong empirical evidence for Contact Hypothesis and Theory, several issues need further clarification. One is direction of causality. Contact can reduce prejudice, but the opposite causal sequence could also be operating. Low levels of prejudice are likely to lead to more intergroup contact, whereas highly prejudiced individuals most likely will try to avoid contact. Longitudinal research is rare and statistical methods to address this issue (i.e., meta-analyses) do

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not provide an optimal solution. The preliminary conclusion is that both sequences operate, but the path from contact to prejudice is stronger (Pettigrew & Tropp, 2000, 2006). There is evidence from some longitudinal studies that empirically show recursive relations between prejudice and contact (Levin et al., 2003; Eller & Abrams, 2003; 2004). Recently, Binder and colleagues (2007) conducted a large scale longitudinal study investigating the direction of causality between contact and prejudice. They reported that both causal sequences operate. However, in contrast to the preliminary conclusion by Pettigrew and Tropp (2000, 2006) in their study the path from prejudice to contact (avoidance) was stronger than the opposite causal path. These finding underline the importance of using longitudinal designs, as also done for the present study. Using this methodology, directional effects of attitudes and behavioural intentions towards outgroup members on actual contact will be analysed as well (cf. chapter 4).

A second issue is the realism of past theorising and research on contact effects under the often stressed optimal conditions. Dixon, Durrheim and Tredoux (2005) therefore proposed a "reality check for Contact Hypothesis". They note, that while "admirable in principle" this research often does not address the "harsher realities of social life" (p. 697). At many times the intergroup reality is far from the proposed optimal conditions. Accordingly, amongst other things, the authors propose to study "mundane encounters between groups" (p. 703), rather than contact under rarefied optimal conditions. The context of the present study is certainly more mundane than optimal, allowing for the "reality check" for contact effects that Dixon and colleagues (2005) demanded.

The critique of lacking realism is also valid for the Extended Contact Hypothesis (Wright, et al., 1997), originally proposed to work when ingroup members know of *close friendships* of other ingroup members with outgroup members. Such indirect close friendships, though more likely than personal friendships with outgroup members, are still not very likely, given the small numbers of migrants. Maybe, also less intense extended contact (for instance knowing ingroup members that have just seen migrants in the neighbourhood or while shopping) can have similarly positive effects on attitudes towards the outgroup? Moreover, up to date extended contact effects have been investigated in few studies only (cf. Feddes, Harth, Kessler, & White, 2007). Additionally, Feddes and his co-workers (2007) have shown that contact with very negatively evaluated outgroups can result in an aggravation of the attitudes towards the ingroup member involved in that contact rather than improving attitudes towards the outgroup. For all these reasons it is highly appealing to study and compare the effects of a) mere contact (under

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non-optimal conditions), b) personal contact and c) less intense extended contact (i.e., not qualifying as close friendship) on attitudes and behavioural intentions towards the outgroup.

2.1.3. Differentiating mere, personal and extended contact effects

Altogether, it can be concluded from many studies that on average contact reduces prejudice towards outgroups. However, because longitudinal studies are scarce it is worthwhile to show that contact can improve attitudes *over time*. Furthermore, the general positive effect of contact can be divided into three separable different effects. These three different contact effects will be analysed simultaneously in one study for the first time, to my knowledge. First, there should be a *mere contact effect*. This concept is built on the mere exposure effect (Zajonc , 1968). The mere exposure effect describes that when a stimulus is presented to an individual on repeated occasions, this mere exposure is capable of making the person's attitude toward the stimulus more positive. Extended to social stimuli, that is people, or more specifically outgroup members, this means that mere exposure to unfamiliar people is likely to improve attitudes towards these people. The fact that the asylum seekers move into the neighbourhood creates a situation with the opportunity for (mere) contact that has been shown by many researchers to have small but positive effects on negative attitudes towards outgroups (Pettigrew & Tropp, 2006). This effect should hold on average for all participants, independently of personal contact experiences, because they all have more or less the same opportunity to meet the newcomers in the streets, to see them while shopping, and so forth. These general situational contact effects can be tested by analysing the average change of participants' attitudes between the two measurement points. However, it should be noted and kept in mind that in the absence of a control group in a neighbourhood without migrant influx, it can not be ruled out that third factors not accounted for lead to the changes in the average attitudes. But because the moving in of the asylum seekers was the most prominent event during the six months of the present study I still think that average changes in attitudes can be attributed to it.

Secondly, there should be a *personal contact effect* that depends on the amount of actual personal contact the participants experienced. Inter-individual differences in this amount of personal contact with the asylum seekers are likely. Therefore, participants' individual levels of prejudice are expected to decrease more when they report to have had more personal contact.

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Such effects can be shown by regressing the change in the attitudes towards the outgroup (that is controlling the time 2 prejudice measure for effects of the time 1 prejudice measure) on the amount of retrospectively self reported contact.

Thirdly, an *extended contact effect* can be expected. That is, knowledge of ingroup members having had contact with outgroup members should improve attitudes towards the outgroup. Again, as with personal contact, inter-individual variability of these extended contact experiences is likely and its effects can be shown by using the hierarchical regression approach.

Additionally, it can be tested whether extended contact has effects *over and above* personal contact. The additional independent contribution of extended contact to the improvement of attitudes and behavioural intentions over and above the effects of personal contact can be shown by using a hierarchical regression approach. A third block with the predictor extended contact can be added to the regression equation, after controlling for the stability in the first block and for personal contact effects in the second block. If it yields significant results for the predictor extended contact that would be "proof" of additional independent effects of extended contact on top of the personal contact effects. The expected three different contact effects (i.e., mere vs. personal vs. extended contact effects) are summarised in the following hypotheses. Moreover, effects of extended contact over and above personal contact are expected.

2.2. Hypotheses

Hypothesis H1) Mere contact effects
The situational opportunity for mere contact will on average lead to an improvement of participants' attitudes and behavioural intentions towards the asylum seekers. Accordingly, I expect that on average negative attitudes and behavioural intentions towards the asylum seekers decrease and positive attitudes and behavioural intentions increase over time.

Hypothesis H2) Personal contact effects
More personal contact with the asylum seekers leads to better attitudes and behavioural intentions towards them. Thus, with more personal intergroup contact I expect a decrease in negative and an

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increase in positive attitudes and more positive behavioural intentions towards the asylum seekers.

Hypothesis H3) Extended contact effects

More extended contact with the asylum seekers leads to more positive attitudes and behavioural intentions towards them. Thus, with more extended intergroup contact (i.e., knowledge of more ingroup members having had contact with outgroup members and knowing of more intense outgroup contact of those ingroup members) I expect decreasing negative and increasing positive attitudes and behavioural intentions towards the asylum seekers.

Hypothesis H4) Extended contact effects over and above personal contact effects

More extended contact with the asylum seekers leads to better attitudes and behavioural intentions towards them over and above the effects of personal contact.

2.3. Method

2.3.1. Procedure

Before the opening of the refuge 600 questionnaires were distributed for the study named "Living together in Germany". I chose mail boxes of people in the direct vicinity of the planned location of the refuge centre. Six months later the first wave respondents were mailed the questionnaire once again. To match participants across the two measurement waves the questionnaires contained an anonymous code. Beside the questionnaires participants additionally sent a separate postcard containing their home address. This ensured that the data remained anonymous and I could send out participants' rewards and approach them again for wave two. At both times participants could take part in a lottery (with prizes of 100, 80 or 60 €). At time 2 each participant additionally received 10 € for filling in their questionnaires for the second time.

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2.3.2. Participants

Of the first wave's 600 distributed questionnaires N_{t1} = 116 German majority members completed and sent them back to us. This yields a return rate of 19.3%. Even though this is only a small portion of those approached and the sample is by no means representative, the advantages of research in real life settings justifies or even calls for the use of such samples. The longitudinal sample consists of those $N_{t1\&t2}$ = 70 Germans who replied twice and could be matched across the two measurement points. Thus, the drop out rate from the first to the second wave is 39.7%. A comparison of the $N_{t1\&t2}$ = 70 longitudinal participants with those who took part only at time 1 (N_{t1only} = 46) and then dropped out revealed no systematic mean differences, neither for demographic variables, nor for prejudice (all Fs < 1.2).

Participants' age ranged from 18 to 87 years with an average of M = 46.5 (SD 18.6). Gender was quite balanced, with 68 females (58.6 %), 47 males (40.5 %) and one person not indicating it. On average subjects had been living in this part of town for 18.5 (SD 11.6) years. Participants indicated their occupations as employees: N=43 (37.1 %), pensioners: N = 37 (31.9 %), students: N = 18 (15.5 %), unemployed: N = 12 (10.3 %) and others: N = 6 (5.2 %).

2.3.3. Measures

Attitudes towards the migrants. Cognitive, affective and behavioural aspects of participants' attitudes towards the outgroup were assessed at both measurement points. All items were answered on 7-point rating scales ranging from "do not agree at all" (scored 1) to "fully agree" (scored 7), unless indicated otherwise. See Table 1 for a summary of scale characteristics (number of items, reliabilities, means, standard deviations, correlations across time and values of t-tests for mean change across time).

The cognitive aspects of the attitudes towards the outgroup were measured by using an adapted version of Pettigrew and Meertens' (1995) "Blatant and subtle prejudice scale". The scale consisted of eight items. Participants were asked to express their agreement to statements such as *"The migrants have jobs we Germans should have"* or *"I could imagine to have a sexual relationship with a migrant"* (reverse coded). For the original German wording of all used items

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see appendix. The scale was constructed by averaging the scores of the according items (α_{t1} = .83, α_{t2} = .87).

In addition I asked participants about how they perceived cultural differences between Germans and migrants. This measure is a more subtle indication of the attitudes towards the outgroup. The scale consisted out of four items adopted from Pettigrew and Meertens' (1995) exaggeration of cultural differences subscale. These items measured how similar or different subjects thought migrants and Germans were on several issues such as *"sexual moral and behaviour"* and *"religious beliefs and practices"*. These items were answered on 7-point Likert scales ranging from *"very different"* (scored 1) to *"very similar"* (scored 7). After recoding them I averaged these items to create a scale (α_{t1} = .71, α_{t2} = .83). Bigger numbers indicate more perceived cultural difference.

To tap the affective aspects of attitudes towards the outgroup, negative emotions were measured. Negative intergroup emotions were assessed by asking *"When thinking about the asylum seekers moving into your neighbourhood, how often do you feel towards the asylum seekers…",* followed by seven negative emotion words (such as *fear, annoyance, anger*) that I adopted from Dijker (1987). Again I used a 7-point rating scale, this time ranging from "never" (scored 1) to "very often" (scored 7). The items were averaged to create a scale (α_{t1} = .93, α_{t2} = .90).

Six items assessed the behavioural aspects of participants' attitudes. They tapped into behavioural intentions directly concerning the asylum seekers in the refuge. I asked about intentions to discriminate the migrants or to exclude them from German society. Examples are: *"If it were up to me I would supply asylum seekers with less money"*, *"… move asylum seekers away from densely populated areas"*, or *"… send asylum seekers back to where they came from"*. Again, the items were averaged to create a scale (α_{t1} = .86, α_{t2} = .86).

Realistic threat perceptions. Additionally, perceived intergroup threat was assessed because it is a central construct in recent theorising about negative attitudes towards outgroups (cf. chapter 3). Perceptions of realistic intergroup threat were assessed with an open ended item format. I asked subjects to write down what they thought concerning: *"With the asylum seekers moving into our neighbourhood I personally am afraid that … (please fill in yourself!)"*. Participants filled into six empty rows whatever negative expectations they had concerning the situation. To create a metric threat-score from participants' words and sentences the number of threats people

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mentioned were counted. Only those threats stemming from the migrant group against the group of Germans were counted (ignoring for instance threats such as "violence by right wing groups *against the migrants*"), resulting in a scale with a range from 0-12. The inter-rater reliability of the ratings from two independent raters was assessed by computing correlations, that were very satisfactory with r_{t1} = .81 and r_{t2} = .90 (*p*s < .001). Additionally, consistent and meaningful correlations with other constructs, such as prejudice, indicate the validity of this measure (see Table 2).

Personal and extended contact. Both kinds of contact were measured at time 2 only, because generally there was no possibility to meet asylum seekers in that neighbourhood before the opening of the refuge and the moving in of these migrants. Personal contact was assessed with five items. These items assessed the self reported behaviour retrospectively. They asked for instance, whether subjects had *"…talked to …"*, *"… personally gotten to know…"* or *"…befriended asylum seekers in our neighbourhood"* in the time since they had arrived. Here, participants recorded their answers ranging from "never" (scored 1) to "very often" (scored 7). Also for this scale I averaged the scores of the items (α_{t2} = .83). Extended contact was assessed just like personal contact with five items at time 2 only. Examples are: *"I know people that have talked to …"*, *"… personally gotten to know…"* or *"…befriended asylum seekers in our neighbourhood"*. These averaged items formed a reliable scale (α_{t2} = .93).

Table 1

Characteristics of scales:

Name of scale, name of dimension, number of items (Items), reliabilities (α), Pearson's correlation coefficients over time (rt1-t2), means (M), standard deviations (SD), T-value of t-test for change across time (T)

Scale	Items	α_{t1}	α_{t2}	r_{t1-t2}	M_{t1} (SD)	M_{t2} (SD)	T
Prejudice	8	.83	.87	.88***	3.92 (1.40)	3.82 (1.41)	1.16
Cultural difference	4	.71	.83	.34**	5.26 (1.21)	5.78 (1.08)	3.29**
Negative Emotions	7	.93	.90	.70***	4.56 (1.63)	3.78 (1.57)	4.94***
Realistic Threat	1	n.a.	n.a.	.40**	3.51 (2.86)	1.28 (1.79)	6.76***
Discrimination intentions	6	.86	.86	.85***	4.34 (1.55)	4.24 (1.49)	1.08
Personal contact	5	n.a.	.83	n.a.	n.a.	2.41 (1.12)	n.a.
Extended contact	5	n.a.	.93	n.a.	n.a.	2.45 (1.73)	n.a.

Note. Responses ranged from 1 to 7, except for realistic threat, where 0 - 12 threats were reported. n.a. = not available due to measurements of personal and extended contact at time 2 only.

* $p < .05$, ** $p < .01$, *** $p < .001$.

2.4. Results

First, in the descriptive section, after some brief remarks on the average agreement of participants with the scales, the relations between the scales will be scrutinised by analysing their inter-correlations at both measurement points separately. Then, I will test the four hypotheses relating to intergroup contact.

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2.4.1. Descriptive results

Average prejudice, realistic threat and contact. The levels of average agreement of participants with the attitude scales is summarised in Table 1. On average there was medium agreement with the prejudice items (M_{t1} = 3.92; M_{t2} = 3.82). Moreover, the results indicated strong perceived cultural differences between Germans and migrants (M_{t1} = 5.26; M_{t2} = 5.78). Participants on average reported to experience negative emotions with respect to the asylum seekers (M_{t1} = 4.56; M_{t2} = 3.78). Additionally, I found a high degree of discrimination and exclusion intentions (M_{t1} = 4.34; M_{t2} = 4.24). Subjects on average reported some realistic threats (M_{t1} = 3.51; M_{t2} = 1.28). For both contact scales at time 2 on average participants reported to have had little contact with the asylum seekers, with $M_{personal}$ = 2.41 (SD = 1.12) and $M_{extended}$ = 2.45 (SD = 1.73).

Cross-sectional relations between the aspects of attitudes towards the outgroup. To describe the cross-sectional relations between the assessed variables correlations were computed for both measurement points separately (see Table 2). The pattern of these relations will be briefly described now. Looking first at the correlations within the attitudes, the prejudice scale was moderately yet significantly positively related to perceptions of cultural difference (r_{t1} = .33, r_{t2} = .48, ps < .001) and strong relations were found for prejudice with negative emotions (r_{t1} = .74, r_{t2} = .65, ps < .001). Perceived cultural difference and negative emotions had moderate positive relations (r_{t1} = .32, r_{t2} = .41, ps < .01). Prejudice was significantly and very strongly related to discrimination intentions (r_{t1} = .84, r_{t2} = .82, ps < .001) and also negative emotions and discrimination intentions were strongly inter-related with each other (r_{t1} = .76, r_{t2} = .69, ps < .001). The relations between perceived cultural difference and discrimination intentions were also positive and significant, but to a lower degree (r_{t1} = .34, r_{t2} = .40, ps < .01). Perceived realistic threat related significantly positively to prejudice (r_{t1} = .29, r_{t2} = .37, ps < .01), negative emotions (r_{t1} = .47, r_{t2} = .46, ps < .001) and discrimination intentions (r_{t1} = .34, r_{t2} = .50, ps < .001). Finally, threat perceptions were found unrelated to perceived cultural difference.

The very high correlations between prejudice, negative emotions and discrimination intentions certainly justify subsuming the items of all these constructs into one scale "negative attitudes, emotions and behavioural intentions towards migrants". However, because I understand them as theoretically different aspects of the underlying general construct negative attitudes towards the outgroup and was interested in their differential relations with the contact

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experiences I refrained from doing so. But, it must be noticed and kept in mind, that for the participants of this study the different aspects of their attitudes towards the outgroup were strongly overlapping and basically represent one general negative attitude towards the asylum seekers.

Cross-sectional relations between contact and the attitudes towards the outgroup. Personal and extended contact were significantly moderately positively related ($r_{t2} = .49$, $p < .001$). For both, own and extended contact, the correlational patterns with the other variables were highly similar and generally in the expected directions. They correlated negatively with prejudice (for personal contact: $r_{t2} = -.43$, $p < .001$; for extended contact: $r_{t2} = -.48$, $p < .001$) and negative intergroup emotions (for both: $r_{t2} = -.37$, $p < .01$). However, both kinds of contact were found unrelated to perceived cultural difference and realistic threat. Finally, weaker discrimination intentions went along with reports of more of both kinds of actual contact (for personal contact: $r_{t2} = -.40$, $p < .01$; for extended contact: $r_{t2} = -.51$, $p < .001$).

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Table 2

Intercorrelations between the scales at time 1 (top row, N_{t1} = 116) and at time 2 (second row, N_{t2} = 70)

	Scale	time	1	2	3	4	5	6	7
1	Prejudice	time1		.33***	.74***	.29**	.84***	n.a.	n.a.
		time2	–	.48***	.65***	.37**	.82***	−.43***	−.48***
2	Cultural difference	time1			.32**	.07	.34***	n.a.	n.a.
		time2		–	.41***	.07	.40**	−.23	−.17
3	Negative Emotions	time1				.47***	.76***	n.a.	n.a.
		time2			–	.46***	.69***	−.37**	−.37**
4	Realistic Threat	time1					.34***	n.a.	n.a.
		time2				–	.50***	−.08	−.18
5	Discrimination intentions	time1						n.a.	n.a.
		time2					–	−.40**	−.51***
6	Personal contact	time1							n.a.
		time2						–	.49***
7	Extended contact	time1							
		time2							–

Note. n.a. = not available due to measurements of personal and extended contact at time 2 only.

* p < .05, ** p < .01, *** p < .001.

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2.4.2. Mere contact effects

First, as summarised in hypothesis H1), I wondered whether the new changed situation, that is, the moving in of the asylum seekers and the possibility to see and meet them, changed participants' average levels of attitudes and behavioural intentions towards them. Two indicators of change across time were used to analyse this effect, labelled *mere contact effect*. Pearson's correlations between the two measurement points show the positional stability of the subjects on the scales. Additionally, t-tests were conducted that indicate significant absolute mean change over time (see Table 1). Both these analyses will reveal average situational effects of mere contact on attitudes and behavioural intentions towards the asylum seekers as expected in hypothesis H1).

Positional stability. As the correlations across time indicate (see Table 1) some variables were highly stable over time: especially the prejudice measure and the discrimination intentions with correlations rs $> = .85$ (ps $< .001$). Negative emotions were a found to be quite stable with $r = .70$ ($p < .001$). Realistic threat perceptions were correlated over time with $r = .40$ ($p < .01$). Perceived cultural differences were found to be least stable with a correlation across time of $r = .34$ ($p < .01$).

Mean change. As can also be seen in Table 1 there is significant change for three scales: perceived cultural difference, negative emotions and realistic threat perceptions. Perceived cultural difference has significantly increased over time from an (already high) average of $M_{t1} = 5.26$ to $M_{t2} = 5.78$ ($t = 3.29$, $p < .01$). Thus, the participants perceived the asylum seekers to be even more different from themselves in terms of norms, religion, sexuality and language, after having them in their neighbourhood for six months. However, there were two significant changes for the better. Negative emotions towards the asylum seekers have decreased over time, from $M_{t1} = 4.56$ to $M_{t2} = 3.78$ ($t = 4.94$, $p < .001$), at time 2 the subjects reported significantly fewer such feelings. For realistic threat ($M_{t1} = 3.51$, $M_{t2} = 1.28$, $t = 6.67$, $p < .001$), measured with an open ended format, the results are especially interesting. The number of reported threats ranged from 0 - 12 at time 1 and was reduced to 0 - 6 at time 2. The likelihood for participants to report any threat was reduced from 81.90 % at time 1 to 66.50 % six months later at time 2.

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In sum, prejudice and discrimination intentions were highly stable whereas perceived cultural difference has increased significantly over time. Additionally, realistic threat and negative emotions have significantly decreased during the six months time lag between the two measurement points. Thus, it can be concluded that hypothesis H1) proposing mere contact effects can be partially accepted. The mere presence of the asylum seekers in the neighbourhood seems to have lead to an improvement in some of the participants' average attitudes and behavioural intentions. However, it has to be noted that a stringent test of this hypothesis H1) would have required a control group, that was missing in the present study. Thus, this result has to be viewed cautiously.

2.4.3. Personal contact effects

Hypothesis H2) had stated that more personal contact with the asylum seekers causally leads to better attitudes and behavioural intentions. Thus, effects of the retrospectively self reported actual contact at time 2 on positive change in attitudes and behavioural intentions towards the asylum seekers were analysed. Therefore, I conducted several blockwise regression analyses. In the first block the dependent variable at time 2 was regressed on the same variable at time 1, thus controlling for its stability. In the second block the remaining change over time in the dependent variable was regressed on the retrospectively reported personal contact (measured at time 2) that had occurred between the two measurement points. The results of these analyses are summarised in Table 3.

As can be seen for two out of five regression analyses I found significant personal contact effects (the following ps are one-tailed, because they test directional hypotheses). The amount of self reported personal contact with the asylum seekers significantly decreased prejudice ($\beta = -.16$, $p < .01$) and discrimination intentions ($\beta = -.12$, $p < .05$). Because in these blockwise analyses I controlled for the stability of the dependent measures in the first block, these effects can be understood as directional effects from personal contact experiences on prejudice and discrimination intentions. No significant effects were found for perceived cultural difference, negative emotions and realistic threat.

Table 3

Summary of five blockwise regression analyses with personal contact predicting change in attitudes towards the outgroup (N = 70)

Analysis #	Scale	β_1	p	β_2	p
1	Prejudice	.82	.000	**-.16**	**.004**
2	Cultural difference	.30	.006	-.16	.08
3	Negative Emotions	.66	.000	-.10	.142
4	Realistic Threat	.40	.000	-.01	.48
5	Discrimination intentions	.81	.000	**-.12**	**.037**

Note. Changes in attitudes towards the outgroup and behavioural intentions were regressed on retrospectively self reported personal contact at time 2. βs of the second block of the analyses are reported. β_1 represents the stability of the construct and β_2 the personal contact effect. Significant results of the last block are marked in **bold**.

All *p*s are one-tailed.

As hypothesised, I found positive causal effects of personal contact experiences on prejudice and discrimination intentions. However, for the other tested attitudes these effects, though generally in the expected directions, did not reach statistical significance (see Table 3). In conclusion, hypothesis H2) can be partially accepted, personal contact does indeed have positive effects on some attitudes and behavioural intentions towards the asylum seekers. However, other aspects of these attitudes were unaffected by the amount of personal contact the participants reported.

2.4.4. Extended contact effects

With hypothesis H3) I assumed extended contact effects. I expected that knowledge of more ingroup members that had more intense contact with the asylum seekers leads to improved attitudes and behavioural intentions towards them in my participants. The same statistical

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approach as for tests of hypothesis H2) was used (cf. chapter 2.4.3). The results of the analyses are summarised in Table 4.

For extended contact, I found very similar effects as for personal contact, the results were significant for the same dependent measures. Prejudice was significantly decreased (β = -.14, $p <$ .05, this and the following ps are one-tailed), as were discrimination intentions (β = -.17, $p < .01$). Again, I found only partial evidence for my hypothesis. As expected, some attitudes and behavioural intentions improved significantly with more extended contact. However, others remained unaffected and hypothesis H3) can be partially accepted.

Table 4

Summary of five blockwise regression analyses with extended contact predicting change in attitudes towards the outgroup (N = 70)

Analysis #	Scale	β_1	p	β_2	p
1	Prejudice	.82	.000	**-.14**	**.018**
2	Cultural difference	.32	.006	-.06	.31
3	Negative Emotions	.68	.000	-.03	.38
4	Realistic Threat	.39	.001	-.07	.29
5	Discrimination intentions	.78	.000	**-.17**	**.008**

Note. Changes in attitudes and behavioural intentions were regressed on retrospectively self reported extended contact at time 2. βs of the second block of the analyses are reported. β_1 represents the stability of the construct and β_2 the extended contact effect. Significant results of the last block are marked in **bold**.

All ps are one-tailed.

2.4.5. Extended contact effects over and above personal contact effects

I have just reported the separate effects of both, personal and extended contact on improving attitudes and behavioural intentions towards the asylum seekers. However, as reported, both

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scales correlate substantially with each other ($r = .49$, $p < .001$) and have significant effects on the very same outcome variables. This raises the question of a comparison of the personal versus extended contact effects, as hypothesised in H4). There, I had assumed that extended contact has effects on attitudes and behavioural intentions over and above the effects of personal contact. A way to test this assumption is the hierarchical regression approach. By entering extended contact into the equation only after in the first block controlling for stability of the criterion and in the second block controlling for effects of personal contact, potential independent additional effects of extended contact can be analysed. The results of these analyses are reported in Table 5.

I found, that in only one out of five cases extended contact had an additional independent effect on change in attitudes towards the outgroup. It predicted significant decreases in discrimination intentions ($\beta = -.14$, $p < .05$). The significant effects on change in prejudice (cf. chapter 2.4.4) disappeared, after controlling for personal contact. In sum, hypothesis H4) can be partially accepted, extended contact does indeed have additional independent effects on discrimination intentions, over those of personal contact.

Table 5

Summary of five blockwise regression analyses with extended contact predicting change in attitudes towards the outgroup, controlling for personal contact (N = 70)

Analysis #	Scale	β	p
1	Prejudice	-.08	.127
2	Cultural difference	.02	.435
3	Negative Emotions	.01	.458
4	Realistic Threat	-.09	.267
5	Discrimination intentions	**-.14**	**.032**

Note. Changes in attitudes and behavioural intentions were regressed on retrospectively self reported extended contact at time 2. The βs of the third block of the analyses are reported. They represent the additional extended contact effect over and above the stability of the attitudes and the personal contact effect. Significant results of the last block are marked in **bold**. All *p*s are one-tailed.

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2.5. Discussion

2.5.1. Summary of the contact results

Generally, I had wondered, whether in my special setting and by applying a longitudinal design I would find positive effects of contact on participants' attitudes and behavioural intentions towards the asylum seekers. Drawing on Contact Hypothesis (Allport, 1954), Contact Theory (Pettigrew, 1998), and Extended Contact Hypothesis (Wright, et al., 1997) I developed and tested four different hypotheses relating to contact.

First, testing hypothesis H1), *mere contact effects* were assessed. I analysed effects of the changed neighbourhood situation, that is, the moving in of the migrants, on the stability and change of participants' average attitudes and behaviour towards these migrants. The opening of the asylum seekers refuge and the consequent moving in of the migrants into the neighbourhood was an event of high personal relevance to the participants'. Therefore, average changes in their attitudes (i.e., a comparison of their expectations before the migrants arrived with their perceptions of the intergroup situation afterwards) can be attributed to this new, changed situation. However, because of the lack of a control group without migrant influx the results for hypothesis H1) have to be viewed with caution. For participants' prejudice and behavioural intentions to discriminate or have contact with the migrants very high stability was found. The other assessed constructs were less stable and did change significantly during the six months time between the two measurement points. Hypothesis H1) could therefore be partially confirmed. The average level of realistic threat decreased significantly. Thus, more negative outcomes were expected before the asylum seekers were moved into the refuge than actually experienced afterwards. Also the amount of negative intergroup emotions towards the asylum seekers decreased over time. The latter finding is in line with meta-analytic examinations of contact effects on attitudes towards minorities (Pettigrew & Tropp, 2000, 2006; Tropp & Pettigrew, 2005). There it was found, that after contact experiences the emotional aspects are more variable and changing faster than the cognitive components of these attitudes. One reason for this change to the better might be that many of the negative expectations were not met during the first six months of asylum seekers living close and thus, the negative expectations in terms of realistic threat and negative emotions were adapted, that is, reduced (cf. Hamilton & Bishop, 1976).

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Additionally, issues of perceived migrants' cultural difference have become more crucial to the participants, the scale showed a significant increase over time. This shows that the mere presence of the asylum seekers increased the salience of a cultural divide between "them and us", but simultaneously decreased some negative perceptions about them.

Secondly, I analysed *personal contact effects*, as proposed in hypothesis H2). Such effects were found for some of the attitudinal scales and the hypothesis can thus be partially accepted. As hypothesised, personal contact experiences decreased prejudice and discrimination intentions. However, the other assessed scales were unaffected by personal contact experiences. An explanation might be that most subjects reported to have had very little actual contact. The possibility to personally get to know the newcomers had not been used by many. Additionally, the optimal conditions for intergroup contact to develop positive effects (Allport, 1954; Pettigrew, 1998) were not met in this field setting: There is no equal status of asylum seekers and Germans and the authorities do not support such equality[3]. Additionally, many majority members perceived conflicting goals and intergroup competition rather than cooperation and very few personal friendships were made. Accordingly, the fact that the asylum seekers were moved into the neighbourhood changed little in some of my subjects' basic attitudes toward their group as a whole. In sum, I assume low personal contact quantity and quality to be responsible for this lack of personal contact effects. Possibly, a time lag of six months was too short to induce change in such robust attitudes and behavioural intentions.

Thirdly, *extended contact effects* as assumed in hypothesis H3) were analysed in this study. It was found, that extended contact decreased prejudice and discrimination intentions. However, for the other attitudinal scales no significant effects were found. Thus, in sum, the empirical data supported hypothesis H3) only partially.

Additionally, as expected in hypothesis H4) independent effects of extended contact over and above personal contact effects were analysed. It was found effects of extended contact on prejudice disappeared, after controlling for personal contact. However, independent effects of extended contact could be shown for decreases in discrimination intentions. Accordingly, hypothesis H4) could be partially accepted only.

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[3] For instance, the city authorities chose the location of the refuge such that it is located on the very fringes of town and thus, as far away from the city centre as possible (cf. appendix, Figure 4).

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2.5.2. General discussion of the different contact effects

Summarising the empirical findings for these different contact effects, it becomes obvious that overall, all three kinds of contact had positive effects on the attitudes towards the outgroup. However, these positive effects do not hold for all the tested attitudes and systematic differences are noticeable for the effects of the different kinds of contact. Mere contact affects other variables than personal and extended contact. Mere contact has effects on the change of some of the perceptions of the intergroup situation in the neighbourhood. It increases perceptions of asylum seekers' cultural difference and decreases realistic threat and negative emotions associated with the new neighbourhood intergroup situation. In contrast, both, personal and extended contact do not affect these rather situational variables, but they assert an influence on the change of more stable and almost trait like (and highly intercorrelated) variables, that is, prejudice and discrimination intentions.

These differential effects of mere versus personal and extended contact hint at different underlying processes. Mere contact seems to be no more than a passive noticing of the non-fulfilment of prior negative expectations concerning the intergroup situation (cf. Hamilton & Bishop, 1976) and thus, only changes perceptions of the concrete neighbourhood intergroup situation (in terms of changing perceptions of cultural difference, negative emotions and realistic threat, all associated with the asylum seekers). Personal and extended contact, in contrast, are more active processes that can therefore positively affect even highly stable trait like variables, such as prejudice.

Personal and extended contact were positively correlated with each other and affected the same constructs, thus, they are somewhat similar in their effects. However, when pitting them against each other, extended contact still exerted some of its positive effects on discrimination intentions over and above those of personal contact.

Finally, it has to be remarked that extended contact as assessed here was not confined to knowing about friendships between ingroup members and asylum seekers. Much more mundane, the bare fact of knowing people that had for instance seen or spoken to the migrants showed these positive independent effects of extended contact on decreasing discrimination intentions.

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2.5.3. Theoretical implications

Research on contact effects is abundant, but longitudinal studies are rare (but see Binder et al., 2007; Eller & Abrams, 2003, 2004; Levin et al., 2003). Depending on the theoretical background used, there are assumptions about several different processes underlying contact effects. Cognitive research based on the social identity approach (Tajfel & Turner, 1979; 1986; Turner, Hogg, Oakes, Reicher, & Whetherell, 1987) proposes social identity and categorisation processes to lead to the positive contact effects (cf. Brewer & Gaertner, 2004; Eller & Abrams, 2004). It is proposed that decategorisation (i.e., viewing people in terms of their individual personal identity, rather than their group membership), or recategorisation in terms of a common ingroup identification (for instance, realising that Germans and migrants all belong to the group of "people living in Germany") are processes underlying the positive effects of contact experiences. The approach focusing on intergroup friendship (e.g. Pettigrew, 1998) makes the emergence of positive intergroup emotions and an increased ability to take the others perspective responsible for change to the better. It is proposed and could be shown that feeling better about the others and also viewing the world from their shoes improves the general attitudes towards them. Furthermore, learning about the outgroup, more positive intergroup behaviour (and the following adoption of the attitudes, to reduce dissonance) and deprovincialisation (a reappraisal of the general validity of ingroup norms and customs) are proposed as processes that reduce prejudice (Pettigrew, 1998; Eller & Abrams, 2004). Researchers focusing on emotions (e.g. Stephan & Stephan, 1985), can show that a decrease of intergroup anxiety and other negative emotions leads to better attitudes towards the outgroup. Bishop and Hamilton (1976) explain the improvement of intergroup attitudes in the neighbourhood they studied with the non-fulfilment of prior negative expectations about the intergroup encounter. In sum, researchers from different theoretical backgrounds have proposed and empirically shown several different mechanisms to underlie positive contact effects. Depending on the perspective taken, these are more focused on cognition or affect.

My research has assessed three different kinds of contact effects simultaneously. It could be shown, that depending on the kind of contact (mere vs. personal and extended) different positive outcomes were achieved, which hints at differing underlying mechanisms. It is a promising avenue to simultaneously compare the effects of different kinds of contact in real life

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contexts with longitudinal designs to find out more about the different underlying processes (cf. Eller & Abrams, 2004).

2.5.4. Practical implications

A "reality check" had been proposed for both, Contact and Extended Contact Hypotheses (cf. chapter 2.1.2). Though my study was conducted in a context with conditions far from optimal, all assessed kinds of contact had positive effects on the attitudes towards the outgroup. This corroborates Pettigrew and Tropp's (2006) point that these optimal conditions are not necessary, but only facilitating. Taken together, the results of the present study show that desegregation can lead to positive intergroup effects, be it through the mere presence of, personal or extended contact with the outgroup members.

2.5.5. Limitations

2.5.1.1. General limitations of the study

Several limitations of this study have to be mentioned because they might reduce the generalisability of the findings. The method of participant recruitment resulted in a small longitudinal sample of $N = 70$. This leads to small statistical power for the used tests. Thus, small effects might not show up in the analyses. If, however, a test turns out to be significant in spite of the small sample this shows that it is a substantial effect. Participants were double self selected. At time 1 only some of those who received the questionnaire in their letter box returned it by mail. For instance highly prejudiced and suspicious people might not have answered because of fear that the data would not remain anonymous. Additionally, locals with a very low level of education might not have answered because of troubles reading the questionnaire. At time 2, only some of the time 1 respondents chose to reply once more. Maybe there was a systematic drop out of, for instance, lazy people, who might (just hypothetically) be different from the rest of the sample in their prejudice levels. This could be a serious disadvantage for the quality of the data set. However, I think that the advantages of having a sample from a field setting where migrant

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influx, threat, prejudice and discrimination are of real life importance to participants more than justifies the proceeding. Additionally, my check for mean differences between those subjects who took part at the time 1 only and then dropped out and the longitudinal time 1 and time 2 respondents yielded no significant results. They were identical in their prejudice levels and basic demographic data.

2.5.1.2. Specific limitations of the contact results

The study was designed such that between the two measurement points there was a crucial change in the neighbourhood: the migrants were moved in. Changes in the average attitudes of participants were therefore interpreted as mere contact effects in this new situation. However, because there was no control group in this study (i.e., a comparable group of German citizens without migrants moving into their neighbourhood) it is not certain, that these changes were actually caused by the migrants moving in. It could be, that third variables (like, for instance, positive media coverage about asylum seekers) caused the observed improvement of some of the attitudes.

Both, personal contact and extended contact were measured at time 2 only, because at time 1 there were no asylum seekers in the neighbourhood. The items I used asked about the contact that had occurred since the arrival of the asylum seekers and thus, they span the six months before the measurement point 2. Still, these contact estimates were made retrospectively. Strictly speaking, a causal interpretation of these results is not adequate. For instance, it could be that the participants adjusted their contact answers to their time 2 levels of prejudice (in terms of *well, I don't like them much, so I guess didn't want to meet them and probably hardly ever had contact with them…*").

Additionally, for the causal interpretation of extended contact effects special caution is needed. Besides the issue of having contact data for time 2 only, the question of causality could be even more complicated. Participants could have thought of friends or acquaintances that are similar to themselves in their attitudes towards asylum seekers (as the positive correlation between personal and extended contact indicates). Alternatively, they could have just assumed such a similarity, or they could even have actively selected their friends on the basis of such similarity. Then, it could be the case that, for instance, those people with little prejudice have (thought of) similar friends or acquaintances who they assumed to be unprejudiced, and who

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therefore most likely had some contact with the asylum seekers. Moreover, other third variables might have caused the observed relations.

Ideally, and originally planned, a third measurement point would have solved these problems about the causal interpretation of the contact effects. But because there were very few subjects in the study already at time 2, the third measurement point had to be skipped. However, in the present study the effects of retrospectively assessed personal and extended contact on the *change* in attitudes and behavioural intentions were analysed (by controlling for their stability over time). Thus, at least, I can conclude, that retrospectively assessed contact coincides with change in attitudes and behavioural intentions. It is highly unlikely, that participants consciously remembered the values they filled into the questionnaire six month earlier and adjusted their contact or attitudinal answers accordingly. Therefore, the presented results in my understanding still reflect some causal influence of contact experiences on change in intergroup attitudes and behavioural intentions.

2.5.6. Conclusion

This study could show, that all three, mere, personal and extended contact can improve some of the attitudes and behavioural intentions towards asylum seekers. Moreover, differential effects of these different kinds of contact were shown, with mere contact having more influence on rather fluid situational perceptions; and personal and extended contact positively influencing the change of more stable personality trait like prejudiced attitudes and discrimination intentions. In sum, both, Contact Hypothesis and Extended Contact Hypothesis were partly confirmed in the special intergroup setting I chose for this study. In spite of the contact conditions being far from optimal and the reported contact generally being low in quantity and quality, still it had positive effects on attitudes and behavioural intentions towards the asylum seekers.

After having analysed these different contact effects in the present chapter 2, in the following chapter 3 I will deal in more detail with another specific issue in relation to intergroup attitudes. Contact with members of an unknown group can lead to feelings of uneasiness. Especially, when negative stereotypes exist about the other group, feeling threatened through the others is very likely. Therefore, in chapter 3, I will focus on threat in relation to attitudes and behavioural intentions towards the asylum seekers.

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3. How does perceived threat relate to prejudice towards the outgroup?

3.1. Introduction

This study generally aims at explaining negative attitudes and behavioural intentions that citizens endorse when confronted with asylum seekers. For this third chapter the focus is on perceived intergroup threat. The asylum seekers, that is, a group of unknown foreigners were moved into the neighbourhood of the study participants. Furthermore, migrants and asylum seekers generally get a lot of negative coverage in the (German) mass media. Therefore, it was highly likely that at least some of the locals would feel threatened from the newcomers' arrival and living in the same district. Thus, I was presented with an exceptional opportunity to assess the threat perceptions of these personally affected participants and relate them to their prejudice, discrimination intentions and so forth.

Threat in relation to attitudes towards outgroups has been central to several theoretical approaches in the past. Generally, two theoretical orientations can be distinguished. The first treats perceived threat as an outcome of inter-individually different stable personality traits, such as prejudice (i.e., the *prejudiced personality approach*). The second orientation makes the opposite causal assumption. It treats prejudice as an outcome of perceived threats (i.e., the *threat creates prejudice approach*). Obviously, these two approaches are in contradiction with each other, when proposing that prejudice is mainly an antecedent versus mainly an outcome of perceived intergroup threat. The goal of this chapter is to empirically test the causal assumptions of these two theoretical orientations with a longitudinal data set. Thus, it will be analysed, whether perceived threat is a predictor or a consequence of prejudiced attitudes and negative behavioural intentions towards asylum seekers. An answer to this question has important theoretical and practical implications, because it implies how to further study intergroup threat and how to intervene in conflictual and threatening intergroup situations.

In the following chapters the two theoretical orientations are described in detail, including empirical findings and critical issues. Then, the empirical results for the central causal question

will be given. Finally, a discussion of these results and of their theoretical and practical implications will follow.

3.2. Theoretical background

Generally, two broad theoretical orientations that relate threat to attitudes towards outgroups can be distinguished in psychological theorising. The first, dating back to the middle of the 20th century, focuses on the *prejudiced personality* (e.g. Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). The general idea of this approach is that inter-individual differences in the levels of outgroup prejudice lead to different appraisals of the intergroup situation and of relevant outgroups. Accordingly, in this approach to perceive an outgroup as threatening is determined by qualities of the *perceiver*, not by the outgroup or situation. Thus, it is an approach from within the realm of personality psychology.

The second theoretical orientation was developed later in the last century by scholars of sociology and social psychology (e.g. Blumer, 1958; Quillian, 1996; Stephan & Stephan, 2000). This approach, that is currently highly en vogue (Stephan & Renfro, 2002), focuses on *threat as a predictor* of attitudes and behaviour towards outgroups. In the following chapters I will describe the ideas of these two theoretical orientations in more detail. Specific prominent theories from within these orientations will be described and their empirical support summarised.

3.2.1. Threat perceptions as consequences of the prejudiced personality

Several theories start off from inter-individual differences in stable traits and use these to explain attitudes and behaviour in relation to outgroups. There are many such theories, but here I will present only some prominent examples. Starting with one classic approach, first the concept of the Authoritarian Personality will be introduced (Adorno et al., 1950). Secondly, a more recent offspring of this concept, namely the Social Dominance Approach will be described (Sidanius, 1993). Finally, I will present a cognitive style, that is, the Need for Cognitive Closure (Webster & Kruglanski, 1994) that has been proposed to systematically vary between individuals and to be

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relatively stable within individuals. Moreover, it has been shown to be related to intergroup preferences and behaviour.

The Authoritarian Personality. The most influential example of the *prejudiced personality* orientation is the work on the Authoritarian Personality (Adorno, et al., 1950). The general assumption of this theorising is that the social attitudes of an individual are an expression of his or her deep personality traits. Originally drawing on a psychoanalytical background it is assumed that these personality traits are developed in childhood and are depending on the upbringing style of the parents. However, this psychoanalytical theorising has not received much empirical support and has therefore been replaced with Social Learning Theory (Altemeyer, 1988). More recently, Feldman (2003) has argued, that the conflicting values of social conformity and personal autonomy underlie Authoritarianism. The main components of Authoritarianism are authoritarian submission, authoritarian aggression and conventionalism (Altemeyer, 1996, Funke, 2005). The Authoritarian Personality Approach has received substantial empirical support (see Altemeyer, 1996). However, this approach has been extensively criticised (cf. Feldman, 2003).

The major theoretical point for my research question is that from within this approach one would expect that discrimination of and prejudice towards migrants are specific expressions of stable inter-individual differences in Authoritarianism and that these stable differences partly determine they way outgroups are seen as more or less threatening (see Duckitt & Fisher, 2003, p. 214).

Social Dominance Orientation. A second and somewhat similar approach is that of Social Dominance Orientation (Sidanius, 1993; Sidanius & Pratto, 1999), which attempts to connect the worlds of individual personality and attitudes with institutional behaviour and social structure. Thus, this approach integrates several levels of analysis. Social Dominance Orientation is defined as a generalized stable orientation toward group-based social hierarchy that has systematic inter-individual differences. The basic idea is that "group conflict and oppression (e.g. racism, …) can be regarded as different manifestations of the same basic human predisposition to form group-based social hierarchies" (Sidanius & Pratto, 1999, p. 38).

Mechanisms to maintain or establish social dominance of one's social group are the legitimising myths that "consist of attitudes, values, beliefs, stereotypes, and ideologies that provide moral and intellectual justification for the social practices…" (p. 45). Perceived

intergroup threat belongs to the list of legitimising myths that can be used to justify the current status quo. It can justify one's personal prejudice and discriminatory intentions or behaviour towards members of subordinate groups (cf. System Justification Theory, e.g. Jost, Banaji, & Nosek, 2004). Social Dominance Theory was extensively tested in 45 samples with more than 18.000 subjects (see Sidanius & Pratto, 1999, chapter 3). It was shown that this orientation can be reliably measured and that it systematically relates to political attitudes, values, beliefs, prejudice and discrimination towards social groups.

From within this approach it can be expected that perceptions of intergroup threat follow in dependence of individual levels of Social Dominance Orientation and prejudice. In this understanding threat perceptions might fulfil the function of legitimising myths and justifications for the available stable outgroup orientations certain individuals hold. Thus, threat perceptions are dependent of these stable orientations.

The Need for Cognitive Closure. One further example of this first general theoretical orientation, that conceptualises perceptions of intergroup threat as outcome of stable inter-individual differences, is the cognitive style Need For Cognitive Closure (Webster & Kruglanski, 1994). It describes a dispositional construct that is manifested through several aspects, such as, a desire for predictability, order and structure, discomfort with ambiguity, a preference for decisiveness, and close-mindedness. It has been shown that this disposition contributes to in-group favouritism, rejection of deviates, resistance to change, conservatism and the perpetuation of group norms (Kruglanski, Pierro, Mannetti, & De Grada, 2006). Accordingly, it can be expected that people high in this cognitive style (who are generally higher in Authoritarianism, Social Dominance Orientation and prejudice) will tend to view outgroups as more threatening than people low in their Need for Cognitive Closure. Thus, depending on the relatively stable and inter-individual different cognitive style, outgroups will be seen as more or less threatening.

Summary. In the previous chapters I briefly introduced three specific theoretical accounts as examples of the general theoretical orientation that assumes threat perceptions to be caused by such stable traits like for instance Authoritarianism. Even though they are conceived as different constructs, there is quite some theoretical overlap between the Authoritarian Personality, Social Dominance Orientation and the Need for Cognitive Closure. Furthermore, empirically these personality descriptors are positively interrelated (Jost, Glaser, Kruglanski, & Sulloway, 2003). It

is the general hypothesis of these approaches that stable inter-individual differences (in Authoritarianism, Social Dominance Orientation, cognitive style, or prejudice) causally determine situational and intergroup appraisals, including perceptions of intergroup threat. Accordingly, threat perceptions are an outcome of prejudice.

3.2.2. Threat perceptions as antecedents of prejudice

Intergroup threat is a central construct for several other theories as a *causal predictor* of tensions and conflicts between social groups. Such theories have been developed by both, scholars of sociology and of social psychology, and a strong overlap exists between these two research traditions. These separately developed approaches have been increasingly connected in recent years (e.g. Riek et al., 2006; Stephan & Stephan, 2000).

3.2.2.1. Sociological theories

Sociological research has added to research on threat through theoretical and empirical work on the Group Position Theory of Prejudice (Blumer, 1958) or Group Threat Model (Quillian, 1996; for a review see Bobo, 1999). These theories share the general idea "that prejudice is in part a response to feelings that certain prerogatives believed to belong to the dominant racial group are under threat by members of the subordinate group" (Quillian, 1996, p. 820).

3.2.2.2. Social psychological theories

Realistic threat to scarce resources. Threat to scarce resources is a fundamental part of Realistic Group Conflict Theory (LeVine et al., 1972; Sherif, 1966), representing an early social psychological contribution to the issue. It is proposed that a negative interdependence between two groups' goals leads to competition, feelings of threat, derogating attitudes and behaviour between their members. Recently, there has been a renewed interest in the concept of intergroup threat in relation to attitudes and behaviour towards outgroups in social psychological theorising

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(e.g. Stephan & Stephan, 2000, Stephan & Renfro, 2002). In their Instrumental Model of Group Conflict Esses, Jackson and Armstrong (1998) propose that subjectively perceived competition for resources represents one determinant of negative attitudes toward immigrants and immigration.

Symbolic threat. Other concepts, such as identity threat (Branscombe et al., 1999) and distinctiveness threat (Brewer, 1991) are based on Social Identity Theory (Tajfel & Turner, 1979, 1986). These latter approaches deal with threat to symbolic resources, like one's social identity, and relate it to attitudes and behaviour towards outgroups.

3.2.2.3. The Integrated Threat Model

Recently, Stephan and Renfro (2002) combined several elements of the just described theories into one integrative model that aims at explaining prejudice and discrimination of outgroups by stressing the importance of threats elicited from these groups. The model builds on the earlier published Integrated Threat Theory of Prejudice (Stephan & Stephan, 2000) but is more comprehensive and more specific than the first version. The differentiation into realistic and symbolic threats and their conceptualisation as determinants of negative intergroup attitudes and behaviour, are central to this approach. Certain antecedents are proposed to lead to perceptions of threat, which then lead to psychological and behavioural reactions, that is attitudes and behaviour towards members of the outgroup (see Figure 1).

How exactly can the elements of this theory and their relations be understood? Four groups of antecedents of threat are proposed. These include *relations between the groups* (e.g. intergroup conflict, relative group status, size of the outgroup relative to the ingroup), *inter-cultural factors* (e.g. differences between collectivistic vs. individualistic cultures), *individual difference factors* (e.g. ingroup identification, outgroup knowledge, self-esteem) and finally *situational factors* (e.g. contact conditions).

These antecedents are hypothesised to lead to realistic and / or symbolic threats. *Realistic threats* endanger the very existence of the ingroup, its political or economic power, or the physical and material well-being of the ingroup and its members. Realistic threats can be distinguished from a number of *symbolic threats*. These concern symbolic resources of the individual or the ingroup, such as its language, culture, ideology, or norms.

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The consequences of threat are described in very general terms as either psychological reactions (such as evaluations of the outgroup, i.e., prejudice) or behavioural reactions (such as protest, aggression, or withdrawal). Rather than static, threats are conceived as dynamic and changing across situations and time.
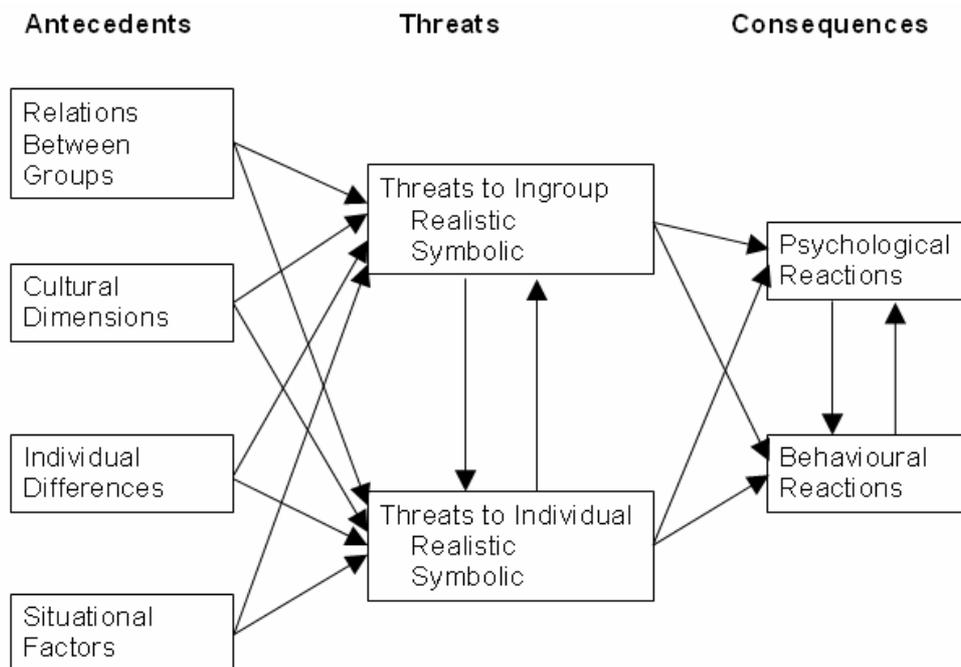
Figure 1. The Integrated Threat Model (adapted from: Stephan & Renfro, 2002, p. 197)

Concerning the issue of causality, beside the general notion that antecedents lead to threat that leads to reactions, the authors explicitly state that "ultimately, the model is circular" (p. 203). This means that the consequences of threat (that is psychological or behavioural reactions) may feed into the antecedents of threat (i.e., perceptions of the intergroup situation), or threat itself, as relations between the groups evolve over time. Admitting this circular option is courageous, because in our field reductionist uni-directional theorising is very common. However, such circularity is realistic, because in reality the studied relations most likely are not simply uni-directional, but reciprocal (cf. Riek, et al., 2006; Stephan, Boniecki, Ybarra, Bettencourt, Ervin, et al., 2002).

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3.2.2.4. Empirical findings

As noted, the Threat Model by Stephan and Renfro (2002) is highly comprehensive and encompasses the central concepts of many relevant past theories. Additionally, there is a recent meta-analysis by Riek and colleagues (2006) summarising the empirical findings within the framework of this model. Therefore, for this section, I will focus on the empirical results concerning the Threat Model.

Overall, there is good empirical evidence for the cross-sectional validity of the Threat Model. A test of the whole model is nearly impossible, due to the large number of involved variables. Therefore empirical studies usually focus on a few of the proposed relations only, such as the link between perceived outgroup size and realistic threat or the link between symbolic threat and prejudice. Riek et al. (2006) summarised the findings about the relationships between various intergroup threats and attitudes towards outgroups in a quantitative meta-analysis. They tracked a total of 95 separate samples with more than 50.000 participants. The average correlation for the link between realistic threat and negative attitudes was $r = .42$ ($p < .05$). The average correlation between symbolic threat and negative attitudes was similarly strong with $r = .45$ ($p < .05$). The correlation between realistic threat and symbolic threat was reported to be positive and in the range of $r = .35$ to $r = .59$ ($ps < .05$).

However, as the authors acknowledge, these solid cross-sectional relations do not reveal anything about the causal relations between outgroup threat and attitudes. The three studies, that used experimental manipulations of realistic threat yielded a much smaller average causal effect of $r = .14$ ($p < .05$).[4] The discrepancy between the average cross-sectional correlation of $r = .42$ ($p < .05$) and the average causal effect of $r = .14$ ($p < .05$) might be rooted in the different methodologies of experiments versus survey studies or in reciprocal causality. However, usually we find *bigger* effect sizes under the controlled experimental conditions in the lab. Therefore, the second explanation for this discrepancy in effect sizes seems more plausible. The cross-sectional correlations between attitudes towards outgroups and perceived threat are based on the causal effects from threat to attitudes and, additionally, on the opposite causal effects from attitudes to threat (and other third factors that influence both constructs simultaneously). Thus, the reported

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[4] For symbolic threat there was no such difference in average effect sizes between experimental and survey studies.

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discrepancy between correlation and the relatively smaller causal effects reveals that there might be a similarly or even stronger causal effect from the attitudes to threat (as proposed in the prejudiced personality approach, cf. chapter 3.2.1), leading to the strong cross-sectional correlations.

To quantify this reverse causation experiments that manipulate prejudice first and then measure threat afterwards are needed. Alternatively, longitudinal studies can potentially reveal the direction of causation. One (unfortunately deficient) example for the latter approach is a recent study by Louis, Duck, Terry, Schuller and Lalonde (in press). They used a two wave longitudinal design to assess the causal influence of perceived realistic threat by asylum seekers on Australian citizens' attitudes and behaviour towards them. They reported that higher threat perceptions causally lead to more negative attitudes over time ($\beta = .19$, $p < .01$), but were not influencing measures of actual behaviour. However, in their study threat was measured at time 1 only, whereas attitudes and behaviour were assessed at time 2 only. Thus, they report no clear causal effect, because the stability of the outcome variables was not controlled for. And, consequently, reverse causation was and could not be tested in this study, and the question as to the strength of these reverse effects remains open.

Summarising, many empirical studies tested different parts of the Threat Model and the results have been reviewed meta-analytically by Riek et al. (2006). Overall, these studies yielded good cross-sectional support for the assumptions of the Threat Model. Commonly, it was found that as hypothesised, the antecedents were related to threat and that more perceived intergroup threat was related to worse intergroup attitudes and behaviour. However, beside a few experimental studies mainly cross-sectional designs have been used. The causal effects in experiments were smaller than the correlations in cross-sectional surveys, implying the possibility of simultaneous causal effects in both directions in the latter. Longitudinal studies that can properly test the proposed causal ordering of the model's elements are still rare.

3.2.2.5. Summary

Several theoretical approaches that focus on perceptions of intergroup threats as causal predictors of attitudes and behaviour towards members of outgroups have just been introduced. Recently, many of the basic ideas of these approaches have been summarised in Stephan and Renfro's

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(2002) Integrated Threat Model. Basically, the model proposes that several individual and situational antecedents lead to perceptions of realistic and symbolic threat. These threat perceptions in turn are hypothesised to lead to psychological and behavioural reactions towards members of the outgroup, that is attitudes and behaviour. The option of reverse causation is explicitly admitted within the Threat Model. The reviewed empirical support is mainly based on cross-sectional designs, with few experiments and longitudinal studies that unfortunately tested only the "threat leads to prejudice link". Empirical comparison of both causal directions is still missing.

3.3. Hypotheses

Two theoretical orientations were introduced in the previous chapter 3.2. They each make assumptions about the causal relations between attitudes and behaviour and perceptions of intergroup threat. The general assumption of the first theoretical orientation (i.e., the *prejudiced personality approach*) is summarised in the following hypothesis:

Hypothesis H5) Prejudice leads to threat perceptions
Higher levels of prejudice against migrants causally lead to stronger perceptions of intergroup threat from these migrants.

The second introduced theoretical orientation (i.e., the *threat leads to prejudice approach*) makes the opposite causal claim that is summarised below:

Hypothesis H6) Threat perceptions lead to prejudice
Stronger perceptions of intergroup threat causally lead to more prejudice towards the migrants.

Because H5) and H6) are causal hypotheses to be tested on data from a longitudinal design, the cross-lagged panel approach (Kenny, 1975, 1979; Cook & Campbell, 1979; Rogosa, 1980) is an adequate way to test them. This statistical technique shows the direction of causation between any two variables. Thus, it is possible to explore whether one variable causally determines significant change in another variable, whether the causal direction is in the opposite

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direction, in that the second variable changes the first, or whether there is bi-directional causation between the two.

3.4. Method

3.4.1. Measures

Participants and procedure of this study have been described in chapter 2.3 already. For the analyses of this chapter I used the following scales that assessed different aspects of attitudes towards the outgroup: prejudice, perceived cultural difference, negative emotions, perceptions of realistic threat and discrimination intentions. Their qualities have been described in chapter 2.3 (cf. Table 1).

Additionally, perceptions of symbolic threat were assessed. Many asylum seekers speak little or no German and prefer to communicate in their original languages, which makes them even more alien to some of the Germans. Therefore, symbolic threat was measured using an item that stated "*During the next years the German language is likely to be displaced by migrants' languages*". For the original German wording of this item see appendix. This item had averages and standard deviations of $M_{t1} = 2.74$, $SD = 1.90$ and $M_{t2} = 2.77$, $SD = 1.84$. It correlated with $r_{t1-t2} = .47$ ($p < .001$) and did not change significantly over time ($t < 1$).

3.5. Results

To give a short overview of the results section: I will first report the cross-sectional relations of the variables, by describing how they are correlated. The aim is to be able to compare the cross-sectional relations of the variables in my data set with what has been reported by others in the literature. Afterwards, I will present the results of the tests of my central causal hypotheses, for which a cross-lagged panel approach was used. This will enable me to choose which of my competing hypotheses best describes the causal relations between prejudice and threat perceptions. Finally, an explorative attempt to find moderators of the direction of causality between prejudice and threat perceptions will be described and its results presented.

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3.5.1. Cross-sectional relations

Cross-sectional relations within the threats

To describe the cross-sectional relations between the assessed variables correlations were computed for both measurement points separately (see Table 2 for realistic threat and Table 6 for symbolic threat). Concerning the correlations between realistic and symbolic threat, surprisingly only at time 1 I found significant positive relations and this correlation was of small size (r_{t1} = .26, $p < .01$). Thus, the two subtypes of threat were not strongly related, they varied independently. Furthermore, I found that prejudice, negative emotions and discrimination intentions were all significantly and strongly related (cf. chapter 2.4.1).

Cross-sectional relations between perceived threats and attitudes towards the outgroup

Realistic threat related significantly positively with prejudice (r_{t1} = .29, r_{t2} = .37, ps < .01), negative intergroup emotions (r_{t1} = .47, r_{t2} = .46, ps < .001) and discrimination intentions (r_{t1} = .34, r_{t2} = .50, ps < .001). For symbolic threat the pattern was very similar. It related significantly positively with prejudice (r_{t1} = .53, r_{t2} = .35, ps < .01), negative intergroup emotions (r_{t1} = .55, r_{t2} = .34, ps < .01) and discrimination intentions (r_{t1} = .51, r_{t2} = .41, ps < .001). Both scales were not related to perceived cultural difference. These generally meaningful relations, that are very similar at both measurement points (see Table 2 for realistic threat and Table 6 for symbolic threat), corroborate the validity of both single item threat measures.

Summarising over all cross-sectional relations between the assessed constructs, they were in agreement with both theoretical orientations that were introduced in chapter 3.2. In line with the *prejudiced personality approach* I found more prejudice and discrimination intentions to go along with stronger threat perceptions of both kinds. However, the cross-sectional findings were also in line with the second theoretical orientation, that is, the *threat creates prejudice approach*, as summarised in the propositions of the Threat Model. The more threats our participants experienced, the more prejudice, negative emotions and discrimination intentions were reported. Taken together, these cross-sectional findings could be used as empirical support for *both* theoretical orientations and they are in line with past empirical findings from *both* these orientations. The decision between their contradicting causal claims can only be made by analysing the data longitudinally.

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Table 6

Intercorrelations of symbolic threat with the other scales at time 1 (top row, N_{t1} = 116) and at time 2 (second row, N_{t2} = 70)

Scale	time	Symbolic Threat
Prejudice	time1	.53***
	time2	.35**
Cultural difference	time1	.16
	time2	.08
Negative Emotions	time1	.55***
	time2	.34**
Realistic Threat	time1	.26**
	time2	.23
Discrimination intentions	time1	.51***
	time2	.41***

Note. ** $p < .01$, *** $p < .001$.

3.5.2. Analyses of directional causality

The uni-directional causal hypotheses H5) and H6) were tested using a cross-lagged panel approach (cf. Kenny, 1975, 1979; Cook & Campbell, 1979; Rogosa, 1980). For a summary of the results of these analyses see Table 7. Hypothesis H5) had stated that higher levels of prejudice against migrants causally lead to stronger perceptions of intergroup threat from these migrants. Hypothesis H6) had made the opposite claim that stronger perceptions of intergroup threat causally lead to more prejudice towards the migrants. Empirically, in my data I found support for hypothesis H5). Perceptions of realistic threat were independently, causally and significantly increased over time by more prejudice ($\beta = .35$, $p < .01$), more negative emotions ($\beta = .37$, $p <$

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.01) and more discrimination and exclusion intentions ($\beta = .34$, $p < .01$). Symbolic threat was significantly increased by more perceived cultural difference ($\beta = .21$, $p < .05$), more negative emotions ($\beta = .29$, $p < .05$) and more discrimination and exclusion intentions ($\beta = .38$, $p < .001$) and unaffected by prejudice. Thus, H5) could be accepted. The empirical pattern was in contradiction with hypothesis H6). I found no causal effects of realistic and symbolic threats on the attitudes and behavioural intentions towards the outgroup and accordingly, hypothesis H6) had to be rejected.

Table 7

Summary of cross-lagged panel analyses between threat perceptions and attitudes towards the outgroup

	Path from realistic threat to attitudes	Path from attitudes to realistic threat	Path from symbolic threat to attitudes	Path from attitudes to symbolic threat
Prejudice	.08	**.35****	-.07	.20
Cultural difference	.03	.16	.20	**.21***
Negative emotions	.02	**.37****	.05	**.29***
Discrimination intentions	.11	**.34****	.04	**.38*****

Note. Cells contain standardised path coefficients. Significant results are marked in **bold**.

* $p < .05$, ** $p < .01$, *** $p < .001$.

In sum, the empirical evidence supported hypothesis H5), whereas H6) had to be rejected. It can be concluded, that higher levels of prejudice, more perceived cultural difference, more negative emotions and stronger discrimination intentions concerning the migrants causally lead to stronger perceptions of intergroup threat from these migrants.

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3.5.3. Moderation of the direction of causality

Empirically it was found in this study that worse attitudes such as high levels of prejudice caused increased intergroup threat perceptions. This finding is in line with the *prejudiced personality approach*, but contradicts the *threat causes prejudice approach*. However, there is experimental evidence showing that a causal path from threat to prejudice can also be of significance (cf. Riek, et al., 2006). If both causal directions are possible, this raises the question which variables might possibly moderate the direction of causality between prejudice and realistic threat. One such potential moderator of the direction of causality between prejudice and threat are perceptions of the power of the ingroup. By drawing on appraisal theories of emotions (e.g. Roseman, 1984; Frijda, 1986; Scherer, 1988) the following can be assumed:

Hypothesis H7) Moderation of the direction of causality between threat and attitudes through perceptions of ingroup power.

If a participant perceives his or her ingroup as powerless higher levels of prejudice will lead to higher levels of threat. If, however, the ingroup is perceived as powerful threat perceptions might be independent of prejudice levels and depend on other third variables.

I tested for this moderation of the causal link by analysing moderator effects of perceptions of the ingroup's power. This analysis was post-hoc and highly explorative, therefore the results have to be regarded very cautiously. However, this approach might hint at promising avenues for future research to increase our understanding of the causal links between prejudice and threat and therefore this analysis is reported here.

Method. Following the procedure by Aiken and West (1991) and adapting it to my longitudinal design I tested for a possible moderation of the causal link from prejudice at time 1 to realistic threat at time 2, while controlling for effects of threat at time 1 (that is controlling the stability of threat) and using perceptions of the power of the ingroup as potential moderator. Thus, a significant result (that is a significant interaction term) would indicate that time 1 ingroup power perceptions moderate the degree of change in threat at time 2 that is predicted by prejudice at time 1.

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Results. The single item "*I find Germans … powerless – powerful*" (scoring 1 to 7, M_{t1} = 4.89, *SD* = 1.40) turned out to be a marginally significant moderator of the "prejudice t1 - change in realistic threat t2 link" (*p* = .086). Further simple slope analyses revealed that the average prejudice – threat effect of *B* = 0.64, *p* = .003 was driven by those 35 participants, that perceived the Germans as especially powerless (*B* = 0.96, *p* = .001), whereas the relation was not significant for those 35 subjects, who saw the Germans as rather powerful (*B* = 0 .31, n.s.). The means of all involved variables for the whole longitudinal sample and both subgroups are presented in Table 8. Summarising, this explorative moderation analysis revealed a marginally significant effect of the moderator perceptions of the ingroup's power on the effect of prejudice at time 1 on the change in threat between times 1 and 2. While for the subgroup of "high ingroup power perceivers" the prejudice - threat link was not significant, it was for "low ingroup power perceivers". Thus, hypothesis H7) can not be accepted, because the proposed moderation did not reach the level of significance. However, there is a tendency of moderation as assumed by hypothesis H7).

Table 8

Means and standard deviations of prejudice and realistic threat for the whole sample (N = 70)
and the subgroups (Ns = 35) involved in the moderation

Scale	Time	Whole sample	Perception of Germans' power	
			high	low
		$N = 70$	$N = 35$	$N = 35$
		M (SD)	M (SD)	M (SD)
Prejudice	time 1	3.92 (1.40)	3.66 (1.34)	4.18 (1.42)
Prejudice	time 2	3.82 (1.40)	3.57 (1.40)	4.07 (1.38)
Realistic threat	time 1	3.51 (2.86)	2.37 (1.24)	4.66 (2.99)
Realistic threat	time 2	1,28 (1.79)	.88 (1.45)	1.68 (2.01)

Note. Responses ranged from 1 to 7 for prejudice and from 0 -12 for realistic threat.

3.6. Discussion

3.6.1. Summary of results

With this study determinants of majority members' negative attitudes and the closely related behavioural intentions towards asylum seekers were examined. Special focus in this third chapter was on perceived intergroup threat in relation to attitudes towards the asylum seekers. More specifically, I tested the causal ordering between negative attitudes and perceptions of intergroup threat. The global goal of this kind of research is to improve the theoretical understanding of phenomena leading to problematic intergroup relations between social groups (as, for instance, citizens and migrants) and thus, to eventually be able to improve these relations. I used a two-wave longitudinal design in a field study with German majority participants that were personally

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affected by migration influx. Just before the moving in of the migrants into their neighbourhood I assessed participants' perceptions of realistic and symbolic threat and their attitudes and behavioural intentions towards the asylum seekers. Six months later I measured the same constructs again and assessed participants' perceptions of the new intergroup situation.

To derive the hypotheses I drew on theorising from two general theoretical orientations. First, from what I summarised under the label of the *prejudiced personality approach* (cf. chapter 3.2.1), I assumed that stable inter-individual differences in attitudes lead to according perceptions of the outgroup as threatening the ingroup. These ideas were summarised in hypothesis H5) that had assumed that inter-individually different levels of prejudice cause according threat perceptions.

Opposite causal assumptions were derived from a second theoretical orientation that I summarised under the label *threat causes prejudice approach* (cf. chapter 3.2.2). This approach is quite comprehensively contained in the recent Integrated Threat Model (Stephan & Renfro, 2002). From this theoretical reasoning hypothesis H6) was derived. It proposed that perceptions of more or less intergroup threat causally lead to according levels of prejudice and discriminatory intentions.

Cross-sectional analyses of the relations between perceived threat and attitudes towards the outgroup were generally in line with both causal assumptions. If I had stopped the analyses here, I could have concluded, that my data support both theoretical orientations. However, using a cross-lagged panel approach I conducted longitudinal analyses. They revealed that hypothesis H5) could be accepted, whereas H6) had to be rejected. It turned out that the attitudes at time 1 causally determined the change in the perceptions of realistic and symbolic threat between time 1 and time 2. These results are in line with the theoretical orientation labelled the *prejudiced personality approach* and they contradict the *threat causes prejudice approach.*

Furthermore, I seized Stephan and Renfro's (2002) suggestion that causation between threat perceptions and attitudes towards an outgroup is ultimately recursive. Therefore, in a highly explorative way, I analysed whether perceptions of the power of the German ingroup moderate the direction of causality between prejudice and threat, as assumed post-hoc in Hypothesis H7). The results were only marginally significant and therefore cannot be properly interpreted. However, they show that a moderation of the direction of causality might be generally possible and that power perceptions might be one potential moderator of the primary causal direction.

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3.6.2. Theoretical implications

First, I will make some meta-theoretical remarks, followed by various ideas on possible future studies and how to further improve the comprehensive and inspiring Threat Model by Stephan and Renfro (2002). I used theorising from two quite distinct theoretical orientations to derive my (contradicting) causal hypotheses. The first, the *prejudiced personality approach* has the basic assumption that stable personality traits, such as prejudice, can cause according threat perceptions. The second approach assumes that *threat causes prejudice.* Both theoretical orientations have inspired a lot of research and empirical evidence has been gathered for both causal assumptions. However, most researchers focus on only one of these approaches and ignore the second. For instance, much of the recent literature that applies and tests the Integrated Threat Model (Stephan & Renfro, 2002) focuses on the "threat causes prejudice link" only, and ignores the other causal direction (cf. Riek et al, 2006). Such uni-directional testing does not fully satisfy the complex model in which Stephan and Renfro (2002) explicitly include the option of reverse causation and take account of personal differences in their list of antecedents of threat perceptions. Because most researchers use cross-sectional designs or experiments that test only one causal direction, they often confirm the "threat leads to prejudice" direction, without having compared it properly with the opposite causal direction.

The present longitudinal study can show that in a real life setting with personally affected participants there is a causal effect from prejudice to threat. This is not to say that studies showing effects from threat to prejudice are wrong, but they are incomplete. For an integrated understanding of the antecedents and consequences of perceiving outgroup threats, prejudice, discrimination and related phenomena both, personality and situation are of importance. This is a call to revive (not relive) the controversy of personal versus situational influences on intergroup relations (cf. Jackson & Poulsen, 2005; Esses, Jackson, Dovidio, & Hodson, 2005; Duckitt, 2003) and make use of the lessons learned in the past.

How to interpret the finding that threat perceptions were an outcome of participants' prejudice? It seems that in my context perceived realistic and symbolic threats served a justifying (Jost et al., 2004) or legitimizing (Sidanius, 1993) function for already existing, highly stable, negative attitudes and behavioural intentions towards the asylum seekers. Hence, the voiced realistic and symbolic threats might be justifications for negative attitudes, rather than their cause. Thus, it seems that in my study the causal ordering is not *"they threaten our jobs and culture and*

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therefore I don't like them and want them out", but "*I don't like them and want them out, and that's because they are threatening our jobs and are culturally different*". Participants' justification and legitimisation were not assessed in the present study, therefore there is no empirical evidence for this notion. However, future studies might address this issue more adequately by measuring participants' justification and legitimisation motives.

Stephan and Renfro's (2002) Threat Model is a very useful research framework and as such has inspired a lot of valuable research. However, the model could be further improved in several ways by future researchers. The comprehensive and very general framework could be specified and enriched with some of the many existing (social-) psychological and sociological theories, their methodologies and the empirical knowledge that they generated in the past. For example interactional person-situation approaches (e.g. Endler, 1982) could make statements under which circumstances the person or the situation is more dominant. Social Identity Theory (Tajfel & Turner, 1986) and Social Categorisation Theory (Turner et al., 1987) might be used to determine when one or the other side of the person-group-continuum is more prominent. Intergroup Emotion Theories (Smith, 1993; Cottrell & Neuberg, 2005) might describe in more detail how very specific situational appraisals can lead to specific group-based emotions that in turn lead to specific action tendencies. These theories explicate, how perceptions of certain aspects of the intergroup situations (for instance in terms of ingroup versus outgroup power to influence this situation) can lead to very specific emotions (i.e., several qualitatively distinct threats). These distinct emotions are then connected to according behavioural reactions, which may be manifold, depending on the situational appraisals. Riek et al. (2006) proposed such a specification of the Integrative Threat Model. Drawing on Smith's (1993) Intergroup Emotion Theory they propose that intergroup emotions mediate between threat and attitudinal and behavioural consequences. Theories on the attitude-behaviour-link (cf. Eagly & Chaiken, 1993) could further specify the relations between psychological reactions and behavioural reactions. Many other existing theories could be fit into the framework of the Threat Model, which is actually not my proposal but has been suggested already by Stephan and Renfro (2002).

A further necessary specification of the Threat Model concerns the differences between realistic and symbolic threat. They were developed in a convincing way as theoretically distinct constructs and are usually found to be correlated with medium strength only (Riek et al., 2006). Nonetheless, there are no specific hypotheses concerning their relations with each other (other than that these relations should be positive) or concerning their differential relations with other

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variables in the Threat Model. However, if no specific effects are expected, then why differentiate between these kinds of threats? The finding of the present study that prejudice causes realistic threat whereas perceived cultural difference causes symbolic threat is one hint of how to potentially specify these relations. As the causal analyses showed, more prejudice lead to more (legitimising) realistic threat, whereas stronger perceived cultural differences lead to more (legitimising) symbolic threat. Thus, it seems that the justification for a certain attitude is sought on that same dimension, by afterwards stressing threat to either realistic or symbolic resources. Openly derogating attitudes and behavioural intentions can be justified by "*them threatening our jobs and security*", whereas exaggerations of cultural differences between the own group and the migrant group are explained by "*them threatening our culture and language*". Such possibilities should be further elaborated in the future.

The relations between perceived threat and attitudes towards the outgroup are most likely of a reciprocal nature (Riek, et al., 2006; Stephan & Renfro, 2002). Concerning the causal directions of the Threat Model it would therefore be beneficial to specify under which conditions which causal direction is expected to be dominant. In other words: which factors moderates the principal direction of causality. For instance, it could be the case that strong motives to justify one's negative attitudes towards an outgroup (possibly depending on societal norms and individual levels of social desirability) amplify the causal path from prejudice to threat. Situational appraisals like the perception of a relatively low power ingroup might to the contrary amplify the path from threat to prejudice, a possibility implied by my moderator analysis (cf. chapter 3.5.3). This search for possible moderators calls for more future research using experimental or longitudinal designs.

A final idea on how to specify the Threat Model concerns the dimension of time. As presented by the authors, time plays no prominent role in the model. So far time is incorporated only in very general terms of "before" and "after". Some concepts are theorised to causally lead to others, with possible mediating processes in between. However, for a really dynamic process model the duration and speed of the ongoing processes should be specified. For instance, I found in my data and in line with Tropp and Pettigrew (2005) that cognitive and affective attitudes have a differential speed of change (cf. chapter 2.4). Emotions about an outgroup change faster than cognitions. Also for causal effects such differential timing is likely. For example, it could be the case that threat leads to prejudice only in the short term, as shown by several cross-sectional and experimental studies (cf. Riek, et al., 2006). In the long term the opposite might be true in that

threat is not a cause of prejudice but a consequence, as was the case in the presented longitudinal study. Though admittedly very time and resource consuming, we need longitudinal empirical studies with *multiple* measurement points to investigate over which course of time which of the theoretical relations of the Threat Model are valid. In short, I propose to improve the threat framework by implementing existing, more detailed theories, by increasing the differentiation of causes and effects of realistic and symbolic threats and by specifying the temporal and causal assumptions and possible moderators thereof.

3.6.3. Practical implications

Empirically I found negative attitudes towards the migrants highly stable. Furthermore, both kinds of threats were outcomes (and possibly justifications), not causes, of these attitudes. This raises the question, where to attempt to start changing such negative attitudes. At first, one might think that attempting to change justifications probably does not have much of an effect on the stable attitudes they are justifying. However, there is some hope for change to the better. When combining the present results with those of past studies (cf. Riek, et al., 2006), it seems highly likely that the causation between attitudes, behaviour and perceived threat is recursive. This implies that *any* point in the circle can be used as a starting point for change. It seems promising to start with the most flexible constructs and hope that via their circular causal links they will eventually affect other, more stable attitudes over the course of time. The most flexible constructs in this study were the negative emotions and perceptions of realistic threat that had declined and perceived cultural difference that had increased, while the other basic attitudes were highly stable in their average levels (cf. chapter 2). So it might be exactly these less stable constructs that one could address for change to the better. However, if these constructs are changed so easily, this might explain why many interventions that aim at reducing prejudice have no long term effects (Oskamp, 2000). It might be, because these constructs return to their original levels as quickly as they improved during and shortly after the intervention. Maybe it is unavoidable to aim at the rather stable constructs, or to aim at all, emotions, cognitions and behaviour, over a prolonged period of time, to achieve lasting change. However, as noted above, even though the objective situation had changed in the present study, some of the subjective basic attitudes towards the

outgroup did not. The questions, where these attitudes stem from, how to change them and who is responsible for such change, remain unanswered here.

When conceived as rather stable personality traits (Adorno et al., 1950; Sidanius, 1993) it is unlikely that Authoritarianism or Social Dominance Orientation can be changed by specific experiences or interventions. However, for instance Duckitt and Fisher (2003, p. 200) understand them as social attitudes and beliefs rather than personality traits. Altemeyer (1988) stresses that Authoritarianism as a social attitude is socially learned through interactions with parents, peers, school, the media and so forth. Thus, if Authoritarianism and Social Dominance Orientation are partly determined by the values of general society (cf. Feldman, 2003; Heitmeyer, 2006; 2007), it might be exactly these values that need change first. Also Normative Theory (Pettigrew, 1991) proposes that changes in the norms of a society can, in the long run, influence the prejudice of individuals that are part of this society.

3.6.4. Limitations

Specific limitations. (For general limitations see chapters 2.5.5 and 5.3) The high stability of the prejudice measure poses a problem within the cross-lagged panel approach that I chose to assess directional causality. Within this approach any construct X measured at time 1 can predict only that amount of variance in construct Y at time 2 that is not predicted by construct Y at time 1, because that time 1 measure of construct Y is controlled for in the equation. High stability of construct Y then means that only little variance is left to be explained by additional constructs. Therefore, the chances of for instance time 1 threat perceptions to predict time 2 prejudice levels were much smaller than the chances to find significant paths in the opposite direction, because in this study the threat measure was less stable than the highly stable prejudice measure. Thus, it might be a statistical artefact that I did not find time 1 threat perceptions to predict a significant amount of variance in the time 2 prejudice measure. However, in my sample the stability of prejudice and discrimination intentions over a period of six months is a fact, and if there is no variance left to be explained then there is no need to explain. However, contact did have effects on the change of these attitudes (cf. chapter 2). Moreover, that there is a causal path from threat to prejudice has been show by others experimentally (cf. Riek et al., 2006) and longitudinally

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(Louis, et al., in press). It is my contribution to show that the opposite path from prejudice to threat also exists and is of significance.

A second issue is the quality of the single item measures. While realistic threat was an aggregate measure of several mentioned threats, the symbolic threat item only assessed the threat to the future persistence of the German language. This is just one aspect of such symbolic threat and the meaning of the construct as assessed by me is rather narrow. Threat to other symbolic resources was not assessed.

3.6.5. Conclusion

The question remains how changes in negative attitudes towards outgroups can be brought about. What is it that can reduce negative emotions and perceptions of high realistic and symbolic threat, prejudice and discrimination intentions? Or in other words, where did they come from in the first place, before the moving in of the foreigners? Societal norms and values have been proposed as one of the sources of attitudes and beliefs in chapter 3.6.3. Furthermore, it was proposed that these macro-level variables need change for individual attitudes to change thereafter (cf. Heitmeyer, 2006, 2007).

Secondly, though it is an old idea, it can be repeated once again. Knowledge is an antidote to prejudice. Many people simply need education, they need numbers and facts (cf. Eller & Abrams, 2004). How many foreigners are there? How are these numbers going to develop in the future? To reduce perceived competition and threat it might be useful to let people know exactly which resources are taken by migrants from larger society (for instance in terms of received welfare money) and which contributions they make (for instance in terms of taxes paid, businesses founded, jobs created, …). Such statistics do exist (e.g. Assaf, Sadka, & Swagel, 2002) and are available for anyone who seriously looks for them. However, the question remains who is responsible for such education? There are many possible institutions and agents in larger society, such as kindergartens, schools, universities, but also public figures, politicians and more than anyone journalists and the mass media. Any society and mass media truly dedicated to the values of "Liberté, Égalité et Fraternité" could make it their mission to debunk the myths linked to asylum seekers and migrants, to educate those who do not know better and thus eventually improve the situation for all concerned.

4. How do acculturation orientations relate to prejudice and personal contact behaviour towards the outgroup?

4.1. Introduction

Why is it of interest to study majority members' acculturation orientations and their relation to attitudes and behaviour towards migrants? Certainly, members of mainstream society have conceptions about how they imagine living together with asylum seekers. The latter often stem from very different cultures. Therefore, beside particular and often negative presumptions and behavioural intentions towards the migrants (cf. chapter 1), these conceptions about a future with the other group also encompass a cultural dimension. That is, they contain ideas about which "changes in the original culture patterns of either or both groups" (Redfield et al., 1936) are desired or should be avoided. Remarkably, such cultural changes after "groups of individuals having different cultures come into continuous first-hand contact" have been labelled "acculturation" in the classic definition by Redfield and colleagues (1936, p. 149). Acculturation orientations are attitudes about how this process of acculturation is occurring or should ideally occur. Several researchers have theoretically and empirically related such acculturation orientations to attitudes and behaviour towards the other cultural group. Their different theories and empirical findings will be elaborated in the following chapters.

The first goal of this chapter is to investigate how the acculturation orientations of a majority group are structured. Secondly I want to explore how majority members' acculturation orientations are related to the quality of intergroup relations, as for instance indicated by prejudice, discrimination intentions and contact behaviour. Finally, I wish to examine the causal order of these relations, namely, whether acculturation orientations are predictors or effects of attitudes and behaviour towards migrants.

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4.1.1. Theoretical approaches to the study of acculturation

Research on acculturation typically focuses on migrants and their personal outcomes, such as well-being (Rudmin, 2003). Due to the majority members' high power position, their acculturation orientations are highly influential; however, they are rarely studied (Berry, 2001; Horenczyk, 1997; Ward, 1996). To only look at the migrants' side, means to neglect the other (i.e., majority) side of the process of acculturation and keeps us from fully understanding the phenomenon. Therefore, I focus on majority members' acculturation orientations in this study and hope to contribute to a better understanding of this side of the process of acculturation. Moreover, these acculturation orientations of majority members will be linked to their prejudice and discrimination intentions, that are essential determinants of the quality of intergroup relations between mainstream society and migrants.

In the rare cases that a majority perspective is taken, acculturation is usually seen in an asymmetrical way (Berry, 1997), possibly due to the asymmetrical power relations. Majority members are typically asked how they think the minority members should acculturate. Most researchers would agree that acculturation is a process of *mutual* change. To my knowledge, it has nonetheless neither been conceptualised nor systematically analysed how the majority members want to deal with their *own* changing mainstream culture. The present study aims at filling this theoretical and empirical gap. Therefore, I propose to look more closely at majority members' acculturation goals concerning their *own* mainstream culture and traditions.

Additionally, acculturation, which can be described as a dynamic process of change, has up to date mainly been studied cross-sectionally, with few exceptions only (e.g., Fuligni, 2001). Acculturation orientations have been shown to be linked to intergroup attitudes and behaviour cross-sectionally. They have been described as predictors (e.g., Zagefka et al., 2002; Zick et al., 2001), or alternatively as effects of intergroup attitudes and behaviour (e.g., Berry, 1997). So far, there is no conclusive evidence that would allow to decide between these contradicting causal claims. With the present longitudinal design I plan to find out more about the causal direction relating majority members' acculturation orientations to their attitudes and behaviour towards migrants.

In sum, my general theoretical approach is an explicit combination of two fields, namely cross-cultural acculturation research and social psychological intergroup research. These two

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fields originally developed separately (Liebkind, 2001), but have been increasingly connected in recent years (Bourhis et al., 1997; Piontkowski, Florack, Hoelker, & Obdrzalek, 2000; Piontkowski et al., 2002; Kutzner, Geschke, Mummendey, Kessler, & Funke, 2007; Zagefka & Brown, 2002; Zagefka et al., 2006; Zick, et al., 2001). With the focus on majority members and their own changing mainstream culture I attempt to shed light at above mentioned neglected aspects of majority acculturation. Additionally, the chosen longitudinal design will contribute to the understanding of the causal relations between majority members' acculturation orientations and their attitudes and behaviour towards migrants.

4.1.2. Dimensions of acculturation orientations

Many researchers (cf. Rudmin, 2003) are taking a two-dimensional approach to acculturation. The first dimension concerns *culture maintenance* that deals with the question whether or not to maintain the group's traditional culture, ways of living and language. The second dimension deals with *culture adoption* (as proposed by Bourhis et al., 1997), that is, whether or not to take up elements of other groups' culture(s) into one's own culture of origin. Contact with the culturally different group (cf. Berry, 1997) is an integral part of adoption of that foreign culture. Whether these two dimensions are orthogonal or whether they can be collapsed into one has been an issue of discussion with diverse findings depending on samples and contexts (Ryder, Alden, & Paulhus, 2000; Zick, et al., 2001). For instance, Leyens (personal communication, January 27, 2007) and Zick and colleagues (2001) found majority members' acculturation orientations to be structured uni-dimensionally on a continuum from culture maintenance to culture adoption.

Some scholars (e.g., Berry, 1997) consider it useful to dichotomise and combine the two dimensions of acculturation orientations into a fourfold categorical scheme. High culture maintenance and high culture adoption would represent an *integration* strategy and low culture maintenance and high culture adoption a strategy labelled *assimilation*. The high culture maintenance, low culture adoption combination is labelled *separation* and the unlikely choice of neither culture maintenance nor adoption constitutes a strategy named *marginalisation*. Due to the severe theoretical and psychometric problems associated with such categorical approaches (Rudmin, 2006), I prefer to not create such categories. Like other researcher (e.g., Zagefka &

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Brown, 2002), I separately examine the relations of the dimensions culture maintenance and culture adoption (or contact) with other constructs, such as prejudice.

4.1.3. Facets of majority members' acculturation orientations

As noted above, due to an asymmetrical view of acculturation, majority members are usually asked how they think the minority members should acculturate. Accordingly, I label the first facet of majorities' acculturation orientations *acculturation demands.* Some authors have acknowledged the importance of a second facet of acculturation orientations that I label *acculturation perceptions*, that is, the strategy migrants prefer as assumed or perceived by members of the majority. These perceptions have been labelled differently as "perceived acculturation ideologies" (Horenczyk, 1996), "imputed attitudes" (Piontkowski et al., 2002), "perceived strategies" (Zagefka & Brown, 2002, Zagefka et al., 2006), or, alternatively, "acculturation attributions" (Kutzner et al., 2007). Additionally, to gain a more complete picture of the interactive process of acculturation, I believe the majority members' *own acculturation goals* should be assessed. Therefore, I propose to assess whether and how much majority members want to maintain their own mainstream culture, language and traditions, and whether and how much they are willing to adopt parts of foreign minority culture(s) into their life.

To sum up my theoretical understanding of majority members' acculturation orientations (see Figure 2): I assume three different facets (acculturation demands, perceptions and own goals) that are each composed of the two dimensions culture maintenance and culture adoption. Moreover, I do not expect the three facets and their two dimensions to be strictly orthogonal, but nonetheless assume that they are clearly distinguishable. Thus, I expect only minor correlations between the facets and meaningful differential relations with attitudes and behaviour towards the migrants that would prove the applicability of the three facet approach.

General term   Facets   Dimensions

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                                    Acculturation Demands         ┌─ Culture maintenance
                                    towards the migrants          └─ Culture adoption

  Acculturation                     Acculturation Perceptions     ┌─ Culture maintenance
  Orientations                      of the migrants' goals        └─ Culture adoption

                                    Own Acculturation Goals       ┌─ Culture maintenance
                                    for the majority culture      └─ Culture adoption
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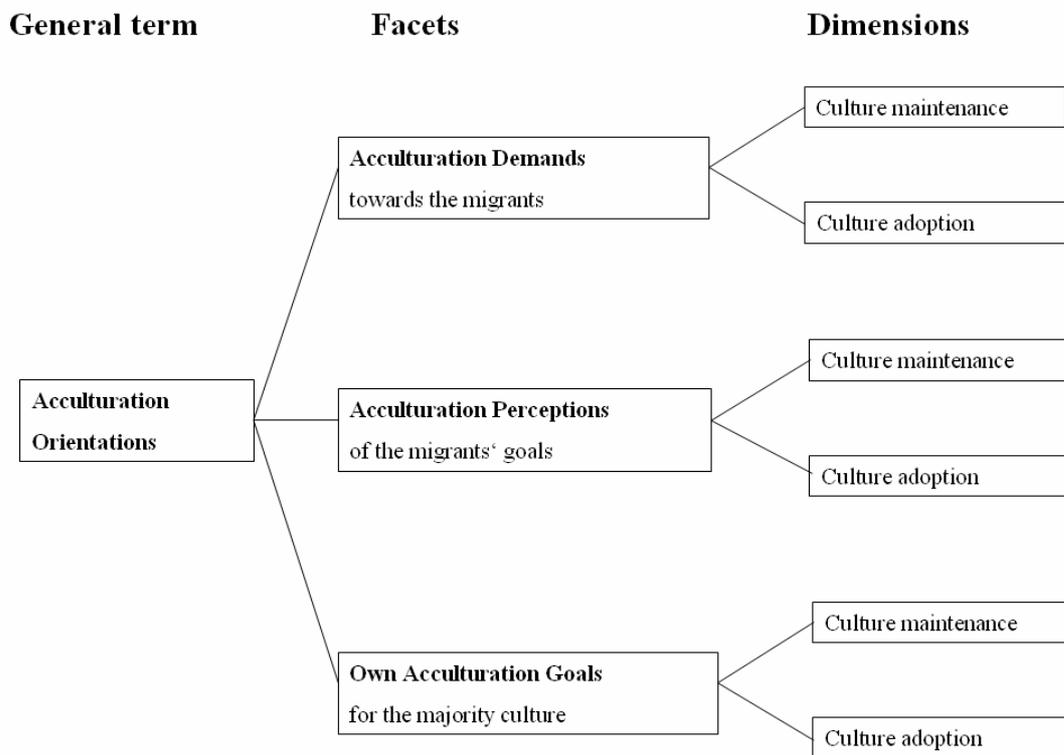
Figure 2. Taxonomy of majority members' acculturation orientations as three facets with two dimensions each.

4.1.4. Empirical evidence for the relations between acculturation orientations and prejudice and behaviour towards outgroups

The reviewed literature contains only few cross-sectional findings on the relations between majority members' acculturation orientations and their attitudes and behaviour towards migrants. These findings mainly relate to acculturation demands. Additionally, there are few studies concerning acculturation perceptions of majority members. Mostly, the relations between an integration orientation and attitudes and behaviour towards migrants are reported. These findings are summarised below.

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4.1.4.1. Acculturation demands

Zagefka and Brown (2002) reported that higher culture maintenance demands were correlated with less ingroup bias and more positive perceptions of intergroup relations in a sample of German majority school children. Thus, the more they demanded culture maintenance from the migrants, the less bias they showed and the better they perceived the quality of intergroup relations. For Belgian and Turkish majority samples, Zagefka and her colleagues (2006) found negative relations between integration demands and negative attitudes towards migrants. Accordingly, participants of this study that demanded more integration from the migrants had less negative attitudes towards them. Zick and colleagues (2001) found in a representative German sample that integration demands correlated negatively with what Pettigrew and Meertens (1995) label blatant prejudice. Additionally, for other German majority samples they reported negative relations of integration demands with what Pettigrew and Meertens (1995) label subtle prejudice and furthermore, with antipathy against foreigners and their perceived dissimilarity. Majority members' integration demands were found to be positively related to intended or actual benevolent behaviour towards migrants. The more subjects endorsed integration demands, the less likely they were to discriminate against or avoid migrants. Piontkowski and colleagues (2000) found German majority's integration demands to be related to more expected positive outcomes, conceptualised as an excess of enriching aspects over threatening aspects of the intergroup situation. Additionally, the perceived similarity in different life domains between own group and migrant group was positively related to integration demands, whereas ingroup bias related negatively to these demands. Thus, the more integration was demanded the more similar the migrants were perceived and the less bias expressed.

4.1.4.2. Acculturation perceptions

There are only few empirical findings about the relations between the majority members' acculturation perceptions and their attitudes towards migrants in the literature I reviewed. Van Oudenhoven and Eisses (1998) reported that Dutch majority members' perceptions of migrants' strong assimilation goals went along with more sympathy towards these migrants compared with

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a perception of desired integration. Kutzner and colleagues (2007) used an experimental approach to test effects of acculturation perceptions on prejudice in German majority participants. They found (study one) that stronger culture maintenance perceptions lead to higher levels of blatant prejudice. Zagefka and colleagues (2006) found no meaningful relations between culture maintenance perceptions and negative attitudes towards migrants in majority samples in Belgium and Turkey. In sum, empirical findings about the relations between acculturation perceptions and intergroup attitudes are rare and not conclusive.

4.1.4.3. Majority members' own acculturation goals

I deliberately use the term own acculturation "*goals*" for the new third facet. Goals can be defined very broadly as "internal representations of desired states" (Austin & Vancouver, 1996, p. 338). In a majority acculturation context these desired states concern mainstream culture. Goals have been studied in-depth by motivational, personality and (social) cognitive researchers, thus we can draw on their knowledge for acculturation research. I conceive one's own acculturation goals to be different from the two other facets, acculturation demands and perceptions. One's own acculturation goals are central and important because they motivate behaviour to reach goal fulfilment. Intergroup attitudes and behaviour could be means to reach a desired cultural state in a multi-group and multi-cultural world.[5] Because these own acculturation goals are a new concept in the reviewed acculturation literature, there are no explicit theoretical considerations or empirical results relating to my research interests. Therefore, I want to explore how majority members' own acculturation goals are distributed, how stable they are over time and finally, how they relate to the other facets of acculturation orientations and the intergroup attitudes and behaviour. Moreover, I want to analyse whether these own goals are predictors or effects of attitudes and behaviour towards asylum seekers.

What do I expect for this new facet? Goals concerning the maintenance of one's own mainstream culture (or adoption of foreign elements) should be highly important, because to a

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[5] The concept of multi-culturalism or multicultural ideology (Berry, 1997; Bourhis et al., 1997; Verkuyten & Thijs, 2002) seemingly includes both minority and majority perspectives and majority members' goals concerning their own culture. However, multi-culturalism as depicted in the acculturation literature is not concerned with majority members' own mainstream culture maintenance and adoption of foreign elements into it. Mostly, the focus is on migrants' culture(s), and thus, this concept is used in the same asymmetrical way as most other acculturation constructs.

majority member his or her own majority culture should be more central than other groups' minority cultures. Accordingly, I expect the new facet "own goals" to be closely linked especially to variables indicating the quality of intergroup relations, such as prejudice and discrimination intentions. More specifically, I expect less positive attitudes, behavioural intentions and behaviour towards migrants for those Germans who put great value on maintaining German culture. The goal to adopt foreign cultural elements into one's own life represents some degree of interest in the members of the other group and should thus be associated with more positive attitudes and behaviour towards them. Finally, for the causal direction of these relations I have no predictions, but remain explorative.

To summarise: Majority members' acculturation *demands* have been found to be related to ingroup bias, subtle and blatant prejudice, antipathy against foreigners, perceived similarity of ingroup and outgroup, perceived threat and enrichment, perceived quality of intergroup relations and finally to discriminatory or avoidant behavioural intentions or actual behaviour. Majority members' acculturation *perceptions* were reported to relate to sympathy and blatant prejudice towards migrants, while another study found no relations of culture maintenance perceptions with negative attitudes towards migrants. In the reviewed literature I found no empirical results concerning the majority members' *own acculturation goals*. I assume that they are an important aspect of acculturation orientations and should therefore be closely linked to attitudes and behaviour towards migrants. In particular, I hypothesise majority members' mainstream culture maintenance goals to be related to more negative and culture adoption goals to more positive intergroup attitudes and behaviour.

4.2. Research questions

First, I want to establish a conceptualisation of majority members' acculturation orientations that includes the three different facets acculturation *demands*, *perceptions* and *own goals*. Small correlations between these facets would show that they are connected, but measure different aspects of acculturation. Additionally, confirmatory factor analysis can verify the hypothesised three facet structure. Finally, differential cross-sectional and longitudinal relations with intergroup attitudes and behaviour would indicate the usefulness of the three facet approach.

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Secondly, I examine how the three facets of majority members' acculturation orientations are related to their attitudes and behaviour towards the migrant group. Cross-sectional correlational analyses will provide answers here.

Thirdly, I explore the causal order of the relations between acculturation orientations and attitudes and behaviour towards the migrants. I investigate whether A) acculturation orientations causally determine outcome variables (such as prejudice), in that they can predict change across time, whether B) acculturation orientations are consequences of these variables, rather than their predictors, or whether C) causality is bi-directional. Cross-lagged panel analyses (Kenny, 1975, 1979; Cook & Campbell, 1979; Rogosa, 1980) are deemed the adequate method to answer this question.

4.3. Method

4.3.1. Measures

Information about the field situation, design, participants and procedure of this study can be found in chapter 2.3. Participants' acculturation orientations and their attitudes towards the migrants were assessed at both measurement points. As cognitive, affective and behavioural aspects of the attitudes towards the migrants prejudice, negative intergroup emotions and discrimination intentions were assessed. Personal contact was measured at time 2 only. The items and qualities of the scales for prejudice, negative emotions, discrimination intentions and personal contact were described in chapter 2.3. Therefore, only the acculturation scales are described in detail here. A summary of the acculturation scale characteristics (number of items, reliabilities, means, standard deviations, correlations across time and values of t-tests for mean change across time) can be found in Table 9.

Three facets of acculturation orientations. The three facets of acculturation orientations (acculturation demands, perceptions and own goals) were each measured two-dimensionally. The two dimensions culture maintenance and culture adoption were assessed separately with three

items each, thus avoiding problematic double barrelled items (cf. Rudmin, 2007). For the original German wording of all used items see appendix. The facets were distinguished by asking either what the subjects think *"the migrants should…"* do for acculturation demands, what the subjects think *"the migrants want to…"* do for acculturation perceptions and what subjects think *"we Germans should…"* do for own acculturation goals. Culture maintenance was assessed with items asking whether migrants should or are perceived wanting to *"… maintain the traditional heritage culture"*, *"keep on living according to the ways of living in their home countries"* and *"… keep on speaking their traditional language"*. Culture adoption items asked whether migrants should or want to *"… adopt our German culture and ways of living"*, *"… actively seek out contact with us Germans"* and finally *"… use the German language"*.

For the third facet "own acculturation goals" very similar items were used. These items assessed first, whether or not German traditions, ways of living and language should be maintained and secondly, whether elements of migrants' culture and traditions should be adopted into German culture. Culture maintenance items asked whether *"We Germans should maintain our traditional heritage culture"*, *"… keep on living according to our traditional ways"* and *"… maintain our German language"*. Culture adoption items assessed whether *"We Germans should adopt some aspects of the culture and ways of living of the migrants"*, *"… actively seek out contact with the migrants"* and finally, *"We Germans should make some effort to learn a language of the migrants"*. For the structure of these items and the resulting scales see the following chapter 4.4.1.

Table 9

Characteristics of acculturation scales:

Name of scale, name of dimension, number of items (Items), reliabilities (α), Pearson's correlation coefficients over time (r$_{t1-t2}$), means (M), standard deviations (SD), T-value of t-test for change across time (T)

Scale	Dimension	Items	α$_{t1}$	α$_{t2}$	r$_{t1-t2}$	M$_{t1}$ (SD)	M$_{t2}$ (SD)	T
Acculturation demands	Culture maintenance	3	.71	.59	.52***	3.27 (1.30)	3.21 (1.13)	.38
Acculturation demands	Culture adoption	1	n.a.	n.a.	.43***	4.11 (1.80)	4.50 (1.39)	1.86
Acculturation perceptions	Culture maintenance	3	.70	.83	.35**	4.42 (1.50)	4.87 (1.54)	2.09*
Acculturation perceptions	Culture adoption	3	.83	.80	.62***	3.71 (1.64)	3.56 (1.52)	.79
Acculturation goals	Culture maintenance	3	.86	.81	.56***	6.21 (1.05)	6.30 (0.91)	.79
Acculturation goals	Culture adoption	3	.85	.85	.76***	3.79 (1.84)	3.53 (1.72)	1.72

Note. Responses ranged from 1 to 7.

n.a. = not available, due to single item measure for acculturation demands culture adoption.

* $p < .05$, ** $p < .01$, *** $p < .001$.

4.4. Results

The results section is arranged as follows: First, the empirical three facet structure of majority members' acculturation orientations will be described. Second, descriptive data about the mean endorsement of the acculturation scales and the cross-sectional relations within the acculturation facets is depicted. Then, the cross-sectional relations between acculturation orientations and attitudes towards the migrants will be presented, followed by the causal analyses of these relations.

4.4.1. Facets of acculturation orientations

To describe and confirm the hypothesised three facet structure of the 18 acculturation orientation items (of which eventually only 16 were used, due to reliability problems, see below), confirmatory factor analysis and AMOS 5.0 software (Arbuckle, 2003) were used. I had assumed that three facets (acculturation demands, perceptions and own goals), each composed of the two dimensions culture maintenance and culture adoption, adequately describe the structure of the acculturation orientations (Model 1, see Figure 3). Alternatively, a two-dimensional solution with only the two dimensions culture maintenance and culture adoption might be sufficient to describe the structure of these items, if the facets measured similar or identical content (Model 2). A third alternative is that acculturation orientations are structured one-dimensionally on a continuum from culture maintenance to culture adoption, but still are differentiated into the three facets (Model 3). Accordingly, I compared three nested models using the data of the 116 first wave participants: a three facets by two dimensions model, a simple two-dimensional model and a one-dimensional three facet model (cf. Table 10, see Figure 3).

In Model 1, I assumed that the theoretically derived structure (cf. chapter 4.1.3), that is, a three facets (i.e., acculturation demands, goals and perceptions) by two dimensions (culture maintenance and culture adoption) model, describes the structure of the 18 acculturation items best. Accordingly, the structure of the model was specified such that the respective items were loading on one of the following six factors: acculturation demands culture maintenance or culture adoption, or acculturation perceptions culture maintenance or culture adoption or finally own

acculturation goals culture maintenance or culture adoption (see Figure 3). Covariances between these six dimensions (C 1 to C 15, in Figure 3) were allowed to vary freely. The variance of the six dimensions was set to 1. The fit between model and data is summarised in Table 10.
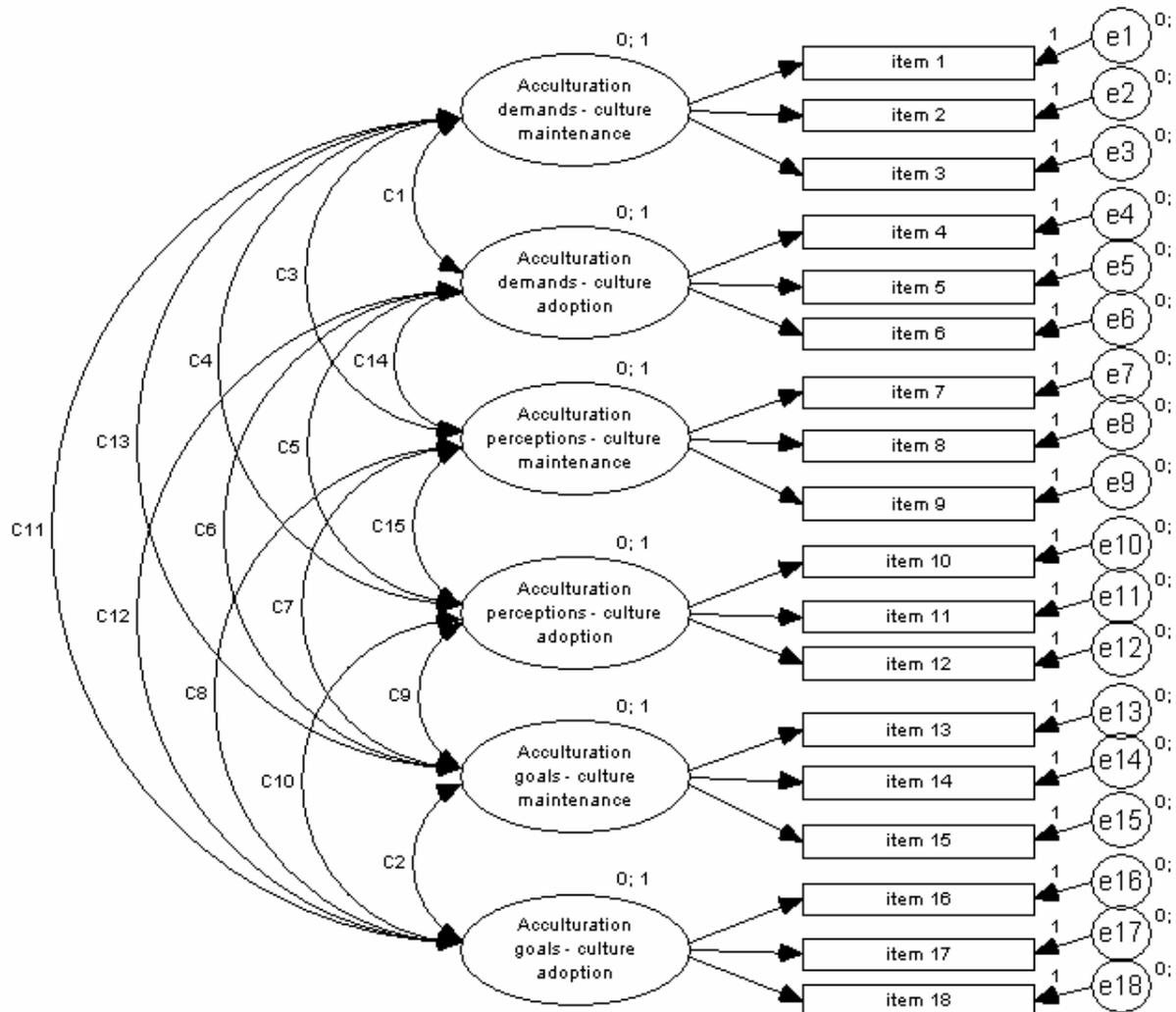
Figure 3. Nested measurement model of the 18 acculturation items. For Model 1 the covariances C1 to C15 were freely estimated. For Model 2 the covariances C3 and C7 were constrained to 1, which created the underlying factor culture maintenance. Furthermore, the covariances C5 and C10 were set to 1 and thus a culture adoption factor created. For Model 3 the covariances C1, C15 and C2 were set to -1, and thus, three underlying bipolar factors created, namely, acculturation demands, acculturation perceptions, and acculturation goals. For original item wordings see appendix.

For Model 2, I assumed that the two factors culture maintenance and culture adoption sufficiently describe the structure of the 18 acculturation items and that there is no need to distinguish between the three facets. Therefore, this model was specified such that all nine culture maintenance items of the three acculturation facets loaded on the culture maintenance dimension (by setting the covariances between culture maintenance demands, perceptions and goals to 1) and all nine culture adoption items loaded on the culture adoption dimension (by setting the covariances between culture adoption demands, perceptions, and goals to 1). Again, a correlation between the two dimensions was allowed and their variances set to 1.

Model 3 was specified such that only the three facets acculturation demands, perceptions and goals were used as latent constructs (by setting the covariances between the dimensions within the three facets to -1). All six respective items of each of these facets (three for culture maintenance and three for culture adoption) loaded on the respective facet.

A comparison of the three models (cf. Table 10) shows that the first model's fit, although not good, is significantly better than the second and third models' fit: $\Delta\chi^2$ ($\Delta df = 4$, $N = 116$) = 296.92, $p < .05$; and $\Delta\chi^2$ ($\Delta df = 3$, $N = 116$) = 185.76, $p < .05$, respectively. Further, the other indices show a superiority of Model 1 over Models 2 and 3. Thus, it can be concluded that the conceptualisation of the acculturation items as indicators of three facets of acculturation orientations (each represented with a culture maintenance and a culture adoption dimension) is indeed the most useful and best way to capture the data. It is significantly better than to just understand these items as an expression of either only the two dimensions (Model 2) or only the three facets (Model 3). Accordingly, reliable scales were built by averaging the scores of the three items for each dimension and for each facet separately, resulting in six (three facets × two dimensions) acculturation scales altogether (for scale characteristics see Table 9).

It was impossible to form a reliable scale from the three culture adoption items of the facet acculturation demands, with reliabilities of $\alpha_{t1} = .14$, $\alpha_{t2} = -.13$, due to one small and two nonsignificant correlations between the three items[6]. Therefore, only the single item "*Migrants should adopt our German culture and ways of living*" (see appendix for original German wording) was used for this culture adoption dimension of the facet acculturation demands.

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[6] This lack of positive correlations between the items was found at both measurement points, yet only for the dimension culture adoption of the facet acculturation demands (i.e., acculturation items 4, 5 and 6 in the appendix). All other acculturation scales (with the exception of this one) were built of the three averaged respective items, leading to a total of 5 * 3 + 1 * 1 =16 used acculturation items.

Consistent correlations with other constructs, such as prejudice (see Table 12), demonstrate the validity of this single item measure.

Table 10

Fit indices for nested sequence of cross-sectional models for the structure of 18 acculturation orientation items ($N_{t1}=116$)

Model	χ^2	df	χ^2 / df	RMSEA[a]	AIC	$\Delta\chi^2$	Δdf
1. Two-dimensional three facet model	292.78*	120	2.44	.091 (.078, .104)	430.78		
2. Two-dimensional model	589.70*	124	4.76	.146 (.135, .158)	719.70	296.92*	4
3. Uni-dimensional three facet model	478.54*	123	3.89	.129 (.116, .141)	610.54	185.76*	3

Note. RMSEA = Root mean square error of approximation, [a] 90 % confidence interval in brackets; AIC = Akaike information criterion.

* $p < .05$.

4.4.2. Descriptive results

4.4.2.1. Mean endorsement of acculturation orientations

First, the means of participants' acculturation orientations will be reported and compared within the facets (see Table 9). On average, subjects demanded significantly less culture maintenance ($M_{t1} = 3.27$; $M_{t2} = 3.21$) than culture adoption ($M_{t1} = 4.11$; $M_{t2} = 4.50$) ($T_{t1} = -2.75$, $p < .01$; $T_{t2} = -5.12$, $p < .001$). For acculturation perceptions there was the opposite pattern: perceptions of culture maintenance were significantly higher ($M_{t1} = 4.42$; $M_{t2} = 4.87$) than those of culture adoption ($M_{t1} = 3.71$; $M_{t2} = 3.56$) ($T_{t1} = 2.37$, $p < .05$; $T_{t2} = 4.12$, $p < .001$). Culture maintenance

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goals for the majority members' own culture were extremely strong (M_{t1} = 6.21; M_{t2} = 6.30, on the seven point scale), whereas own culture adoption goals were significantly less pronounced (M_{t1} = 3.79; M_{t2} = 3.53), (T_{t1} = 8.85, p < .001; T_{t2} = 11.21, p < .001).

Taken together, participants demanded more culture adoption than culture maintenance from the migrants, but they perceived the migrants to want more culture maintenance that adoption. The goal of own mainstream culture maintenance was strongly endorsed.

4.4.2.2. Cross-sectional relations

To describe the cross-sectional relations within the acculturation scales and between the acculturation and outgroup attitude scales and personal contact, Pearson's correlations were computed for both measurement points separately (see Tables 11 & 12). I will first report the relations within and between the facets of acculturation orientations. Then, I will describe the cross-sectional relations between acculturation orientations and attitudes and behaviour towards the migrants that will yield answers to the second research question (see 4.2.).

Relations within and between the facets of acculturation orientations
Within each of the three facets (acculturation demands, perceptions and own goals), the acculturation dimensions correlated significantly negative with each other (see Table 11). Because these correlations were small to medium size only (-.30 < = rs < = -.51, ps < .01), a two-dimensional approach captures the structure within the facets best (cf. chapter 4.4.1).

Between the three facets there were some further significant relations. Culture maintenance demands correlated significantly positive with culture maintenance perceptions and own culture adoption goals. Culture adoption demands related significantly negative to own culture adoption goals. These small to medium size correlations (.22 < rs < .51, ps < .05) between the facets of acculturation orientations are yet another indication that the facets measure qualitatively different aspects of subjects' attitudes towards the process of acculturation.

Table 11

Intercorrelations within and between the facets of acculturation orientations at time 1 (top row in cells, $N_{t1} = 116$) and at time 2 (second row in cells, $N_{t2} = 70$)

	Scale	Dimension	Time	1	2	3	4	5	6
1	Acculturation demands	Culture maintenance	time 1	–	-.51***	.46***	.00	-.22*	.51***
			time 2		-.39**	.29*	.26*	-.09	.32**
2	Acculturation demands	Culture adoption	time 1		–	-.39***	.22*	.15	-.32***
			time 2			-.07	-.10	.24*	-.39**
3	Acculturation perceptions	Culture maintenance	time 1			–	-.36***	-.08	.30**
			time 2				-.50***	.20	.15
4	Acculturation perceptions	Culture adoption	time 1				–	.22*	.12
			time 2					.03	.13
5	Acculturation goals	Culture maintenance	time 1					–	-.30**
			time 2						-.15
6	Acculturation goals	Culture adoption	time 1						–
			time 2						

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Relations of acculturation orientations with attitudes and behaviour towards the migrants

Pearson's correlations were computed to quantify the cross-sectional relations between acculturation orientations and attitudes and behaviour towards migrants (see Table 12), in order to replicate findings from the reviewed literature and find answers to the second research question (see chapter 4.2).

Culture maintenance demands correlated significantly negative with prejudice and discrimination intentions. Positive relations with negative emotions and no relations with personal contact were found. *Culture adoption demands* related significantly positive to prejudice. Furthermore, such demands went along with significantly more negative emotions and

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discrimination intentions. Personal contact was not meaningfully related to culture adoption demands.

Culture maintenance perceptions showed significant negative relations with prejudice at time 1, but not at time 2. Further, no meaningful relations were found between culture maintenance perceptions and negative emotions. Significant negative correlations were found with discrimination intentions, yet at time 1 only. Culture maintenance perceptions were not related to personal contact. *Culture adoption perceptions* did not relate to prejudice. However, they went along with significantly less negative emotions, yet at time 2 only. There were no meaningful relations to discrimination intentions and personal contact.

Own culture maintenance goals related significantly to all measured constructs, with the exception of negative emotions at time 2. Thus, high mainstream culture maintenance goals went along with more prejudice, more negative emotions (at time 1), more discrimination intentions and less personal contact. *Culture adoption goals* related significantly to all other measures. Accordingly, high culture adoption goals coincided with less prejudice, fewer negative emotions, fewer discrimination intentions and with more personal contact.

Taken together the high similarity of the coefficients at time 1 and time 2 shows (see Table 12) that the pattern of correlations and thus the interrelations between the assessed variables are quite stable. In sum, there were strong links between acculturation orientations and attitudes and behaviour cross-sectionally. Moreover, these relations were different for the three facets of acculturation orientations: Acculturation demands related to prejudice, negative emotions and discrimination intentions. Culture maintenance perceptions related to prejudice and discrimination intentions, yet at time 1 only, whereas culture adoption perceptions only related to negative emotions at time 2. Own acculturation goals were related to prejudice, negative emotions, discrimination intentions and personal contact. These patterns of correlations show that culture maintenance demands and majority members' own culture maintenance and adoption goals are to a strong degree tied to almost all of the variables assessing the attitudes and behaviour towards migrants. Acculturation perceptions, in contrast, are not linked to as many of these variables and if they are, the degree of the association is weaker and less consistent over time.

Table 12

Intercorrelations between the acculturation and attitude scales at time 1 (top row in cells, N_{t1} = 116) and at time 2 (second row in cells, N_{t2} = 70)

Scale	Dimension	Time	Prejudice	Negative emotions	Discrimi- nation intentions	Personal contact
Acculturation demands	Culture maintenance	time 1	-.49***	-.49***	-.61***	n.a.
		time 2	-.31*	-.37**	-.35**	.00
Acculturation demands	Culture adoption	time 1	.45***	.33***	.47***	n.a.
		time 2	.44***	.38**	.41***	-.18
Acculturation perceptions	Culture maintenance	time 1	-.29**	-.12	-.23*	n.a.
		time 2	-.17	-.13	-.23	-.16
Acculturation perceptions	Culture adoption	time 1	-.06	-.08	-.10	n.a.
		time 2	-.07	-.32**	-.16	.20
Acculturation goals	Culture maintenance	time 1	.40***	.30**	.32**	n.a.
		time 2	.37**	.19	.25*	-.36**
Acculturation goals	Culture adoption	time 1	-.72***	-.58***	-.66***	n.a.
		time 2	-.70***	-.60***	-.76***	.39**

Note. n.a. = not available, due to measurements of personal contact at time 2 only.

* $p < .05$, ** $p < .01$, *** $p < .001$.

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4.4.2.3. Stability and change of the acculturation orientations

To quantify participants' positional stability and mean change of the acculturation orientations over time, Pearson's correlations and t-tests were computed between the two measurement points (see Table 9). The six acculturation scales proved to be medium to highly stable, with an average correlation of $r_{t1t2} = .54$. Culture maintenance perceptions and culture adoption demands showed the lowest stability ($r_{t1t2} = .35$; $r_{t1t2} = .43$, ps < .01, respectively). Culture maintenance demands and own culture maintenance goals were medium stable ($r_{t1t2} = .52$; $r_{t1t2} = .56$, ps < .01, respectively) and the highest stability was found for majority members' culture adoption goals and their culture adoption perceptions ($r_{t1t2} = .76$; $r_{t1t2} = .62$, ps < .01, respectively). Culture maintenance perceptions was the only subscale which showed a significant absolute change, namely an increase from $M_{t1} = 4.42$ to $M_{t2} = 4.87$, $t(69) = 2.09$, $p < .05$. Thus, participants perceived the asylum seekers wanting to maintain their traditional culture(s) even more at the second measurement point. Taken together, acculturation orientations were medium to highly stable and increasing culture maintenance perceptions was the only scale that changed significantly across time.

4.4.3. Cross-lagged panel analyses of directional causality

The central research question of this chapter was to assess the directional causality between the acculturation orientations and attitudes towards the outgroup. To decide whether A) acculturation orientations cause, or B) are being caused by the intergroup attitudes, or C) there is bi-directional causation, cross-lagged panel analyses (Kenny, 1975, 1979; Cook & Campbell, 1979; Rogosa, 1980) were computed for the relevant combinations of variables (for results see Tables 13 & 14).

The standardised path coefficients in Tables 13 and 14 indicate whether interindividual differences in change in one variable can be explained by interindividual differences in a second variable. Moreover, because the time 1 measurement of the first variable is part of the regression equation, only change *over and above the stability* of that first variable is indicated.[7] Additionally, a second path coefficient quantifies the strength of the causal relations in the opposite direction, indicating an influence on the second by the first variable. Potential outcomes of such analyses are either no significant causal links between the two variables, uni-directional causality with one variable influencing the degree of change of the second, or bi-directional causation with significant causal paths in both directions.

Within the facets and dimensions of acculturation orientations, there are only three significant uni-directional causal paths to be reported: A *perception* of migrants' high culture adoption goals lead to significantly more *demands* for culture maintenance ($\beta = .20$, $p < .05$) six months later. The *own goal* of adopting foreign elements into German culture lead to significantly less demands for culture adoption ($\beta = -.22$, $p < .05$). And finally, the *own goal* to maintain the German culture lead to significantly less endorsement of the own goal to adopt foreign elements into this German mainstream culture ($\beta = -.20$, $p < .05$).

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[7] Because at time 1 there was no possibility for actual contact before the moving in of the asylum seekers into the neighbourhood I instead controlled for contact *intentions* at time 1. Contact intentions were measured using three items (see appendix for original German wording), for instance by asking "*I will actively seek contact with the asylum seekers*" ($\alpha_{t1} = .81$, $M_{t1} = 3.81$, $SD = 1.63$). Contact intentions at time 1 showed significant positive relations with self reported personal contact at time 2 ($r = .45$, $p < .001$). Thus, subjects' behavioural intentions and actual behaviour did correspond well, at least in respect to contact.

Table 13

Summary of cross-lagged panel analyses within the acculturation scales

	Scale A	Dimension	Scale B / Causal direction	1	2	3	4	5	6
1	Acculturation demands	Culture maintenance	A to B		-.06	.22	.01	.08	.14
			B to A	–	.04	.08	**.20***	.11	.17
2	Acculturation demands	Culture adoption	A to B			-.07	-.01	.01	-.01
			B to A		–	.22	-.05	.09	**-.22***
3	Acculturation perceptions	Culture maintenance	A to B				-.09	.09	-.02
			B to A			–	-.13	-.06	.09
4	Acculturation perceptions	Culture adoption	A to B					-.04	-.03
			B to A				–	-.06	.05
5	Acculturation goals	Culture maintenance	A to B						**-.20***
			B to A					–	-.11
6	Acculturation goals	Culture adoption	A to B						
			B to A						–

Note. Cells contain standardised path coefficients from scale A to scale B (top row in cells) and from scale B to scale A (bottom row in cells), significant results are marked **bold**.

* $p < .05$.

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Between acculturation orientations and the attitudes and behaviour towards the migrants, seven significant uni-directional and two significant bi-directional path coefficients were found. These are now described for each of the three facets of acculturation orientations. Stronger culture maintenance *demands* lead to fewer reported negative emotions (β = -.22, *p* < .05). Stronger culture adoption demands did not have causal effects, but were themselves caused by strong negative emotions (β = .25, *p* < .05) and by high discrimination intentions (β = .26, *p* < .05). For culture maintenance *perceptions* there were no signs of directional causality. Strong culture adoption perceptions caused significantly less negative emotions (β = -.17, *p* < .05).

Most significant paths could be found for the *own acculturation goals.* Strong majority culture maintenance goals had causal effects on personal contact (β = -.28, *p* < .05). Those participants with strong majority culture maintenance goals reported to have had less personal contact with the migrants. Strong endorsement of these own goals in turn was caused by higher prejudice (β = .12, *p* < .05). Strong culture adoption goals were decreased across time by high prejudice (β = -.27, *p* < .05). The relations between own culture adoption goals and discrimination intentions and negative emotions constituted the two cases of bi-directional causality: strong culture adoption goals lead to less discrimination (β = -.15, *p* < .05) and, simultaneously, high discrimination intentions lead to weaker culture adoption goals (β = -.34, *p* < .01). The same is true for negative emotions that were reduced by (β = -.22, *p* < .05) and were simultaneously decreasing (β = -.34, *p* < .01) these own culture adoption goals.

Table 14

Summary of cross-lagged panel analyses between acculturation orientations and attitude scales and personal contact

Scale A	Dimension	Scale B Causal direction	Prejudice	Negative emotions	Discrimi-nation intentions	Personal contact [a]
Acculturation demands	Culture maintenance	A to B	-.02	**-.22***	.05	-.03
		B to A	-.04	-.03	-.07	n.a.
Acculturation demands	Culture adoption	A to B	.21	.01	.01	-.04
		B to A	.05	**.25***	**.26***	n.a.
Acculturation perceptions	Culture maintenance	A to B	.09	.04	.00	-.19
		B to A	-.14	-.18	-.12	n.a.
Acculturation perceptions	Culture adoption	A to B	.01	**-.17***	-.09	-.02
		B to A	.02	-.02	-.05	n.a.
Acculturation goals	Culture maintenance	A to B	.12	-.04	.03	**-.28***
		B to A	**.12***	-.01	.02	n.a.
Acculturation goals	Culture adoption	A to B	.00	**-.22***	**-.15***	-.18
		B to A	**-.27***	**-.34****	**-.34****	n.a.

Note. Cells contain standardised path coefficients from scale A to scale B (top row in cells) and from scale B to scale A (bottom row in cells), significant results are marked **bold**.

[a] Personal contact was measured at time 2 only. I used time 1 contact intentions as a control for stability. Thus, for contact only the paths from A to B can be interpreted.

* $p < .05$, ** $p < .01$.

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Taken together, these cross-lagged analyses showed clear evidence for directional causality. I found four significant causal effects of acculturation orientations on attitudes and behaviour. This supports assumption A) of my final research question that acculturation orientations are causal predictors of attitudes towards the asylum seekers. Acculturation orientations predicted the amount of negative emotions and personal contact. However, I also found three significant paths in the opposite causal direction. Here, acculturation orientations were caused by the attitudes and behaviour, a result that supports assumption B) and contradicts assumption A). Prejudice determined the majority members' goals for mainstream culture maintenance and foreign culture adoption. Negative emotions and discrimination intentions caused acculturation demands for culture adoption. Furthermore, I found two cases of bi-directional causation, namely between own culture adoption goals and negative emotions and discrimination intentions, supporting assumption C). In sum: no clear one-sided conclusion is possible concerning my last research question, because I found evidence for both causal directions and sometimes for bi-directional causation.

4.5. Discussion

After a summary of the findings in the order of the three research questions (cf. chapter 4.2), I will discuss theoretical and practical implications of these results. Some specific limitations of the present chapter about acculturation will be mentioned before the conclusion.

4.5.1. Summary of results

This study dealt with majority members' acculturation orientations, their hypothesised three facet structure and their cross-sectional and causal relations to attitudes and behaviour towards migrants. For the structure of acculturation orientations in majority samples three facets had been hypothesised, namely acculturation demands, perceptions and own goals (each two-dimensionally with culture maintenance and culture adoption). This structure could be confirmed using multiple statistical approaches. Most correlations within and between the facets turned out to be of small to medium size. Moreover, confirmatory factor analysis confirmed the superiority

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of a two-dimensional three facet model over a simple two-dimensional (culture maintenance - culture adoption) model and also over a one-dimensional three facet model. Finally, I found different associations with attitudes and behaviour towards migrants, such as prejudice or discrimination intentions and personal contact. Thus, I conclude that the three facet approach adequately describes the complex structure of majority members' acculturation orientations. It enriches existing approaches to the study of acculturation and calls for more scientific attention in the future. Without the facet of majority members' own acculturation goals it is impossible to fully understand majority acculturation.

The second research question concerned the cross-sectional relations between the acculturation orientations and the attitudes and behaviour towards the migrants. I found many strong correlations between these constructs. Thus, I was able to replicate in a field context, what other researchers (see chapter 4.1.4) have found in other contexts. High culture maintenance demands, for instance, were related to low prejudice, less negative emotions and less discrimination intentions. Acculturation perceptions showed only few meaningful relations with attitudes and behaviour towards migrants. Thus, they seem less important for the quality of intergroup relations from a majority perspective. Interestingly, the highest number of and the strongest significant relations with the attitudes and behaviour were found for the own acculturation goals. They meaningfully related to all measured intergroup attitudes and personal contact behaviour. This shows that majority members' own acculturation goals are an important and central construct when it comes to the quality of intergroup relations between members of mainstream society and migrants.

The final question concerned the direction of causality. I had asked: Do acculturation orientations A) causally predict attitudes and behaviour towards migrants, is it B) rather the other way that acculturation orientations are effects of the intergroup attitudes and behaviour, or is C) causation bi-directional? Cross-lagged panel analyses (Kenny, 1975, 1979; Cook & Campbell, 1979; Rogosa, 1980) provided answers here. In three cases acculturation orientations did have causal effects indeed, thus confirming assumption A). However, at the same time I found considerable evidence of opposite causal paths. In four cases acculturation orientations were effects, not predictors of attitudes and behaviour towards migrants, supporting my assumption B). Moreover, two cases of bi-directional causation were found, supporting assumption C). Therefore, in sum, no clear one-sided conclusion is possible concerning my final research question. Acculturation orientations represented both, predictors and effects of intergroup

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attitudes and behaviour. However, it is an important result in itself that there is no uni-directional causality.

4.5.2. Theoretical implications

Generally it is a promising theoretical approach to connect the research traditions of acculturation and intergroup relations research (as previously done for instance by Bourhis et al., 1997; Piontkowski et al.; 2000; Zagefka & Brown, 2002). Moreover, rather than just studying acculturating minorities, a focus on acculturating majorities is essential, because it corresponds to their central role in the interactive process of acculturation. Future research should, accordingly, take a more differentiated look at majority members' acculturation orientations (Horenczyk, 1997;Ward, 1996).

Especially majority members' own acculturation goals were closely associated to their attitudes and behaviour towards migrants. Own culture maintenance goals turned out to be the only construct in this study that reliably predicted the amount of personal contact with the asylum seekers. Moreover, I found bi-directional causal relations of own culture adoption goals with negative emotions and discrimination intentions towards the asylum seekers. Considering the potential harm of negative intergroup emotions and discrimination intentions and the potential benefits of positive intergroup contact (Pettigrew & Tropp, 2000, 2006; cf. chapter 2), majority members' own acculturation goals turn out to be of utmost significance for the quality of intergroup relations from a majority perspective. This finding corresponds to Zick et al. (2001), who reported majority member's acculturation orientations to be better predictors of individual behaviour in relation to ethnic minorities than their levels of subtle or blatant prejudice. I could show that in my sample, it is especially the acculturation goals concerning the own mainstream culture that have this effect. This calls for further theoretical elaboration and empirical replication in order to deepen our understanding of these phenomena.

In this study, both causal directions and some cases of bi-directional causation between acculturation orientations and intergroup attitudes and behaviour were found. This hints at an underlying general belief system concerning migrants (cf. Kessler & Mummendey, 2002). Such belief systems are characterised by bi-directional causal relations between their components rather than clearly distinguishable uni-directional processes. Accordingly, to describe and study

such belief systems, concepts like parallel processing in connectionist networks might be more adequate than the usual linear uni-directional causal thinking in our field (cf. Read, Vanman, & Miller, 1997).

One further issue for future research is the dimensionality of acculturation orientations. Although some researchers (Leyens, personal communication, January 27, 2007; Zick, et al., 2001) reported an uni-dimensional structure of majority members' acculturation orientations, a two-dimensional solution fit the present data better (cf. chapter 4.4.1). Both culture maintenance and culture adoption formed negatively correlated, but relatively independent factors. Acculturation processes in their neighbourhood had a high relevance for the personally affected participants of this study. It could be that this high relevance lead to deeper reflection about acculturation processes and accordingly caused more elaborated acculturation orientations than we find in other samples and contexts. However, this is only post-hoc speculation and further research is needed to determine the reasons of these contradictory findings. Possibly, it would be useful to assess the personal relevance and distance of the ongoing acculturation processes.

4.5.3. Practical implications

Which are the practical and political implications of these findings? Do the results imply new approaches or opportunities on how to improve intergroup relations from a majority perspective? In the social psychological literature there is an abundance of findings on effects of contact and its optimal conditions (Pettigrew & Tropp, 2006, cf. chapter 2). Other approaches focus on effects of intergroup competition on attitudes towards migrants (e.g., Esses, Jackson, & Armstrong, 1998) and also threat (e.g. Stephan & Renfro, 2002) has been a central concept (cf. chapter 3). The present chapter shows that a closer look at majority members' attitudes towards acculturation and more specifically, at their acculturation demands and own acculturation goals, might open up new vistas how to improve relations between culturally different groups.

What could be the consequences of the strong and partly causal links of majority members' own culture adoption goals with their attitudes and behaviour towards migrants? The adoption of foreign cultural elements into majority culture should be actively promoted by authorities. Official agents such as governments, media, or schools should support a climate of multiculturalism (cf. Bourhis et al., 1997), as has been recognised for instance by officials in

countries such as Canada or New Zealand. It is not enough to accept migrants' different cultural backgrounds. Cultural openness and culture learning of majority members should be portrayed as enriching, rather than threatening their mainstream cultural background. This might eventually lead to an enhanced willingness of native citizens to adopt elements of foreign cultures into their own that has been shown by this study to decrease negative intergroup emotions and discrimination intentions towards migrants.

This interactive process might be fostered by the migrants themselves. In a society with a climate of acceptance and appreciation of their cultural differences they could live and promote their cultures not only privately, but also in public. They might thus support members of mainstream society to learn about their cultures and possibly adopt some parts thereof. This process is actually currently going on. For instance döner kebab, pommes frites, tequila and vodka have become popular foods and drinks of many native Germans (cf. Rudmin, 2006). But this openness could and should be expanded beyond food and drinking habits to other domains, such as cultural events, ways of thinking, work and family life (cf. Navas, Garcia, Sánchez, Rojas, Pumares, & Fernández, 2005).

4.5.4. Limitations

Specific limitations. (For general limitations see chapters 2.5.5 and 5.3) The problem that the very high stability of the prejudice measures makes it rather unlikely to find causal effects on these measures with the cross-lagged panel approach has already been dealt with in chapter 3.6.5. There are two specific measurement issues concerning the acculturation scales used in this chapter, beside the general limitations of this study (cf. chapter 2.5.5).

First, culture adoption acculturation demands were measured using a single item only (cf. chapter 4.3.1). For unknown reasons it was not possible to create a reliable scale from the three items originally tailored for this subscale. However, the item "*Migrants should adopt our German culture and ways of living*" exactly words the meaning of the construct. Moreover, this measure relates to other constructs in meaningful ways (cf. chapter 4.4.2.2), from which one can imply its adequateness.

Secondly, there was a ceiling effect in the assessment of majority culture maintenance goals (with Ms > 6.20 on the seven point scale). In the future, these own goals should be

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measured with more adequate items that allow for more variability. However, the systematic cross-sectional and causal relations with other constructs (cf. chapters 4.4.2 and 4.4.3) show that this is not a major issue in this study.

4.5.5. Conclusion

Ubiquitous migration and acculturation processes can not be avoided or ignored, even though it might be tempting to do so. Members of mainstream society and migrants have to take and make the best of the challenges that globalisation poses to all of us. Only together we can eventually create a just, peaceful and mutually enriching coexistence of all people, whatever our geographical and cultural backgrounds.

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5. General discussion

5.1. Studying prejudice and contact in a real life context

The present longitudinal study was conducted in a field context with majority participants that were personally affected by migration. Their attitudes towards asylum seekers were assessed directly before and six months after an asylum seekers refuge was opened in their neighbourhood. This special situation made it possible to test several hypotheses in a real life context. Similar intergroup situations often lead to problematic relations between the involved groups of citizens and migrants. Furthermore, migrants are often confronted with prejudice and discrimination. Therefore, it was the aim of the present study to improve the theoretical understanding of circumstances leading to derogation and discrimination of migrants and asylum seekers by members of mainstream society. Furthermore, it was aimed to draw practical implications from the present findings. The longitudinal design made possible causal analyses and interpretation of the data. Having chosen the present context lends high ecological validity to the results, in that they stem from personally affected participants, who care about their local neighbourhood situation. However, this context and the chosen methods of assessment and analysis also lead to several limitations for the present study.

5.2. Limits of the present research

5.2.1. Contextual limits

Beside the limitations mentioned in previous chapters the present study has some general caveats. The method of recruitment lead to a small sample of double self selected participants. Moreover, it was necessary to know participants' addresses to be able to send out their rewards and approach them again for the second wave. Therefore, the data were not 100 % anonymous, which might have kept some sceptical or scared participants from joining the study. Assessing participants' expectations at time 1 and later at time 2 their perceptions of the intergroup situation

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is different from many other studies (it resembles an intervention design, but without the control group). Although this situation is an advantage in many respects, it made a time 1 measure of contact impossible and therefore true causal analyses for personal and extended contact were unfeasible.

5.2.2. Methodological limits

One consequence of the small sample size is that many of paths that in reality are bi-directional do not reach significant strength in this small sample. Thus, in many cases it seems like there is only uni-directional causation. However, studies with big samples often show bi-directional causation between constructs that are so closely related as the ones in the present study (cf. Binder, et al., 2007; Kessler et al., 2007).

The scope of this study (and in fact, most other studies) was limited to a number of constructs of interest, naturally. Therefore, many other constructs of interest, such as personality characteristics (e. g. Feldman, 2003), or (perceived) macro-level data (e. g. Heitmeyer, 2006) were ignored here in spite of their high relevance to the studied subject.

The method of assessment of participants' attitudes with questionnaires has its general limits (and advantages), as it for instance forces participants to react within the range of the items and scales and inhibits authentic idiosyncratic answers.

A specific problem of the present study is that generally the questionnaires were too long with a total of ten pages. The attempt to assess more constructs of interest, lead to a reduced number of participants in the end, because some potential participants were certainly scared off by the lengthy questionnaire. The same might be true for this dissertation, by the way, where some of the many potential readers might have been scared off by now.

The study was conducted with two measurement points only. But, to really capture the dynamics of intergroup perceptions, attitudes and behaviour multiple measurement points are needed. Additionally, there are at least two further caveats with measurement that need mentioning. First, there was a very strong overlap between the chosen measures of prejudice, negative emotions and discrimination intentions. The very strong correlations between these constructs yielded them as a syndrome (or belief system, cf. above) of negative attitudes, emotions and behavioural intentions towards asylum seekers, rather than clearly distinguishable.

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Secondly, several constructs were measured by using only single items and the quality of such measurement is hard to assess. One last issue is related to statistics. The high stability of the attitudes questions the adequateness of the cross-lagged panel method (cf. chapter 3.6.4).

5.3. Summary of the presented results

5.3.1. Contact reduced prejudice against the asylum seekers

Three different contact hypotheses had been tested in a real life field situation in which the contact conditions were far from optimal (cf. Allport, 1954; Pettigrew, 1998). The intergroup setting with asylum seekers moving into their neighbourhood gave the original inhabitants the opportunity for *mere contact*, that had been hypothesised in hypothesis H1) to lead to improved attitudes and behavioural intentions towards the asylum seekers. Over time a decrease of negative emotions and of perceptions of threat from the migrants was observed in the study participants. This change is attributed to the fact that the asylum seekers had arrived in the neighbourhood, which constituted the most prominent local event in the six months during the two measurements. However, the lack of a control group without migrant influx makes alternative explanations possible and has to be kept in mind. Furthermore, perceptions of cultural difference increased and prejudice and discrimination intentions were unaffected by mere contact. Thus, hypothesis H1) could be partially confirmed.

Secondly, effects of *personal contact* were tested in this study. It had been expected in hypothesis H2) that the more personal contact participants experienced during the six month after the asylum seekers had been moved into the refuge the more positive their attitudes towards the asylum seekers. Results showed that prejudice and discrimination intentions decreased indeed, whereas perceived cultural difference, threat and negative emotions were unaffected by the self reported amount of personal contact experiences. Thus, hypothesis H2) could be partially accepted.

Thirdly, *extended contact* effects (Wright et al., 1997) were analysed. It had been expected with hypothesis H3) that knowledge of ingroup members having had contact with asylum seekers would lead to improved attitudes and behavioural intentions towards them.

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Empirically, it was found, that extended contact affected exactly the same outcomes as personal contact had. Prejudice and discrimination intentions decreased, whereas perceived cultural difference, threat and negative emotions were not affected. Thus, hypothesis H3) could be partially accepted. This, in combination with a positive correlation between both kinds of contact, raised the fourth question H4), of whether extended contact had effects over and above personal contact. Whereas there were no independent effects on prejudice, after controlling for personal contact, the effects on discrimination intentions remained and H4) could be partially accepted.

Taken together, all three kinds of contact had independent effects on improving attitudes and behavioural intentions towards the asylum seekers. Interestingly, mere contact affected other outcomes than personal and extended contact. Mere contact decreased negative emotions and perceptions of threat and increased perceptions of cultural difference. Personal and extended contact affected different outcome variables, namely prejudice and discrimination intentions. These observed different effects show that mere contact works differently from personal and extended contact, which implies different underlying processes. In three longitudinal field studies Eller and Abrams (2003, 2004) compared two processual models of contact, namely Pettigrew's Contact Theory (1998) and Gaertner and Dovidio's (2000) Common Ingroup Identity Model (2004). They concluded that the models are not in contradiction, but complement each other. Whereas Pettigrew focuses on behaviour, emotions and knowledge about the outgroup, Gaertner and Dovidio highlight the effects of cognitive categorisation processes. This distinction is somewhat mirrored in the presently found differences of mere versus personal and extended contact effects, where the further affected emotions, threat and perceived cultural difference and the latter prejudice and the very closely related behavioural intentions. The fit of the present findings with these two perspectives is not quite perfect, but the general notion that a combination of different models and levels of analysis is necessary to understand prejudice seems very fruitful to me. Finally, in contradiction to Eller and Abrams' findings (2003, 2004) and in line with Pettigrew and Tropp's meta-analysis (2006) in the present study friendship was not a necessary but rather only a facilitating condition for contact effects. This is good news, because then also very basic and distant forms of contact can have positive effects, as shown here.

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5.3.2. Threat perceptions were a consequence of prejudice

Many different studies have show in the past that stronger perceptions of intergroup threat are related to more negative attitudes towards members of the threatening group. However, two different causal directions for this relation have been proposed in the literature by different theories that can be classified to belong to two theoretical orientations. Within the first, that is, the *prejudiced personality approach*, it is hypothesised that prejudice leads to threat. Accordingly, I expected with hypothesis H5) that higher levels of prejudice against migrants causally lead to stronger perceptions of intergroup threat from these migrants. The second introduced theoretical orientation, that is, the *threat leads to prejudice approach*, makes the opposite causal claim that threat leads to prejudice. In hypothesis H6) I expected that stronger perceptions of intergroup threat causally lead to more prejudice and / or more negative behavioural intentions towards the migrants.

Empirically, in the present data it was found that perceptions of intergroup threat were an outcome, not a cause, of negative attitudes and behavioural intentions. Higher levels of prejudice, negative emotions and discrimination intentions lead to *smaller* decreases of realistic threat that had generally declined over time (cf. Table 1). Perceived cultural difference, negative emotions and discrimination intentions lead to increases in symbolic threat. Thus, the present data support hypothesis H5) and contradict hypothesis H6).

Past research has shown in contradiction with the present results that there can be effects from threat to attitudes (Riek et al., 2006). Thus, taken together, recursive causation is highly likely also between threat perceptions and attitudes towards outgroups (Stephan & Renfro, 2002). This raised the question which conditions moderate the primary direction of causality. Analyses were conducted for on potential moderator, that is, perceptions of ingroup power. It was assumed in hypothesis H7) that if subjects perceive their ingroup as powerless higher levels of prejudice would lead to higher levels of threat. If, however, the ingroup is perceived as powerful threat might be independent of prejudice levels and depend on other third variables. The moderator analysis revealed, that perceptions of ingroup' power were a marginally significant moderator of the "prejudice t1 - change in realistic threat t2 link". The causal effect was driven by those 35 participants that perceived their German ingroup as especially powerless. The relation was not significant for those 35 subjects, who saw the Germans as rather powerful. Because only

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marginally significant this effect shall not be elaborated further, but it hints at one promising avenue to better understand the causal relations between threat and attitudes in the future (cf. chapter 5.4).

In sum, it was found that threat was an outcome, rather than a precursor of the attitudes and the theoretical perspective of the prejudiced personality found empirical support. However, most likely the threat-attitude-link is bi-directional and future research should examine potential moderators of the direction of this link.

5.3.3. Acculturation orientations were antecedents and consequences of prejudice

For majority members' acculturation orientations a three facet structure had been hypothesised. Additionally, their cross-sectional and causal relations to attitudes and behaviour towards migrants were analysed. The differentiation into the three facets acculturation *demands*, *perceptions* and *own goals* could be confirmed using several statistical methods. Especially, it was shown, that the new facet majority members' own acculturation goals can be reliably measured and that these goals are different from the two other acculturation facets.

Concerning the second research question (cf. chapter 4.2) it was found that cross-sectionally acculturation demands and own goals related in meaningful ways to attitudes and behaviour towards the migrants, whereas for acculturation perceptions this was generally not the case. Stronger culture maintenance demands went along with less prejudice, negative emotions and discrimination intentions, whereas stronger culture adoption demands correlated with more prejudice, negative emotions and discrimination intentions. The opposite pattern was found for own acculturation goals: Strong own culture maintenance goals went along with more prejudice, negative emotions, discrimination intentions and less personal contact, whereas strong culture adoption goals related to less prejudice, negative emotions and discrimination intentions and more personal contact.

Finally, for the third research question testing the direction of causality between acculturation orientations and attitudes and behaviour the conclusion was that the causal relations are bi-directional. Acculturation orientations represented both, predictors and outcomes of attitudes and behavioural intentions towards the asylum seekers and in two cases bi-directional

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causation was found. The new facet own acculturation goals had the highest number of significant causal relations with the attitudes towards the asylum seekers. Moreover, the acculturation goals directed at the maintenance of the own mainstream culture were the only important longitudinal predictor of personal intergroup contact (avoidance) in this study.

In sum, three facets of acculturation orientations could be distinguished, the cross-sectional relations with attitudes and behaviour towards the migrants were meaningful and as expected. The strongest relations were found for the own acculturation goals. Causality between acculturation orientations and attitudes and behavioural intentions was bi-directional. The findings of this study have several general theoretical and practical implications that will be suggested below. First, I will report some new theoretical perspectives that arose from and during the present study. These will be followed by a number of recommendations on how to improve the intergroup situation between citizens and migrants.

5.4. New theoretical perspectives

For contact research. I agree with (Dixon, Durrheim, & Tredoux, 2005) that contact researchers should "get real". Optimal contact conditions are rare in real life, but even under less optimal conditions there are still positive effects of contact on the attitudes towards the outgroup, as in the present study and as concluded meta-analytically by Pettigrew and Tropp (2006). Moreover, the present study showed that a comparison of several kinds of contact can be fruitful. All kinds of contact, namely mere, personal and extended contact had independent positive effects on attitudes and behavioural intentions towards the migrants. An additional enrichment to recent contact theorising arises from the distinction of quantity versus quality of contact (cf. Brown & Hewstone, 2005). High quality of contact can for instance be indicated by low perceived emotional distance of the outgroup friend, a feeling of equality in the friendship and behavioural patterns of mutual support and cooperation (Binder et al., 2007). Interestingly these highly resemble Allport's (1954) optimal contact conditions, with a shift of the focus from the situation to the concerned individuals. However, in this study I could show that even very mundane contact conditions that are far from optimal can lead to positive effects. Concerning the causal directions, Eller and Abrams (2004) noticed that often reverse causation was the case in their

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studies. They concluded that "the contact-mediator-prejudice link should be seen as reciprocal, fluid process" (p. 253), which I can only underline.

For threat research. Also for threat research the option of recursive causation should receive more attention. Rather than asking whether one or the other causal direction is true, more scientific energy should be spent on trying to find possible moderators of the primary direction of causality. From the present study several aspects could be responsible for the current finding that threat perceptions were an outcome of the attitudes and not vice versa. It could be that the special intergroup context, that is, a neighbourhood situation with personally affected participants lead to the result. Accordingly, similar studies should be conducted in systematically varied contexts (for instance with vs. without migrant influx). Furthermore, perceptions of the ingroup' power might moderate the primary direction of causality, as hinted at with the present moderator analysis (cf. chapter 3.5.3). Additionally, the perceived outgroup's power or perceptions of the relative difference between the power of ingroup of outgroup(s) could be moderators (cf. Mackie, Devos, & Smith, 2000). Furthermore, it could be that certain personality traits or alternatively personality types are more prone to one or the other causal direction. Some people might for instance be more in need of a justification of negative attitudes and discriminatory intentions towards a subordinate group (possibly those with high social desirability) and therefore be more likely to show causal effects from the prejudice to their threat perceptions, if the latter serve to justify the further. Last but not least, the time lag of six months between the two measurement points and a first measurement before the arrival of the outgroup could have lead to the present results. Accordingly, as elaborated in chapter 3.6.3, multiple measurements are needed for future studies.

For acculturation research. A focus on acculturating majorities is recommended, because majorities are usually powerful and highly influential, yet rarely studied (Horenczyk, 1997, Ward, 1996). The cross-sectional relations of acculturation orientations with attitudes and behavioural intentions towards the outgroup as well as the directional effects in both causal directions show a close connection between these constructs. Especially the goals concerning their own mainstream culture are of high importance, because most closely related to the quality of intergroup relations from a majority perspective. Here, intergroup and acculturation research could profit from research on goals in general psychology (e. g. Austin et al., 1996) and group's goals in cognitive and social psychology (e.g. Gollwitzer & Moskowitz, 1996; Wegge, 2000).

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For Interactive Models of Acculturation (Bourhis et al., 1997; Piontkowski et al., 2002) the present results are not so promising. Generally it is a good idea to connect acculturation orientations with intergroup relations and this notion strongly influenced the present research project. Both interactive models make clear predictions about the causal effects leading from the concordance of acculturation orientations to attitudes towards the outgroup and intergroup relations. However, findings from the present study indicate that the causal relations between acculturation orientations and intergroup attitudes are bi-directional and thus they challenge the uni-directional assumption of these interactive models. When stripped of their central causal assumptions what remains from these models is only correlational and thus, purely descriptive. Then, only the basic statement is left that acculturation orientations are somehow related to intergroup attitudes and relations as both, their predictors and consequences. This questioning of the utility of these Interactive Models of Acculturation calls for more theoretical elaboration on when and how causal effects are directed predominantly in one or the other direction. Again, the call is made for more longitudinal research to solve the open causality issues.

For intergroup research. More generally, I think to have learnt some lessons about where I recommend to put the focus of future research. It is a summary and elaboration of some of the points already made above. When summing up findings from past research with the present findings it turns out hat neither the causal link between contact and prejudice, nor the causal link between threat and prejudice, nor the causal link between acculturation orientations and prejudice are uni-directional. Thus, concerning the question of causality what is needed in social psychological theorising are dynamic, recursive models that can capture and predict such recursive relations.

One highly promising approach that clearly exceeds our usual, oversimplifying, uni-directional theorising is that of a belief system. Such a system consists of overlapping representations of several closely related concepts. Furthermore, it implies bi-directional causation between the involved elements. For instance Kessler and Mummendey (2002) argued that the relations between perceived socio-structural characteristics, identity management strategies, ingroup identification and perceived threat are best accounted for in terms of a stable configuration of beliefs, rather than separate sequential processes. The close linkage between the elements of such a system can lead to many mediating processes, where the sum of indirect effects can be stronger than direct effects (Kessler, Mummendey, Funke, Brown, Binder, et al.,

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2007). Such belief systems can, for instance, be described by using connectionist network approaches (like parallel constraint satisfaction networks, cf. Read et al., 1997), which may be one way leading to a more dynamic social psychology (Smith, 1996). In such networks the contained concepts (e.g., prejudice, emotions and behavioural intentions towards a certain outgroup, perceptions of this outgroup's goals, relative power position, etc.) are all interlinked through bi-directional connections of varying strength. Accordingly, change in one concept A will lead to change in another concept B, but, at the same time, the opposite can also be true that change in B affects A. Furthermore, the amount, time and direction of change depend on constraints represented through links with the other concepts that are interconnected with A and B. Such networks of interrelated constructs are proposed to work according to principles of Gestalt, where, for instance, the whole has a different meaning than the sum of the parts, and all parts are somehow causally interconnected (cf. Read et al., 1997 for further elaboration on this). In my understanding it is more plausible to assume such an interconnected structure for the concepts we usually study, than to assume that it is enough to only study the uni-directional connection between any two concepts A and B. These ideas have been around for more than 20 years (cf. Smith, 1982, 1996), but are rarely applied to dynamically relate intergroup perceptions, attitudes and behaviour.

Furthermore, to capture the dynamics of the ongoing processes studies with multiple measurements should be conducted. Different constructs (such as cognitions vs. emotions) have a differential speed of change, as described by Tropp and Pettigrew (2005) and shown in chapter 2 of this thesis. Therefore, a stronger future focus on the time dimension is recommended, both for theorising and empirically studying social psychological phenomena (cf. Mitchell & James, 2001). Currently, we have mainly two rather extreme time perspectives in our research designs. We use either experiments or cross-sectional surveys that work within minutes and rarely last more than an hour. These are mainly used to solve relational or micro-processual research questions. Additionally, there is some longitudinal research (mainly from applied, field, or sociological studies) with weeks to months between the measurements. Here, it is often tried to transfer effects from the lab to the field. Both approaches often work with the same theories and both are needed to better understand short- and long-term social psychological processes and effects. However, I assume that some of the discrepant findings between these approaches (i.e., lab experiments vs. longitudinal field studies) might be resolved when concentrating more explicitly on the time dimension. It seems unreasonable to assume that identical processes work

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the same way in 30 minutes versus 3 months. This, however, leads to the open questions of how to theoretically determine the time that different effects need and last and how to empirically arrange the time lag between the measurements.

Moreover, it is worthwhile to connect different research traditions, as done in the present project inspired by the theories this research was grounded on. To better understand prejudice a focus on intergroup emotions (e.g. Smith, 1993; Cottrell et al., 2005) and threat (cf. chapter 3) that brings back affect into the cognitively dominated theorising enhances the explanatory power of the models. The combination of acculturation and und intergroup research (e.g. Bourhis et al., 1997; Piontkowski et al., 2002) proved fruitful (cf. chapter 4). The Integrated Threat Model by Stephan and Renfro (2002, see chapter 3) that combines theorising from sociology, social psychology, personality psychology and cross-cultural psychology with realistic and symbolic threats and attitudes and behaviour towards outgroups is highly inspiring. Additionally, for instance, Heitmeyer and colleagues (2006) connected several micro-level theories in their macro-level framework to explain group focused enmity. Moreover, they empirically apply this approach by studying it in an impressive representative longitudinal multi-wave design.

Generally, the diversity of different social scientific sub-disciplines should be seen as a chance to improved understanding of the studied phenomena, not as distinctiveness threat (Branscombe et al., 1999) to one's own scientific field, as often seems to be the case. As outlook for the future, these interdisciplinary connections should be spread even further, including for instance disciplines that are (seemingly) as remote from our field as informatics, economics, or biology.

For social science. In my humble opinion the points just made have several implications for social science in general. Not only for research, but also for teaching of under- and postgraduate students, there should be enough time to develop such interdisciplinary connections within and between individuals. Time pressure puts blinkers on students and researcher and hinders them to look how other disciplines deal with the very phenomena they study. Diversity of the theoretical expertise of students and their professors, but also of the conferences organised and congresses visited could further promote such connections.

A second point is that critique is essential for a further development of social science. There should be no need to stress this point that is central to the self-conception of the scientific community. However, the hierarchical power structures in science and publishing can lead to the

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suppression of vital scientific critique due to personal motives of some theorists, editors and reviewers (cf. McGuire, 1997). One example of such suppression of vital information is the case of the fundamental critique of present acculturation research by Floyd Rudmin (2006b). An earlier (2004) manuscript of his sound critique was awarded the SPSSI (APA Division 9) 2005 "Otto Klineberg Intercultural and International Relations Prize", that indicates the quality of the paper. Nonetheless, Rudmin was forced to publish these ideas that could lead to an advancement of the whole field of acculturation research in an unknown online journal (AnthroGlobe Journal; http://www.anthroglobe.ca), after having been rejected publication in mainstream acculturation journals (Rudmin, personal communications, 2006). Accordingly, these publication structures have to be changed if advancement of knowledge is what science aims at (cf. Kressel, 1990). However, one positive consequence of Rudmin's struggle with mainstream acculturation publishers, editors and reviewers was that Blackwell Publishing has adopted guidelines for ethical editing from the clinical field (cf. Blackwell Publishing, 2007; Graf et al., 2007) that might prevent happening to other people what happened him.

Finally, the current reward structure in (also social) science leads to many publications, but not necessary to an improved understanding of the studied issues. Accordingly, this reward system has to be changed (Kressel, 1990) because in my understanding our present lack of understanding of intergroup conflict threatens as much as the survival of mankind.

In sum, I propose for intergroup research on contact, threat and acculturation to "get real", to not shy away from field contexts (cf. Graumann, 1988). A focus on the actual world is needed to understand and possibly solve the highly relevant intergroup tensions that we find on all levels of intergroup relations. Theoretically, I think an application of new approaches, such as belief systems modelled as recursive connectionist networks are promising to capture the true dynamics of ongoing processes. Furthermore, because the time dimension is understudied, empirical studies with multiple measurements are essential. Finally, changes in social scientific publishing and reward structures are suggested.

5.5. Practical implications

This field study was conducted also with the aim to find out possibilities how to improve the intergroup relations between citizens and migrants from a citizen perspective. Some of these

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practical suggestions will be presented now. Several facts became obvious in the present study. First, prejudice and discrimination intentions were prevalent on a medium level already before the asylum seekers had been moved in and most of these negative attitudes and behavioural intentions showed a high stability over time. Secondly, however, there was an improvement of some of these attitudes after different forms of intergroup contact (cf. chapter 2). This shows that desegregation can lead to improved attitudes and should be further promoted. Thirdly, in most cases these rather stable attitudes were not simply an outcome of other variables, such as threat or acculturation orientations, but causality was reverse or recursive.

This leads to the question of where potential interventions should aim at to start change for the better. The present results show, in combination with previous findings, that any point in the causally interlinked outgroup emotions, attitudes, behavioural intentions, etcetera can be aimed at, because via the often bi-directional links with other constructs they will eventually all be affected. Because negative emotions and threat perceptions were most flexible in the present study these might be good starting points. However, if they are so flexible they might change back to their original levels quickly. Thus, aiming at the more stable prejudiced attitudes might be unavoidable. Additionally, learning about the outgroup and consequently increased knowledge about the others can reduce perceptions threat and thus, be an antidote against prejudice (cf. Eller & Abrams, 2004). Such willingness to learn about and from the others and a general cultural curiosity can have positive effects. This was for instance shown in the present study through the negative cross-sectional relations between foreign culture adoption acculturation goals, prejudice and discrimination; and the positive directional links between own mainstream culture maintenance goals and contact avoidance. Finally, for the question of who is responsible to implement measures that lead to more knowledge and contact, my answer is that it is me and you and especially those people who have enough power to influence the masses of average people and the general norms and values of our society.

5.6. Conclusion

In the introduction of this thesis the very general question "What determines majority members' negative attitudes and behaviour towards migrants?" had been asked. It was further specified into several sub-questions dealing with intergroup contact, perceived intergroup threat and

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acculturation orientations. Their cross-sectional and longitudinal relations with attitudes and behaviour towards the asylum seekers were scrutinised.

Empirically, it was found that prejudice and discrimination intentions were prevalent in the participating German inhabitants of the studied neighbourhood from the beginning and that they were relatively stable over a time course of six months. However, in the more than two years since the opening of the refuge no critical incident has happened, neither asylum seekers nor Germans got seriously attacked or hurt. Moreover, some positive changes in participants' attitudes could be detected over the six months time of the present study. It was found that different kinds of contact lead to improved attitudes towards the newcomers. However, neither perceived intergroup threat nor acculturation orientations were found to be clear predictors of intergroup attitudes and behaviour, as had been originally assumed. The causal direction was either bi-directional or stemming from prejudice. Thus, some answers to the more specific research questions of the present study could be given, that enrich the present intergroup literature.

After having studied the subject in-depth it emerged that it is too simple to ask the uni-directional, basic question "What leads to prejudice?". Many new and possibly more adequate questions rose during the time of the present project. Future research, and possibly I myself, might want to address issues, such as: What determines the dynamic relations between intergroup perceptions, attitudes and behaviour? What defines the principal direction of causality between them? How can the strong overlap between typical social psychological measures be usefully and parsimoniously conceptualised? Which alternative methodological and statistical approaches could be helpful in understanding these questions? Some preliminary ideas on these issues have been developed in chapter 5.4, however, mostly there are no answers yet. In conclusion, the present study has raised many new questions about intergroup relations, beside the answers given to the original ones. The world in its present state (cf. today's newspaper) desperately needs these questions to be asked and answered, if a survival of mankind is aimed at.

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6. Summary

Prejudice towards and discrimination of migrants are serious societal problems in our modern, globalised world. In the present doctoral thesis negative attitudes of citizens towards asylum seekers were examined longitudinally in a field setting. It was studied how such negative attitudes relate to citizens' contact experiences with asylum seekers. Additionally, the attitudes were related to feelings of threat elicited from this outgroup and to acculturation orientations of the participants, who were part of the native cultural majority group. Furthermore, the longitudinal design allowed to examine the causal direction of these relations. Thus, it could be analysed whether attitudes towards the outgroup were predictors or effects of threat perceptions and acculturation orientations, or whether there was bi-directional causation.

A longitudinal field study with two measurement points was conducted with the German inhabitants ($N = 70$) of a neighbourhood where an asylum seekers refuge was soon to be opened. Many locals opposed the opening of the refuge. Directly before and six months after the opening of the refuge the attitudes (i.e., prejudice, negative emotions and discrimination intentions) of the locals towards the asylum seekers were assessed with questionnaires. At the second measurement point, participants additionally reported their contact experiences with the asylum seekers, since they had been moved into the neighbourhood. This specific field situation was chosen, because it represents a real life setting of citizens versus migrants that often leads to problematic intergroup relations between the involved groups. Thus, it was possible to longitudinally test several social psychological theories in the field and improve the general theoretical understanding of the causal relations between the attitudes towards an outgroup, mutual contact experiences, threat perceptions and acculturation orientations.

Several theoretical backgrounds were used for this study and some open questions answered for each of the applied theories. First, drawing on theories from social psychological contact research, the effects of three different kinds of contact were analysed simultaneously. Improvement of attitudes towards the migrants through mere contact (mere presence of the newcomers), personal contact (own contact experiences) and extended contact (knowledge of neighbours' contact experiences) were hypothesised and these different contact effects then tested and compared. Secondly, different theories were used to causally relate perceptions of realistic and symbolic intergroup threat to attitudes towards the asylum seekers. Approaches that can be

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summarised under the label of the *prejudiced personality* take stable personality traits, such as Authoritarianism or prejudice, as causal predictors of threat perceptions. Other theories that can be summarised under the label *threat leads to prejudice*, such as the Integrated Threat Model, take threat perceptions as causal antecedents of prejudice. The contradicting causal claims of these two groups of theories were tested with the present longitudinal study. Thirdly, citizens' acculturation orientations were related to their attitudes and personal contact behaviour towards the asylum seekers. Acculturation orientations were conceptualised as consisting of three facets, namely, acculturation demands (what migrants should do), perceptions (what migrants are perceived to want) and own goals (how participants want to deal with their own changing mainstream culture). Each of these three facets of acculturation orientations was conceptualised with the two dimensions culture maintenance and culture adoption. Acculturation orientations were related to attitudes towards and personal contact behaviour with the asylum seekers. Additionally, the causal direction of these relations was scrutinised.

Results showed that all three kinds of contact (i.e., mere, personal and extended contact) had positive effects on some of the assessed attitudes towards the outgroup. Interestingly, over time, mere contact changed other variables (it decreased negative emotions and realistic threat perceptions) than personal and extended contact (that decreased prejudice and discrimination intentions). Furthermore, extended contact had positive effects on discrimination intentions even after statistically controlling for the effects of personal contact. In summary, it could be shown that desegregation leads to positive attitudinal effects and that the effects of mere contact are different from those of personal and extended contact. Future research should further compare and disentangle these different effects and the underlying processes.

Threat perceptions were found to be outcomes, not predictors of the attitudes towards the migrants. Thus, the present results support the general notion that rather stable personality traits (such as prejudice that was found highly stable over time in the present study) can causally lead to according perceptions of outgroups as more or less threatening, both realistically and symbolically. Because other studies have shown experimentally that heightened threat perceptions can increase prejudice, most likely these causal relations are bi-directional, as also assumed by the Integrated Threat Model. Therefore, the call was made for more future research about the moderators of the principal direction of causality. Personal differences in the need for justification of negative attitudes and behaviour towards subordinate outgroups and perceptions

of the power attributed to ingroup versus outgroup were proposed as potential moderators for future studies.

The best way to empirically captured citizens' acculturation orientations was the theorised, innovative three facet conceptualisation of acculturation demands, perceptions and own goals. Furthermore, these acculturation orientations were found meaningfully related with attitudes and behaviour towards the asylum seekers, mainly for the facets demands and own goals. Strong culture maintenance demands, for instance, went along with less prejudice and strong culture adoption demands with more prejudice. Contrary relations were found for own acculturation goals, where strong mainstream culture maintenance goals went along with more, and strong foreign culture adoption goals with less prejudice. Acculturation perceptions showed fewer relations with the attitudes and behaviour and thus, seemed not so important. The longitudinal causal analyses showed that acculturation orientations represented both, predictors and consequences of the attitudes, and some cases of bi-directional causation were found as well. Interestingly, the facet own acculturation goals had the highest number of causal links with the attitudes towards the migrants. For instance, stronger own mainstream culture maintenance goals predicted the amount of personal contact avoidance participants reported.

In sum, all kinds of contact lead to improved attitudes towards the other group. Furthermore, these attitudes determined how threatening the asylum seekers were seen. Finally, acculturation orientations were meaningfully related to attitudes and behaviour towards the asylum seekers, especially for the facet own acculturation goals. Moreover, the causal relations between acculturation orientations and the attitudes were bi-directional. Thus, it can be concluded, that all theoretical perspectives used in the present thesis contributed to the understanding of prejudice and discrimination intentions of citizens towards migrants. Their separate contributions are complementing each other and further theoretical integration should be aimed at. Especially, the issue of recursive causality requires more scientific attention in the future and longitudinal studies with multiple measurement points. New, integrative and interdisciplinary methods and ways of thinking are needed (such as network approaches rather than uni-directional theorising), in order to better understand the dynamic relations between contact, threat, prejudice and discrimination between culturally different social groups. Such improved understanding might eventually be essential to ensure the survival of mankind that currently seems to engage increasingly in a "clash of civilisations".

7. Zusammenfassung

Vorurteile gegenüber und Diskriminierung von Migranten sind schwerwiegende soziale Probleme in unserer modernen, globalisierten Welt. In der vorliegenden Doktorarbeit wurden negative Einstellungen von Mitgliedern der Mehrheitsgesellschaft gegenüber Asylbewerbern in einer längsschnittlichen Feldstudie untersucht. Es wurde analysiert, wie negativen Einstellungen mit Kontakterfahrungen mit Asylbewerbern zusammenhängen. Außerdem wurden diese negativen Einstellungen mit Bedrohungswahrnehmungen und Akkulturationsorientierungen der Teilnehmer verknüpft. Das längsschnittliche Design der Studie ermöglichte Analysen der Kausalrichtung dieser Zusammenhänge. Damit war es möglich festzustellen, ob Einstellungen gegenüber der Fremdgruppe Prädiktoren oder Konsequenzen von Bedrohungswahrnehmungen und Akkulturationsorientierungen sind, oder ob rekursive Zusammenhänge vorliegen.

Eine längsschnittliche Feldstudie wurde mit den deutschen Einwohnern ($N = 70$) eines Wohngebietes durchgeführt, in dem eine Asylbewerberunterkunft eröffnet werden sollte, was viele der Einheimischen ablehnten. Direkt vor, und sechs Monate nach der Eröffnung der Asylbewerberunterkunft wurden die Einstellungen (d.h. Vorurteile, negative Emotionen und Diskriminierungsabsichten) der Anwohner gegenüber den Asylbewerbern mit Fragebögen erhoben. Zum zweiten Messzeitpunkt wurden außerdem Kontakterfahrungen der Einheimischen mit den zugezogenen Asylbewerbern erfragt. Diese besondere Feldsituation wurde für die vorliegende Untersuchung gewählt, weil sie eine echte Intergruppensituation mit Einheimischen und Migranten darstellt, und weil solche Situationen häufig mit problematischen Beziehungen zwischen den Betroffenen einhergehen. Dadurch war es möglich, diverse sozialpsychologische Theorien längsschnittlich im Feld zu überprüfen, und somit das generelle theoretische Verständig der kausalen Beziehungen zwischen Einstellungen zu Fremdgruppen, Kontakterfahrungen, Bedrohungswahrnehmungen und Akkulturationsorientierungen zu verbessern.

Verschiedene theoretische Hintergründe wurden für diese Studie herangezogen, und einige der jeweils noch offenen Fragen beantwortet. Erstens wurden Theorien aus der sozialpsychologischen Kontaktforschung verwendet, und die Auswirkungen von drei verschiedenen Arten von Kontakterfahrungen parallel analysiert. Es wurde angenommen, dass eine Verbesserung der Einstellungen gegenüber den Asylbewerbern durch bloßen Kontakt (bloße Anwesenheit der Neuankömmlinge), persönlichen Kontakt (eigene Kontakterfahrungen) und

vermittelten Kontakt (Kenntnis von Kontakterfahrungen der Nachbarn) zustande kommt. Diese drei verschiedenen Kontakteffekte wurden geprüft und miteinander verglichen. Zweitens wurden mehrere Theorien verwendet, um die Kausalverbindungen zwischen realistischen und symbolischen Bedrohungswahrnehmungen sowie Einstellungen zu Fremdgruppen zu beschreiben. Einige Ansätze, die sich unter der Bezeichnung der *vorurteilsbehafteten Persönlichkeit* zusammenfassen lassen, betrachten stabile Persönlichkeitseigenschaften wie Autoritarismus oder auch Vorurteile als kausale Ursachen von Bedrohungswahrnehmungen. Andere Ansätze, wie zum Beispiel das Integrierte Bedrohungsmodell, die sich unter der Bezeichnung *Bedrohung führt zu Vorurteilen* zusammenfassen lassen, betrachten Bedrohungswahrnehmungen als kausale Ursachen von Vorurteilen. Die sich widersprechenden Kausalannahmen dieser zwei Gruppen von Theorien wurden in der vorliegenden Studie untersucht. Drittens wurden die Akkulturationsorientierungen der Anwohner mit ihren Einstellungen und persönlichen Kontakterfahrungen mit den Asylbewerbern in Verbindung gebracht. Die Akkulturationsorientierungen wurden in drei Facetten differenziert: Akkulturationsforderungen (was die Migranten tun sollten), Akkulturationswahrnehmungen (Wahrnehmungen der Ziele der Migranten), sowie eigene Akkulturationsziele (bezüglich der Veränderung der deutschen Mehrheitskultur). Jede dieser drei Facetten von Akkulturationsorientierungen wurde anhand der zwei Dimensionen Kulturerhaltung und Kulturübernahme konzeptualisiert. Akkulturationsorientierungen wurden mit Einstellungen zur Fremdgruppe sowie mit persönlichem Kontakt in Verbindung gebracht, und zusätzlich wurde die Kausalrichtung dieser Zusammenhänge untersucht.

Die Ergebnisse zeigten, dass alle drei Arten von Kontakt (bloßer, persönlicher und vermittelter) positive Effekte auf einige der erhobenen Einstellungen zur Fremdgruppe hatten. Interessanterweise veränderte bloßer Kontakt andere Variablen (negative Emotionen und realistische Bedrohungswahrnehmungen verringerten sich) als persönlicher und vermittelter Kontakt (welche Vorurteile und Diskriminierungsabsichten verringerten). Vermittelter Kontakt verringerte Diskriminierungsabsichten auch nach statistischer Kontrolle der persönlichen Kontakteffekte. Zusammenfassend konnte gezeigt werden, dass Desegration zu verbesserten Einstellungen führt, und dass diese Effekte für bloßen Kontakt anders sind als für persönlichen oder vermittelten Kontakt. Zukünftige Forschung sollte diese verschiedenen Kontakteffekte weiter vergleichen und die zu Grunde liegenden Prozesse genauer differenzieren.

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Bedrohungswahrnehmungen waren Konsequenzen und nicht Prädiktoren der Einstellungen zu den Asylbewerbern. Insofern unterstützen die vorliegenden Ergebnisse den generellen Ansatz, dass eher stabile Persönlichkeitseigenschaften (wie z.B. Vorurteile, die in der vorliegenden Studie im Zeitverlauf hoch stabil waren) kausal zu entsprechenden Wahrnehmungen von Fremdgruppen als mehr oder weniger (realistisch und symbolisch) bedrohlich führen können. Da andere Untersuchungen experimentell zeigen konnten, dass auch gesteigerte Bedrohungswahrnehmungen zu erhöhten Vorurteilen führen, sind diese Kausalbeziehungen mit hoher Wahrscheinlichkeit bidirektional, was auch im Integrativen Bedrohungsmodell angenommen wurde. Deshalb sollte zukünftige Forschung klären, welche Moderatorvariablen die Kausaleffekte der einen oder der anderen Richtung dominant werden lassen. Interindividuelle Unterschiede von Rechtfertigungstendenzen für negative Einstellungen und Verhaltensweisen gegenüber schwächeren Gruppen oder Wahrnehmungen der Macht der Eigen- oder Fremdgruppe wurden für zukünftige Studien als zu untersuchende potentielle Moderatoren vorgeschlagen.

Die Akkulturationsorientierungen der untersuchten Mitglieder der Mehrheitsgesellschaft ließen sich am besten mit dem hypothetisch angenommenen, neuen Konzept beschreiben, welches die drei Facetten Akkulturationsforderungen, Akkulturationswahrnehmungen, und eigene Akkulturationsziele umfasst. Akkulturationsorientierungen hingen erwartungsgemäß mit Einstellungen und Verhalten gegenüber den Asylbewerbern zusammen, vor allem die Facetten Akkulturationsforderungen und eigene Ziele. Zum Beispiel hingen starke Kulturerhaltungs-forderungen mit weniger Vorurteilen und starke Kulturübernahme-forderungen mit mehr Vorurteilen zusammen. Im Gegensatz dazu waren stärkere Kulturerhaltungs-ziele bezüglich der eigenen deutschen Kultur mit mehr, und stärkere Kulturübernahme-ziele mit weniger Vorurteilen assoziiert. Die Akkulturations-wahrnehmungen hingen kaum mit Einstellungen und Verhalten gegenüber den Asylbewerbern zusammen und stellten sich somit insgesamt als weniger wichtig heraus. Die längsschnittlichen Kausalanalysen ergaben, dass Akkulturationsorientierungen sowohl Prädiktoren als auch Konsequenzen der Einstellungen gegenüber der Fremdgruppe waren, und es fanden sich auch einige Fälle mit bidirektionalen Kausalverbindungen. Interessanterweise ergaben sich für die Facette eigene Akkulturations-ziele die meisten Kausalzusammenhänge mit den Einstellungen. Stark ausgeprägte Ziele, die deutsche Mehrheitskultur zu bewahren führten zum Beispiel zu späterer Kontaktvermeidung der Befragten.

Zusammen genommen zeigte sich, dass alle Arten von Kontakt zu verbesserten Einstellungen gegenüber den Asylbewerbern führten. Von diesen Einstellungen wiederum hing es ab, als wie bedrohlich die anderen wahrgenommen wurden. Akkulturationsorientierungen hingen erwartungsgemäß mit Einstellungen und Verhalten zusammen, vor allem für die Facette eigene Akkulturations-ziele. Die Kausalrichtung dieser Zusammenhänge erwies sich als bidirektional. Alle in dieser Doktorarbeit verwendeten theoretischen Perspektiven erwiesen sich als hilfreich im Zusammenhang mit den Vorurteilen und Diskriminierungsabsichten von Mitgliedern der Mehrheitsgesellschaft gegenüber Migranten. Die verschiedenen theoretischen Beiträge ergänzen sich, und sollten in der Zukunft noch mehr integriert werden. Insbesondere der Umstand der rekursiven Kausalbeziehungen erfordert in der Zukunft noch mehr wissenschaftliche Aufmerksamkeit und die Verwendung von Längsschnittstudien mit multiplen Messzeitpunkten. Neue, integrative und interdisziplinäre Methoden und Denkansätze sind gefragt (zum Beispiel Netzwerkansätze, statt unidirektionaler Theorien), um die dynamischen Beziehungen zwischen Kontakt, Bedrohung, Vorurteilen und Diskriminierung zwischen kulturell verschiedenen, sozialen Gruppen besser verstehen zu können. Dieses verbesserte Verständnis könnte sich im Endeffekt als essentiell für das Überleben der Menschheit erweisen, welche scheinbar gerade zunehmend auf einen „Zusammenprall der Kulturen" hinsteuert.

References

Adorno, T. W., Frenkel-Brunswik, E., Levinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. Harpers.

Aiken, L. S. & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications, Inc.

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. Jossey-Bass.

Altemeyer, B. (1996). *The authoritarian specter*. Harvard University Press.

Annan, K. (2006). *International migration and developement, Report of the Secretary-General*. United Nations, General Assembly. Retrieved July 15, 2006, from http://daccessdds.un.org/doc/UNDOC/GEN/N06/353/54/PDF/N0635354.pdf?OpenElement.

Antirassistische Initiative e.V. (2007). Bundesdeutsche Flüchtlingspolitik und ihre tödlichen Folgen, 14. aktualisierte Auflage. Retrieved March 1, 2007 from http://ari-berlin.org/doku/titel.htm.

Arbuckle, J. L. (2003). Amos 5 [Computer software]. Chicago, IL: SmallWaters.

Assaf, R., Sadka, E., & Swagel, P. (2002). Tax Burden And Migration: A Political Economy Theory And Evidence. *Journal of Public Economics, 85,* 167-190.

Austin, J. T. & Vancouver, J. B. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin, 120,* 338-375.

Berry, J. W. (1997). Immigration, Acculturation and Adaptation. *Applied Psychology: An International Review, 46,* 5-68.

Berry, J. W. (2001). A psychology of immigration. *Journal of Social Issues, 57,* 615-631.

Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A. et al. (2007). Does Contact Reduce Prejudice or Does Prejudice Reduce Contact? A Longitudinal Test of the Contact Hypothesis in Three European Countries. Manuscript submitted for publication.

Blackwell Publishing (2007). Best Practice Guidelines on Publication Ethics: A Publisher's Perspective. Retrieved March 1, 2007 from http://www.blackwellpublishing.com/publicationethics/#_Toc149460065.

Blumer, H. (1958). Race prejudice as a sense of group position. *Pacific Sociological Review, 1,* 3-7.

Bobo, L. D. (1999). Prejudice as group position: Microfoundations of a sociological approach to racism and race relations. *Journal of Social Issues, 55,* 445-472.

Bourhis, R. Y., Moiese, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International Journal of Psychology, 32,* 369-386.

Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat. In N.Ellemers & R. Spears (Eds.), *Social identity: Context, commitment, content* (pp. 35-58). Oxford, England: Blackwell Science Ltd.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality & Social Psychology Bulletin, 17,* 475-482.

Brewer, M. B. & Gaertner, S. L. (2004). Toward Reduction of Prejudice: Intergroup Contact and Social Categorization. In M.B.Brewer & M. Hewstone (Eds.), *Self and social identity* (pp. 298-318). Blackwell Publishing.

Brown, R. & Hewstone, M. (2005). An Integrative Theory of Intergroup Contact. In M.P.Zanna (Ed.), *Advances in experimental social psychology, Vol. 37* (pp. 255-343). Elsevier Academic Press.

Campbell, D. T. (1965). Ethnocentric and other altruistic motives. In D.Levine (Ed.), *Nebraska Symposium on Motivation 1965* (pp. 282-312). Lincoln: University of Nebraska Press.

_____

Cook, T. D. & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Boston: Houghton Mifflin.

Cottrell, C. A. & Neuberg, S. L. (2005). Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach to "Prejudice". *Journal of Personality and Social Psychology, 88,* 770-789.

Dijker, A. J. (1987). Emotional reactions to ethnic minorities. *European Journal of Social Psychology, 17,* 305-325.

Dixon, J., Durrheim, K., & Tredoux, C. (2005). Beyond the Optimal Contact Strategy: A Reality Check for the Contact Hypothesis. *American Psychologist, 60,* 697-711.

Duckitt, J. (2003). Prejudice and intergroup hostility. In D.O.Sears, L. Huddy, & R. Jervis (Eds.), *Oxford handbook of political psychology* (pp. 559-600). Oxford University Press.

Duckitt, J. & Fisher, K. (2003). The impact of social threat on world view and ideological attitudes. *Political Psychology, 24,* 199-222.

Eagly, A. H. & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.

Eller, A. & Abrams, D. (2003). 'Gringos' in Mexico: Cross-sectional and longitudinal effects of language school-promoted contact on intergroup bias. *Group Processes & Intergroup Relations, 6,* 55-75.

Eller, A. & Abrams, D. (2004). Come together: Longitudinal comparisons of Pettigrew's reformulated intergroup contact model and the Common Ingroup Identity Model in Anglo-French and Mexican-American contexts. *European Journal of Social Psychology, 34,* 229-256.

Endler, N. S. (1982). Interactionism: A personality model, but not yet a theory. *Nebraska Symposium on Motivation,* 155-200.

_____

Esses, V. M., Jackson, L. M., & Armstrong, T. L. (1998). Intergroup competition and attitudes toward immigrants and immigration: An instrumental model of group conflict. *Journal of Social Issues, 54,* 699-724.

Esses, V. M., Jackson, L. M., Dovidio, J. F., & Hodson, G. (2005). Instrumental Relations Among Groups: Group Competition, Conflict, and Prejudice. In J.F.Dovidio, P. Glick, & L. A. Rudman (Eds.), *On the nature of prejudice: Fifty years after Allport* (pp. 227-243). Blackwell Publishing.

European Monitoring Centre on Racism and Xenophobia (2005). Racism and Xenophobia in the EU Member States trends, developments and good practice. Annual Report 2005. Retrieved July 20, 2006, from http://eumc.europa.eu/eumc/material/pub/ar05/AR05_p2_EN.pdf.

Feddes, A., Harth, N., Kessler, T., & White, M. P. (2007). Getting to Know Your Group Members Through Their Friends: Possible Negative Consequences of Extended Contact. Unpublished manuscript, University of Jena, Germany.

Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology, 24,* 41-74.

Frijda, N. H. (1986). *The emotions*. Cambridge University Press.

Fuligni, A. J. (2001). A comparative longitudinal approach to acculturation among children from immigrant families. *Harvard Educational Review, 71,* 566-578.

Funke, F. (2005). The Dimensionality of Right-Wing Authoritarianism: Lessons from the Dilemma between Theory and Measurement. *Political Psychology, 26,* 195-218.

Gaertner, S. L. & Dovidio, J. F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Psychology Press.

Gollwitzer, P. M. & Moskowitz, G. B. (1996). Goal effects on action and cognition. In E.T.Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 361-399). Guilford Press.

_____

Graf, C., Wager, E., Bowman, A., Fiack, S., Scott-Lichter, D., & Robinson, A. (2007). Best Practice Guidelines on Publication Ethics: a Publisher's Perspective. *International Journal of Clinical Practice, 61,* 1-26.

Graumann, C. F. (1988). Der Kognitivismus in der Sozialpsychology: Die Kehrseite der 'Wende'. *Psychologische Rundschau, 39,* 83-90.

Hamilton, D. L. & Bishop, G. D. (1976). Attitudinal and behavioral effects of initial integration of White suburban neighborhoods. *Journal of Social Issues, 32,* 47-67.

Heitmeyer, W. (2006). *Deutsche Zustände, Folge 4*. Frankfurt am Main: Suhrkamp Verlag.

Heitmeyer, W. (2007). *Deutsche Zustände, Folge 5*. Frankfurt am Main: Suhrkamp Verlag.

Horenczyk, G. (1996). Migrant identities in conflict: Acculturation attitudes and perceived acculturation ideologies. In G.M.Breakwell & E. Lyons (Eds.), *Changing European identities: Social psychological analyses of social change* (pp. 241-250). Woburn, MA, US: Butterworth-Heinemann.

Horenczyk, G. (1997). Immigrants' perceptions of host attitudes and their reconstruction of cultural groups. *Applied Psychology: An International Review, 46,* 34-38.

Jackson, J. W. & Poulsen, J. R. (2005). Contact Experiences Mediate the Relationship Between Five-Factor Model Personality Traits and Ethnic Prejudice. *Journal of Applied Social Psychology, 35,* 667-685.

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo. *Political Psychology, 25,* 881-920.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin, 129,* 339-375.

Kenny, D. A. (1975). Cross-lagged panel correlation: A test for spuriousness. *Psychological Bulletin, 82,* 887-903.

Kenny, D. A. (1979). *Correlation and causality*. New York: Wiley.

_____

Kessler, T. & Mummendey, A. (2002). Sequential or parallel processes? A longitudinal field study concerning determinants of identity-management strategies. *Journal of Personality & Social Psychology, 82,* 75-88.

Kessler, T., Mummendey, A., Funke, F., Brown, R., Binder, J., et al. (2007). Emotional migration politics: Ingroup projection, prejudice and emotions towards migrants. Unpublished manuscript, University of Jena, Germany.

Klink, A. & Wagner, U. (1999). Discrimination against ethnic minorities in Germany: Going back to the field. *Journal of Applied Social Psychology, 29,* 402-423.

Kressel, N. J. (1990). Systemic barriers to progress in academic social psychology. *Journal of Social Psychology, 130,* 5-27.

Kruglanski, A. W., Pierro, A., Mannetti, L., & De Grada, E. (2006). Groups as Epistemic Providers: Need for Closure and the Unfolding of Group-Centrism. *Psychological Review, 113,* 84-100.

Kutzner, F. L. W., Geschke, D., Mummendey, A., Kessler, T., & Funke, F. (2007). When migrants want what they shouldn't: Acculturation attitudes and attributions of members of the receiving society as determinants of intergroup relations. Unpublished manuscript, University of Heidelberg, Germany.

Levin, S., van Laar, C., & Sidanius, J. (2003). The effects of ingroup and outgroup friendship on ethnic attitudes in college: A longitudinal study. *Group Processes & Intergroup Relations, 6,* 76-92.

LeVine, R. A. & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior.* John Wiley & Sons.

Liebkind, K. (2001). Acculturation. In R.J.Brown & S. L. Gaertner (Eds.), *Intergroup processes* (pp. 386-406).

Liebkind, K. & McAlister, A. L. (1999). Extended contact through peer modelling to promote tolerance in Finland. *European Journal of Social Psychology, 29,* 765-780.

_____

Louis, W. R., Duck, J. M., Terry, D. J., Schuller, R. A., & Lalonde, R. M. (in press). Why do citizens want to keep refugees out? Threats, fairness and hostile norms in the treatment of asylum seekersy. *European Journal of Social Psychology*.

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality & Social Psychology, 79,* 602-616.

McGuire, W. J. (1997). Going beyond the banalities of bubbapsychology: A perspectivist social psychology. In C.McGarty & S. A. Haslam (Eds.), *The message of social psychology: Perspectives on mind in society* (pp. 221-237). Blackwell Publishing.

Mitchell, T. R. & James, L. R. (2001). Building better theory: Time and the specification of when things happen. *Academy of Management Review, 26,* 530-547.

Navas, M., García, M. C., Sánchez, J., Rojas, A. J., Pumares, P., & Fernández, J. S. (2005). Relative Acculturation Extended Model (RAEM): New contributions with regard to the study of acculturation. *International Journal of Intercultural Relations, 29,* 21-37.

Oskamp, S. (2000). *Reducing prejudice and discrimination*. Mahwah, NJ, US: Lawrence Erlbaum Associates, Publishers.

Paolini, S., Hewstone, M., Cairns, E., & Voci, A. (2004). Effects of Direct and Indirect Cross-Group Friendships on Judgments of Catholics and Protestants in Northern Ireland: The Mediating Role of an Anxiety-Reduction Mechanism. *Personality and Social Psychology Bulletin, 30,* 770-786.

Pettigrew, T. F. & Meertens, R. W. (1995). Subtle and blatant prejudice in western Europe. *European Journal of Social Psychology, 25,* 57-75.

Pettigrew, T. F. (1991). Normative Theory in Intergroup Relations: Explaining Bo th Harmony an d Conflict. *Psychology & Developing Societies, 3,* 3-16.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49,* 65-85.

Pettigrew, T. F. & Tropp, L. R. (2000). Does intergroup contact reduce prejudice: Recent meta-analytic findings. In S.Oskamp (Ed.), *Reducing prejudice and discrimination* (pp. 93-114). Lawrence Erlbaum Associates, Publishers.

Pettigrew, T. F. & Tropp, L. R. (2006). A Meta-Analytic Test of Intergroup Contact Theory. *Journal of Personality and Social Psychology, 90,* 751-783.

Piontkowski, U., Florack, A., Hoelker, P., & Obdrzalek, P. (2000). Predicting acculturation attitudes of dominant and non-dominant groups. *International Journal of Intercultural Relations, 24,* 1-26.

Piontkowski, U., Rohmann, A., & Florack, A. (2002). Concordance of acculturation attitudes and perceived threat. *Group Processes & Intergroup Relations, 5,* 221-232.

Quillian, L. (1996). Group threat and regional change in attitudes toward African-Americans. *American Journal of Sociology, 102,* 816-860.

Read, S. J., Vanman, E. J., & Miller, L. C. (1997). Connectionism, parallel constraint satisfaction processes, and Gestalt principles: (Re)introducing cognitive dynamics to social psychology. *Personality and Social Psychology Review, 1,* 26-53.

Redfield, R., Linton, R., & Herskovits, M. (1936). Memorandum on the study of acculturation. *American Anthropologist, 38,* 149-152.

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup Threat and Outgroup Attitudes: A Meta-Analytic Review. *Personality and Social Psychology Review, 10,* 336-353.

Rogosa, D. (1980). A critique of cross-lagged correlation. *Psychological Bulletin, 88,* 245-258.

Roseman, I. J. (1984). Cognitive determinants of emotion: A structural theory. *Review of Personality & Social Psychology, 5,* 11-36.

Rudmin, F. W. (2003). Catalogue of acculturation constructs: descriptions of 126 taxonomies, 1918 - 2003. Retrieved July 23, 2005 from: http://www.ac.wwu.edu/~culture/rudmin.htm.

_____

Rudmin, F. W. (2006). Debate in Science: The case of Acculturation. AnthroGlobe Journal. Retrieved December 24, 2006 from: http://www.anthroglobe.ca/docs/rudminf_acculturation_061204.pdf

Rudmin, F. W. (in press). Acculturation Measures of Bicultural Integration: History, Criticisms and Corrective Options. *Journal of Cross-Cultural Psychology*.

Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality & Social Psychology, 79,* 49-65.

Scherer, K. R. (1988). Cognitive antecedents of emotion. In V.Hamilton, G. H. Bower, & N. H. Frijda (Eds.), *Cognitive perspectives on emotion and motivation* (pp. 88-126). Dordrecht, The Netherlands: Kluwer.

Sherif, M. (1966). *Group conflict and co-operation: Their social psychology*. London: Routledge & Kegan Paul.

Sidanius, J. (1993). The psychology of group conflict and the dynamics of oppression: A social dominance perspective. In S.Iyengar & W. J. McGuire (Eds.), *Explorations in political psychology* (pp. 183-219). Duke University Press.

Sidanius, J. & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press.

Smith, E. R. (1982). Beliefs, attributions, and evaluations: Nonhierarchical models of mediation in social cognition. *Journal of Personality and Social Psychology, 43,* 248-259.

Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D.M.Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297-315). San Diego, CA, US: Academic Press, Inc.

Smith, E. R. (1996). What do connectionism and social psychology offer each other? *Journal of Personality and Social Psychology, 70,* 893-912.

Stephan, W. G., Boniecki, K. A., Ybarra, O., Bettencourt, A., Ervin, K. S., Jackson, L. A. et al. (2002). The role of threats in the racial attitudes of Blacks and White. *Personality & Social Psychology Bulletin, 28,* 1242-1254.

Stephan, W. G. & Renfro, C. L. (2002). The role of threat in intergroup relations. In *From prejudice to intergroup emotions: Differentiated reactions to social groups* (pp. 191-207). New York: Psychology Press.

Stephan, W. G. & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues, 41,* 157-175.

Stephan, W. G. & Stephan, C. W. (2000). An integrated threat theory of prejudice. In S.Oskamp (Ed.), *Reducing prejudice and discrimination* (New Jersey: Lawrence Erlbaum Associates.

Tajfel, H. & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W.G.Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey: Brooks/Cole Publ.

Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S.Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations (2nd ed.)* (pp. 7-24). Chicago: Nelson-Hall.

Tropp, L. R. & Pettigrew, T. F. (2005). Differential Relationships Between Intergroup Contact and Affective and Cognitive Dimensions of Prejudice. *Personality and Social Psychology Bulletin, 31,* 1145-1158.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Whetherell, M. (1987). *Rediscovering the social group: A self-categorisation theory*. Oxford: Blackwell.

Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. Manuscript submitted for publication.

_____

van Laar, C., Levin, S., Sinclair, S., & Sidanius, J. (2005). The effect of university roommate contact on ethnic attitudes and behavior. *Journal of Experimental Social Psychology, 41,* 329-345.

van Oudenhoven, J. P. & Eisses, A. M. (1998). Integration and assimilation of Moroccan immigrants in Israel and the Netherlands. *International Journal of Intercultural Relations, 22,* 293-307.

Verkuyten, M. & Thijs, J. (2002). Multiculturalism among minority and majority adolescents in the Netherlands. *International Journal of Intercultural Relations, 26,* 91-108.

Ward, C. (1996). Acculturation. In D. Landis & R. S. Bhagat (Eds.), *Handbook of intercultural training (2nd ed.)* (pp. 124-147). Sage Publications, Inc.

Webster, D. M. & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology, 67,* 1049-1062.

Wegge, J. (2000). Participation in group goal setting: Some novel findings and a comprehensive model as a new ending to an old story. *Applied Psychology: An International Review, 49,* 498-516.

Wright, S. C., Aron, A., McLaughlin-Volpe, T., & Ropp, S. A. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Journal of Personality and Social Psychology, 73,* 73-90.

Zagefka, H. & Brown, R. (2002). The relationship between acculturation strategies, relative fit and intergroup relations: Immigrant-majority relations in Germany. *European Journal of Social Psychology, 32,* 171-188.

Zagefka, H., Brown, R., Broquard, M., & Martin, S. L. (in press). Predictors and consequences of negative attitudes toward immigrants in Belgium and Turkey: Acculturation preferences, acculturation preference 'fit', and economic competition. *British Journal of Social Psychology.*

Zajonc , R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology, 9,* 1-27.

_____

Zick, A., Wagner, U., van Dick, R., & Petzel, T. (2001). Acculturation and prejudice in Germany:

Majority and minority perspectives. *Journal of Social Issues, 57,* 541-557.

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Appendix

List of items in original wording

Prejudice
(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

1. *Die Zuwanderer haben Arbeitsplätze, die uns Deutschen zustehen.*

2. *Ich könnte mir vorstellen, mit einem Zuwanderer /einer Zuwanderin eine sexuelle Beziehung zu haben.* (-) (= item is reverse recoded)

3. *Die meisten Zuwanderer, die hier staatliche Unterstützung beziehen, könnten recht gut ohne dieses Geld auskommen, wenn sie nur wollten.*

4. *Wir Deutschen und die Zuwanderer werden nie richtig miteinander zurechtkommen, selbst wenn wir eng befreundet sind.*

5. *Die meisten deutschen Politiker kümmern sich zu sehr um die Zuwanderer und nicht genug um uns durchschnittliche Deutsche.*

6. *Ich hätte nichts dagegen, wenn ich einen entsprechend qualifizierten Zuwanderer zum Vorgesetzten bekäme.* (-)

7. *Ich hätte nichts dagegen, wenn ein Zuwanderer aus denselben sozialen und wirtschaftlichen Verhältnissen wie ich in meine Familie einheiraten würde.* (-)

In der folgenden Liste sind einige Dinge aufgeführt, die viele Leute als wichtige Ursache für Gemeinsamkeiten oder Unterschiede zwischen verschiedenen Volksgruppen ansehen. Bitte geben Sie an, wie groß die Unterschiede zwischen uns Deutschen und den Zuwanderern sind. (ranging from 1 „sehr große Unterschiede" to 7 „sehr große Gemeinsamkeiten")

8. *Ehrlichkeit und Aufrichtigkeit* (-)

Cultural difference
(ranging from 1 „sehr große Unterschiede" to 7 „sehr große Gemeinsamkeiten")

In der folgenden Liste sind einige Dinge aufgeführt, die viele Leute als wichtige Ursache für Gemeinsamkeiten oder Unterschiede zwischen verschiedenen Volksgruppen ansehen. Bitte geben Sie an, wie groß die Unterschiede zwischen uns Deutschen und den Zuwanderern sind.

1. *Die Werte zu denen die Kinder erzogen werden*

2. *Die religiösen Überzeugungen und Praktiken*

3. *Die sexuelle Moral oder das sexuelle Verhalten*

4. *Die Sprache, die sie sprechen*

_____

Negative Emotions
(ranging from 1 „niemals" to 7 „sehr oft")

Wenn Sie an den Zuzug der Asylbewerber nach Lobeda denken, wie häufig **empfinden** Sie dann gegenüber den Asylbewerbern …

1. *Unsicherheit*
2. *Misstrauen*
3. *Angst*
4. *Ärger*
5. *Furcht*
6. *Belästigung*
7. *Abneigung*

Realistic Threat

Wir möchten Sie nun bitten, uns Ihre persönlichen Befürchtungen im Zusammenhang mit dem Zuzug der Asylbewerber nach Lobeda mitzuteilen. Bitte tragen Sie maximal bis zu sechs Gedanken, die Ihnen dazu einfallen, selbst in die untenstehende Tabelle ein.

Meine persönlichen Befürchtungen im Zusammenhang mit dem Zuzug der Asylbewerber sind … (Bitte **selbst** eintragen.)

Symbolic Threat
(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

1. *Die deutsche Sprache wird in den nächsten Jahren vermutlich zunehmend durch die Sprachen der Zuwanderer verdrängt werden.*

Discrimination intentions
(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

Wenn es nach mir ginge, würde ich …

1. *… die Asylbewerber mit mehr Geld versorgen. (-)*
2. *… die Asylbewerber außerhalb dicht besiedelter Gebiete unterbringen.*
3. *… die Asylbewerber in ihre Herkunftsländer zurückschicken.*
4. *… den Asylbewerbern so schnell wie möglich normale deutsche Bürgerrechte zugestehen. (-)*
5. *… die Asylbewerber mit weniger Geld versorgen.*
6. *… den Asylbewerbern einen möglichst guten Start hier in Deutschland ermöglichen.(-)*

Acculturation orientations

(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

Acculturation demands

culture maintenance

1. *Die Zuwanderer sollten ihre traditionelle Herkunftskultur bewahren.*

2. *Die Zuwanderer sollten hier auch weiterhin entsprechend der Lebensweise ihrer Heimatländer leben.*

3. *Die Zuwanderer sollten weiterhin vor allem ihre Herkunftssprache sprechen.*

culture adoption

4. *Die Zuwanderer sollten unsere deutsche Kultur und Lebensweise übernehmen.*

(not used:

5. *Die Zuwanderer sollten aktiv Kontakt zu uns Deutschen suchen.*

6. *Die Zuwanderer sollten vor allem die deutsche Sprache verwenden.)*

Acculturation perceptions

culture maintenance

1. *Die Zuwanderer wollen ihre traditionelle Herkunftskultur bewahren.*

2. *Die Zuwanderer wollen hier auch weiterhin entsprechend der Lebensweise ihrer Heimatländer leben.*

3. *Die Zuwanderer wollen weiterhin vor allem ihre Herkunftssprache sprechen.*

culture adoption

4. *Die Zuwanderer wollen vor allem die deutsche Sprache verwenden.*

5. *Die Zuwanderer wollen unsere deutsche Kultur und Lebensweise übernehmen.*

6. *Die Zuwanderer wollen aktiv Kontakt zu uns Deutschen suchen.*

Acculturation goals

culture maintenance

1. *Wir Deutschen sollten unsere traditionelle Herkunftskultur bewahren.*

2. *Wir Deutschen sollten unsere deutsche Sprache pflegen.*

3. *Wir Deutschen sollten auch weiterhin entsprechend unserer traditionellen Lebensweise leben.*

culture adoption

4. *Wir Deutschen sollten uns bemühen, auch eine Sprache der Zuwanderer zu erlernen.*

5. *Wir Deutschen sollten etwas von der Kultur und Lebensweise der Zuwanderer annehmen.*

6. *Wir Deutschen sollten aktiv Kontakt zu den Zuwanderern suchen.*

Contact intentions
(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

1. *Ich werde aktiv Kontakt zu den Asylbewerbern suchen.*

2. *Begegnungen mit den Asylbewerbern werde ich eher aus dem Weg gehen. (-)*

3. *Ich werde den Asylbewerbern offen und freundlich entgegentreten.*

Personal contact (time 2 only)
(ranging from 1 „niemals" to 7 „sehr häufig")

1. *Ich bin schon Asylbewerbern in Lobeda begegnet.*

2. *Ich habe mich schon mit Asylbewerbern in Lobeda unterhalten.*

3. *Ich habe schon Asylbewerber in Lobeda persönlich kennengelernt.*

4. *Ich habe mich mit Asylbewerbern in Lobeda angefreundet.*

5. *Ich verbringe gern mit den Asylbewerbern in Lobeda Zeit.*

Extended contact (time 2 only)
(ranging from 1 „stimme ich gar nicht zu" to 7 „stimme ich völlig zu")

1. *Ich kenne Leute, die schon Asylbewerbern in Lobeda begegnet sind.*

2. *Ich kenne Leute, die sich schon mit Asylbewerbern in Lobeda unterhalten haben.*

3. *Ich kenne Leute, die schon Asylbewerber in Lobeda persönlich kennengelernt haben.*

4. *Ich kenne Leute, die sich mit Asylbewerbern in Lobeda angefreundet haben.*

5. *Ich kenne Leute, die mit den Asylbewerbern in Lobeda gern Zeit verbringen.*

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Pictures of the study location
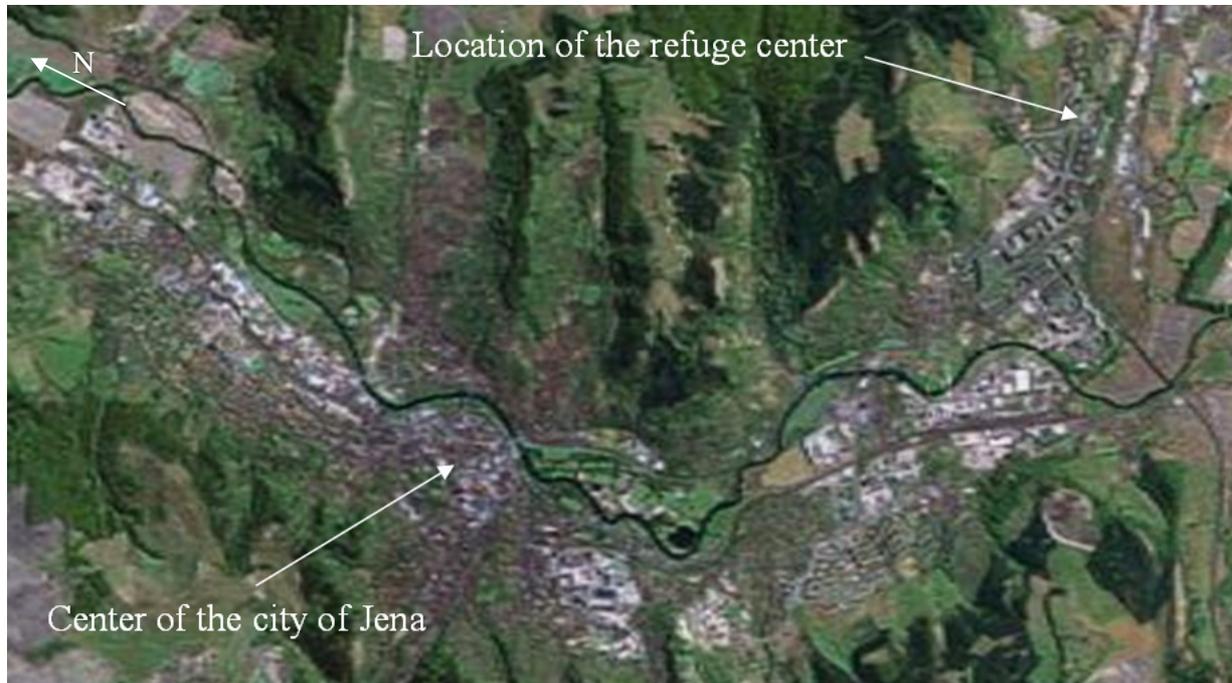
Figure 4. Picture of the city of Jena and the location of the refuge centre at the very outskirts of the city (retrieved from http://jena-city.de, January, 16th, 2007).

Figure 5. Picture of the location of the study, with the asylum seekers refuge centre (in red ellipse) and the neighbouring houses where study participants lived. (retrieved from http://jena-city.de, January, 16th, 2007).

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Curriculum Vitae

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_____   _____

Ort, Datum   Unterschrift

Ehrenwörtliche Erklärung

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

Ferner erkläre ich, dass ich die vorliegende Arbeit selbst und ohne unzulässige Hilfe Dritter angefertigt habe. Alle von mir benutzten Hilfsmittel, persönliche Mitteilungen und Quellen sind in der Arbeit angegeben. Bei der Auswahl und Auswertung des Materials, der Durchführung der Studie, sowie bei der Herstellung des Manuskripts haben mir die nachstehend aufgeführten Personen in der jeweils beschriebenen Weise geholfen:

1. Florian Kutzner, Hilfe bei der Datenerhebung
2. Nicolas Koranyi, Hilfe bei der Datenerhebung
3. Katja Peilke, Hilfe bei der Datenerhebung
4. Tobias Ruttke, Hilfe als Zweiter Codierer der offenen Antworten

Weitere Personen waren an der inhaltlich-materiellen Erstellung der Arbeit nicht beteiligt. Insbesondere habe ich hierfür nicht die Hilfe eines Promotionsberaters in Anspruch genommen. Dritte haben weder unmittelbar noch mittelbar geldwerte Leistungen von mir für Arbeiten erhalten, die im Zusammenhang mit dem Inhalt der vorgelegten Dissertation stehen.

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