# Should I stay or should I go?

# Strategies to regulate individual achievement needs within task groups.

### Dissertation

zur Erlangung des akademischen Grades

Doctor philosophiae (Dr. phil.)

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

von Dipl.-Psych. Susanne Täuber geboren am 04.03.1980 in Erfurt

Gutachter:	1. Prof. Dr. Amélie Mummendey, Friedrich-Schiller University Jena						
	2. Prof. Dr. Rupert Brown, University of Sussex						
Tag des Kolloquiums	Tag des Kolloquiums: 19. 11 .2009						

### **Acknowledgements**

First and foremost I would like to thank my supervisors Amélie Mummendey, Rupert Brown, and Kai Sassenberg. Without their constant encouragement, theoretical and practical contribution, and their trust in me this thesis would not have been accomplished. The International Graduate College has been a wonderful and inspiring environment for developing and conducting research, collaborations, and friendship. Thanks go to the Deutsche Forschungsgemeinschaft who facilitates such a great research environment with their financial support.

Many people in the IGC and around have enriched my life. Special thanks go to Nicole, who was a fantastic room mate and a great friend. Andy, for providing me with insights into how to survive writing the PhD thesis and the ups and downs of life ("Just put one foot in front of the other and then do the next darn thing"). Maria, Robert, and Janine for being good friends. Philipp, for being a competent informant regarding the formal stuff that comes along with the thesis. Alison, for endless nights on the balcony, for keeping cool right in the middle of chaos and for proof-reading my thesis.

I owe my gratitude to all the people who listened to me, consoled me and cheered me up during the final spurt of my dissertation. Special thanks go to my family for their love, support, and patience. I owe much to my grandfather Richard, my mother Doris, and my sister Ulrike. Without you, the adventure of balancing between science and children would not have been possible. I thank Matthias for his love and support during the last five years. Last but not least, I thank my children Moritz and Emilia for teaching me which things in life are really significant. You have stretched me to the limit, but you have also been a source of inspiration, laughter, and love. Thanks!

## TABLE OF CONTENTS

A	CKNOWLEDGEMENTS	I
1	INTRODUCTION	4
2	THEORETICAL BACKGROUND	6
	2.1 THE FULFILMENT OF INDIVIDUAL NEEDS WITHIN GROUPS	6
	2.1.1 Types of groups and types of needs	6
	2.2 EMERGENCE AND CONSEQUENCES OF DIVERGENCE EXPERIENCES	8
	2.3 STRATEGIES TO REGULATE THE FULFILMENT OF INDIVIDUAL NEEDS WITHIN GROUPS	10
	2.3.1 Regulating the need to belong	10
	2.3.2 Regulating the need for esteem	11
	2.3.3 Regulating the need for achievement	11
	2.4 THE PSYCHOLOGICAL IMPLICATIONS OF GOAL-DIVERGENCE	15
	2.4.1 Does the task emphasize loyalty toward the group or individual accomplishments?	17
	2.5 WHICH PSYCHOLOGICAL PROCESSES INFLUENCE RESPONSES TO GOAL-DIVERGENCE?	
	2.5.1 Identification	20
	2.5.2 Affective responses to the group	21
	2.6 OVERVIEW OF THE STUDIES	22
3	EMPIRICAL EVIDENCE	24
	3.1 Study 1	24
	3.2 STUDY 2	31
	3.3 STUDY 3	46
	3.3.1 Pre-Study: Goal Negotiation	46
	3.3.2 Main Study: Goal Adjustment and Exit-Intentions	48
	3.4 Study 4	61
4	GENERAL DISCUSSION	87
	LIMITATIONS	93
	PRACTICAL APPLICATIONS	94
	IMPLICATIONS FOR THEORY AND FUTURE RESEARCH DIRECTIONS	95
	CONCLUSIONS	99
R	EFERENCES	101
A	PPENDIX	108
SI	UMMARY	114
7	LICA MAMENTA COLINO	117

	III
CURRICULUM VITAE	119
EHRENWÖRTLICHE ERKLÄRUNG	120

1 Introduction 4

Jeder, siehst du ihn einzeln, ist leidlich klug und verständig, Sind sie in Corpore, gleich wird dir ein Dummkopf daraus. Friedrich Schiller in "Xenien", Musenalmanach 1797

#### 1 Introduction

According to Friedrich Schiller, any individual on their own is fairly smart and understanding, but as a member of a group quickly turns into a blockhead. The current dissertation challenges such a view by demonstrating that individuals act and react sensibly within groups. A number of premises build the ground for this dissertation: People readily distinguish between different types of groups (Brown & Torres, 1996; Lickel, Hamilton, Wieczorkowska et al., 2000; Lickel, Hamilton, & Sherman, 2001; Hamilton, 2007) and different types of groups are associated with the fulfilment of different needs (Aharpour & Brown, 2002; Deaux, Reid, Mizrahi, & Ethier, 1999; Johnson, Crawford, Sherman et al., 2006). Moreover, people aim to belong to groups that meet their current individual needs (Correll & Park, 2005; Moreland & Levine, 2002; Packer, 2008). Finally, research has demonstrated that the perception that a membership in a specific group serves the fulfilment of current individual needs results in identification with that group (Aharpour & Brown, 2002; Correll & Park, 2005; Hamilton, 2007). The current dissertation integrated these insights and extended them by investigating the complete picture of how being a group member relates to perceived need fulfilment through group membership, how this perception is impaired, and what the consequences of such impairment are. The focus of the present research is the impact of the perception that a specific group *does not* serve the fulfilment of current individual needs (any longer).

Of such individual needs, three have been identified that are presumably fundamental: The need for self-esteem or identity, the need to belong, and the need for achievement (Baumeister & Leary, 1995; DeShon & Gillespie, 2005). While research exists that allows for conclusions regarding the regulation of the need for esteem or identity (e.g., Blanz, Mummendey, Mielke, & Klink, 1998; Kessler & Mummendey, 2002; Mummendey, Kessler, Klink, Mielke, 1999a; Mummendey, Klink, Mielke, Wenzel, & Blanz, 1999b) and the need to belong (e.g., Brewer, 1991; Knowles & Gardner, 2008) in group contexts, to my knowledge, no comparable research exists regarding the regulation of achievement needs. To fill this gap and complete the picture, the current dissertation focused on the regulation of individual achievement needs in the context of task groups. Task groups have been shown to be associated predominantly with the need for achievement, as opposed to the need for self-esteem or identity and

1 Introduction 5

the need to belong (Johnson et al., 2006). Discrepancies should thus be experienced when individual achievement needs cannot be fulfilled through group membership. The aim of the current dissertation is to show that in task groups, divergent individual goals and group goals elicit the perception that group membership does not serve the fulfilment of individual achievement needs. Responses to goal-divergence can be understood as strategies that individuals adopt as a means to regulate the fulfilment of current achievement needs within task groups.

The current dissertation contributes to a better understanding of the role of needs for individuals' behaviour in groups. It underlines that the relationship between individuals and groups must be approached bidirectionally (Jetten & Postmes, 2006; Packer, 2008) and demonstrates the dynamic and ongoing usage of need regulation strategies that individuals use to make the relationship between themselves and their groups most rewarding for both sides. The general discussion integrates the empirical findings of the current dissertation with existing theory and research. Suggestions are being made as to how insights from the current dissertation can contribute to a refinement of social identity theory (SIT; Tajfel & Turner, 1979) that has been demanded by other researchers (e.g., Brown, 2000). Although the research presented here focused on a specific type of group and a specific type of need, taking into account the variety of groups and needs that obviously exist would stimulate a fertile and theoretically sound extension of SIT and allow for a better understanding of social identity mechanisms (Brown, 2000).

# 2 Theoretical background

#### 2.1 The fulfilment of individual needs within groups

Group membership serves as a resource that can satisfy a variety of individuals' needs (Forsyth, Elliot, & Welsh, 1999). Different theories emphasize different psychological benefits that individuals gain from membership in groups, for instance self-esteem (Social Identity Theory; Tajfel, 1978; Tajfel & Turner, 1986), an understanding of the self (Self Categorization Theory; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), or an optimal balance between assimilation and differentiation motivations (Optimal Distinctiveness Theory; Brewer, 1991), to name just a few. These theories converge in the notion that membership in groups psychologically benefits individuals. Sherman and his colleagues (Sherman, Hamilton, & Lewis, 1999) summarized these different psychological benefits of membership in social groups under the term social identity value. The authors define social identity value as multiply determined and as reflected in the importance of membership in a specific group to the individual (Sherman et al., 1999). In a similar way, Correll and Park (2005) use the term psychological utility of group membership in their conceptualisation of the ingroup as a social resource. According to these authors, people evaluate the functionality of membership in a specific group based on the group's potential to satisfy their current individual needs. Thus, individuals evaluate and identify with a specific group based on their judgements of the psychological utility of membership in that group or to the social value attached to the group (Correll & Park, 2005; Sherman et al., 1999). This view on the relation between individuals and groups has recently been defined concisely:

Even within the context of a specific group, I carry with me certain idiosyncratic characteristics, beliefs, and values that can influence the way I interact with and behave in the group. My identity-related task as a group member is to determine how I fit into the group and the role(s) I should play there. (Packer, 2008, p. 67)

The role of fit between an individual's current needs and the group's perceived potential to fulfil these needs for an evaluation of group membership as being functional will be further elaborated on in the following paragraphs.

#### 2.1.1 Types of groups and types of needs

Empirical evidence suggests that people readily distinguish between different types of groups (Brown & Torres, 1996; Deaux et al., 1995; Lickel et al., 2000; Lickel et al., 2001).

Lickel and his collaborators (2000; 2001) provide empirical evidence that people intuitively use a taxonomy of four types of groups: Intimacy groups (family, friends, romantic partner), task groups (employees of a store, learning groups, sports teams), social categories (women, Blacks, Jews); and loose associations (people at a bus stop). Each of these group types is characterised by a unique set of properties with regard to size, duration, permeability, common goals, common outcomes, and member interaction. For example, intimacy groups and social categories are less permeable than task groups and loose associations. With regard to the meaningfulness of group membership, intimacy groups and task groups score higher than social categories and loose associations (Lickel et al., 2001).

How do different types of groups relate to individuals' need fulfilment? Research indicates that people intuitively differentiate between different types of groups. Moreover, people are aware that membership in different groups is associated with the fulfilment of different needs: Johnson and her colleagues (Johnson et al., 2006) reported that participants associated specific types of groups with the fulfilment of specific needs. The authors showed stronger implicit and explicit associations between task groups and the fulfilment of achievement needs (compared to the fulfilment of affiliation and identity needs), between intimacy groups and the fulfilment of affiliation needs (compared to the fulfilment of identity and achievement needs), and between broader social categories and the fulfilment of identity needs (compared to the fulfilment of affiliation and achievement needs). Thus, a comprehensive framework can be derived in which fulfilment of the fundamental human needs for self-esteem, for belonging, and for achievement (Baumeister & Leary, 1995; Deci & Ryan, 1999, 2000; DeShon & Gillespie, 2005) is set into relation with membership in different types of groups. This framework can be further differentiated by relating more specific types of groups with more differentiated needs.

In an attempt to show that ingroup identification evolves from a variety of motives besides the need for positive self-esteem as suggested by SIT (Tajfel & Turner, 1986), Aharpour and Brown (2002) conducted a study with four different groups (trade unionists, football supporters, English students, Japanese students). They examined the association of different identity functions with identification and ingroup bias in each of these groups. The identity functions extracted by these authors were material and emotional interdependence, behavioural and emotional independence, self and social learning, ingroup ability comparison, and ingroup homogeneity and intergroup comparison. Aharpour and Brown (2002) revealed that for

each of the groups, a specific set of identity functions predicted identification with that group. It seems plausible to conceive of these identity functions as needs that individuals strive to satisfy through membership in a specific group. The findings by Aharpour and Brown (2002) indicate that ingroup identification is a consequence of the fulfilment of individual needs through group membership. This is to say that if one or more needs that are relevant for identification with a specific group are not fulfilled any longer, group members might respond to this by decreased identification and eventually might exit the group. For example, ingroup homogeneity was a core function of identity among football supporters, but not among trade unionists (Aharpour & Brown, 2002). Events that impair perceived ingroup homogeneity, for instance the emergence of factions, should therefore affect identification among football supporters, but not among trade unionists.

The above example illustrates that a variety of groups and needs exist that have to be considered in order to understand the complex relationship between individuals and groups. The current dissertation argues that, irrespective of the specific need and type of group under consideration, the perceived fit between ones current needs and the group's potential to fulfil these needs influences how much group membership is valued (Correll & Park, 2005; Packer, 2008; Sherman et al., 1991). Evidence exists that such evaluations play a role when the need to belong and the need for self-esteem are in focus (Knowles & Gardner, 2008; Tajfel & Turner, 1986; see section 2.3 for a detailed review). To my knowledge, the role of fit for perceived functionality of group membership with respect to individuals' achievement needs has not yet been investigated. Therefore, the present dissertation focuses on individuals' achievement needs and on the groups in which these needs are relatively more important than other needs, namely on task groups. In the following section, a brief review will be provided regarding how experiences of divergence emerge.

### 2.2 Emergence and consequences of divergence experiences

Goals have been conceptualized as being multidimensional and hierarchically organized (Brendl & Higgins, 1996; DeShon & Gillespie, 2005). In an attempt to integrate the various models and theories of individual goal pursuit, DeShon and Gillespie (2005) define selfgoals as being highest in the hierarchy. Based on the work of Baumeister and Leary (1995), the authors define self-goals as the needs for affiliation, agency, and esteem, which are equivalent to the aforementioned needs to belong, achievement, and esteem. The goals that

are higher in the hierarchy define the "why" of goal pursuit, whereas those lower in the hierarchy define the "how" of goal pursuit. This hierarchy-based differentiation parallels the distinction between high identity goals (defining the "why") and low identity goals (defining the "how") that was put forward by Brendl and Higgins (1996). DeShon and Gillespie (2005) propose that "All individuals possess, in varying degrees, the highest level goals of agency, esteem, and affiliation" (p. 1108). Irrespective of the self-goal that provides the basic focus of attention (achievement, affiliation, or esteem), goal progress must be monitored in order to ensure successful goal pursuit.

The core feature of monitoring goal progress is the detection of discrepancies between the current state and the desired state (Carver & Scheier, 1998, 2000; DeShon & Gillespie, 2005). Not only has human information processing been shown to be highly sensitive to errors and discrepancies, moreover the sensitivity to discrepancies seems to be a hard-wired function of the brain (cf. DeShon & Gillespie, 2005, p. 1110). Discrepancy detection basically relies on comparisons between the current state and the desired state that reflects the goal. If the result of this comparison is a discrepancy, an output function is triggered that "filters down through the goal hierarchy until a relevant behaviour is enacted to reduce the discrepancy" (cf. DeShon & Gillespie, 2005, p. 1110). There is no plausible reason to assume that individuals are less sensitive to discrepancies between their goals and the current conditions when they are embedded in a group context. Indeed, Bizman and Yinon (2002) predicted and showed that discrepancies between how the ingroup is (the actual social self) and how the ingroup wishes to be (the ideal social self) or how the ingroup should be (the ought social self) elicited the same reactions as such discrepancies do when they refer to the individual self.

These findings indicate that the same sensory system that monitors progress towards goals attached to the individual self also monitors progress towards goals attached to the social self. In the current dissertation, the ingroup provides the environment in which individual goal pursuit takes place. Discrepancy detection here refers to discrepancies between an individual's achievement needs (the desired state) and the perceived potential of the group to fulfil these needs (the current state of the environment). Discrepancy experiences should operate in essentially the same way in all types of groups and regarding all types of needs. Generally, discrepancies between the desired state and the current state are experienced as psychologically aversive states that elicit corrective actions (Carver & Scheier, 1998, 2000; Higgins,

1987). These corrective actions aim to reduce the discrepancy experienced. The following section introduces strategies that individuals can adopt when they experience such discrepancies with respect to different needs.

# 2.3 Strategies to regulate the fulfilment of individual needs within groups

#### 2.3.1 Regulating the need to belong

Recent theory and research has been occupied with strategies that individuals can adopt when they detect a discrepancy between their needs and the group's potential to fulfil these needs (e.g., Correll & Park, 2005). Although explicit reference to strategies such as regulating individual need fulfilment is scarce, it appears to be implicitly included in theory. One recent study that has made explicit reference to the regulation of affiliation needs has been put forward by Knowles and Gardner (2008). When people feel rejected this induces a discrepancy between the current state (rejection, exclusion) and the desired state (belonging, inclusion). The authors demonstrated that rejected individuals adopt specific strategies to regulate their frustrated need to belong (Knowles & Gardner, 2008). Specifically, these authors showed that individuals who were reliving an episode of rejection activated and amplified other meaningful social relationships they have. Importantly, these strategies buffered against the negative consequences that rejection usually has on mood and ratings of ones own social competence. Moreover, these groups did not have to be physically present – mental representations of such groups sufficed (Knowles & Gardner, 2008). What is interesting in this example of need regulation is that not just any group served as a means to successfully regulate participants' frustrated need to belong. Only groups that were meaningful to the individual helped to protect from rejection distress. This means that to regulate a specific need such as the need to belong, people rely on specific types of groups. In this case, only meaningful, highly entitative groups such as intimacy groups served as a means to cope with rejection distress (Knowles & Gardner, 2005). Because intimacy groups are associated more with the need to belong than with the needs for achievement and esteem (Johnson et al., 2006), these findings can be taken as first evidence that when individuals (mentally) turn to other groups in order to regulate frustrated needs, they prefer groups that are associated with the need that has been frustrated.

#### 2.3.2 Regulating the need for esteem

In SIT (Tajfel & Turner, 1979), reference to need regulation is made less explicit. SIT proposes that group membership serves to enhance or maintain self-esteem (but see Aharpour & Brown, 2002; Brown, 2000), which reflects the fundamental human need for esteem (Baumeister & Leary, 1995). Membership in a specific group satisfies this need as long as this group is seen as positively distinct from relevant outgroups (Tajfel & Turner, 1979, 1986). Negative comparison outcomes with relevant outgroups signal that the ingroup cannot satisfy group member's current need for self-esteem any more. Such negative comparison outcomes can include a variety of domains, such as performing worse than a relevant outgroup, belonging to a stigmatized group, or belonging to a minority. Discrepancies between the desired state (positive self-esteem) and the current state (impaired self-esteem) can also be induced through changes in the core of a group's identity, for example when the group merges with another group. Such changes are experienced as subverting the group's identity (Sani, 2008) or as a discontinuance of the group's identity (van Leeuwen, van Knippenberg, & Ellemers, 2003).

The aforementioned circumstances (which are by no means exhaustive) can induce evaluations of the ingroup as not (longer) satisfying group members' need for self-esteem. Tajfel and Turner (1979, 1986) have proposed three strategies that group members can use in order to regulate their need for self-esteem (or positive distinctiveness) when this need is frustrated by one of the above mentioned conditions. These strategies are known as identity management strategies and involve social creativity, individual mobility, and collective action. Social creativity refers to changing the comparison dimension or comparison object in such a way that regarding the new comparison dimension or object the ingroup is superior to the outgroup (e.g., Blanz et al., 1998). Individual mobility means that group members leave the group and join another group. Finally, collective action refers to actions that group members engage in collectively to improve their ingroup's status. The usage of these identity management strategies has received overwhelming empirical support both in experimental and field research (e.g., Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999a; Mummendey et al., 1999b).

#### 2.3.3 Regulating the need for achievement

The research reviewed so far has provided valuable insights into strategies that group members may adopt as a means to regulate the need to belong and the need for self-esteem when these needs were frustrated in an intragroup setting. To my knowledge, a similar investigation of the regulation of achievement needs has not been accomplished to date. The aim of the current dissertation is to fill this gap and to provide a testable framework for strategies that serve individuals' regulation of achievement needs. Discrepancies between the current state and the desired state are experienced as psychologically aversive states that elicit corrective actions (Carver & Scheier, 1998, 2000; Higgins, 1987). Looking at identity management strategies from this angle, one can clearly see that each of these strategies constitutes a corrective action that serves the ultimate goal of reducing the experienced discrepancy. In some cases, corrective actions involve the activation of mental representations of meaningful other groups (Knowles & Gardner, 2008) or the cognitive re-interpretation of relevant comparison dimensions (Tajfel & Turner, 1979). In other cases, such as individual mobility, the corrective action involves changing the social category. Such corrective actions are likely to also emerge when individuals' need for achievement is frustrated in task groups. Strategies that individuals might adopt as a means to regulate achievement needs will be introduced in the following.

First, when do individuals experience discrepancies in task groups? Task groups have been shown to be associated predominantly with the need for achievement, as opposed to the need for self-esteem or identity and the need to belong (Johnson et al., 2006). Discrepancies should thus be experienced when individual achievement needs cannot be fulfilled through group membership. More specifically, the core feature that differentiates task groups from other types of groups is sharing common goals (Sherman et al., 1999). Consequently, discrepancies between the desired state and the current state will be experienced when individual and group goals are divergent. Thus, the critical information that members of task groups are expected to respond to is whether their individual goals correspond with or are divergent from the group goals. Usually, individuals will join a specific group only after close inspection of how this group's goals and objectives fit with the person's goals and objectives. Think for instance of a person who tries to decide on a study programme. This person might collect information about the goals of several programmes, about the composition of students, and will try to figure out to what extent the features of a certain group fit with his or her personal preferences. This procedure is called "investigation" and represents the earliest stage of the group socialization process as suggested by Moreland and Levine (2002). According to these authors, investigation is a bidirectional process: The group searches for individuals who are willing and able to contribute to the achievement of group goals. The individual, on the other hand, searches "for groups that can contribute to the satisfaction of personal needs" (Moreland & Levine, 2002, p. 187). Hence, most people aim to ensure a good fit between themselves and the group they want to join *before* entering the group, with the general objective to warrant the optimal satisfaction of their current individual needs.

However, the established initial fit between individual goals and the group's goals might change over time due to development of both the group and the individual. As Correll and Park (2005) stated, both changes in the individual's needs and changes in the group's fortunes can induce a mismatch where before there was a match. Because experiences of discrepancy between the desired state and the current state elicit corrective actions (Carver & Scheier, 1998, 2000; Higgins, 1987), several strategies should be evident that allow group members to respond to these experiences of goal-divergence. I will introduce three possible strategies that are conceptually similar to the identity management strategies proposed by SIT. Each of these strategies can be associated with the tasks that arise in certain phases of group socialization (Moreland & Levine, 2002). The array of the strategies introduced below is by no means exhaustive, but aims to exemplify the most important and feasible ones.

#### Adjustment of goals

The first corrective action that might re-install correspondence between individual goals and group goals is to adjust one of these goals so that it matches the other. This strategy is similar to social creativity in the framework of SIT. Processes in which an individual adjusts to a group (assimilation) or the group adjusts to an individual (accommodation) characterize the phases of entry and maintenance in the group socialization process (Moreland & Levine, 2002). The aim of this mutual adjustment is to make the relationship between the group and the individual more rewarding. The group benefits from greater individual contributions to the achievement of group goals. The individual benefits from greater contributions of the group to the satisfaction of his or her needs. One example is the promotion of an employee. Granting the promotion benefits the department by retaining a good and committed employee. Likewise, being promoted benefits the employee by signalling that his or her work is valued more, and by occupying a position that better fits his or her individual achievement needs.

#### Negotiation of goals

Another possible strategy that group members can engage in is to negotiate individual and group goals. This strategy is likely to be used in times of change, when internal and ex-

ternal pressures might force the group to re-define its identity and objectives. Prominent examples are staff retreats that are set up on a regular basis to discuss aims and objectives of the organization. A related example for negotiations of individual goals and group goals are political conventions. Moreland and Levine (2002) refer to this strategy as resocialization. This phase is characterized by attempts of the group and the individual to change one another "so that the group's goals are more likely to be achieved and the individual's needs are more likely to be satisfied" (Moreland & Levine, 2002, p. 188). Resocialization usually results from divergence between the group and the individual, for instance when role negotiation fails. To remain in the above example, if the employee is not granted the promotion, role negotiation has failed and the individual and the group have to negotiate again. The negotiation of goals that follows is closely related to what is referred to as collective action in the framework of SIT. The scope of the action is somewhat different though: In collective action, the ingroup's position vis-à-vis a relevant outgroup or in comparison to the ingroup's past position is in focus. In goal negotiation, the individual's position in the ingroup is in focus. If negotiation is successful, commitment levels of both the group and the individual rise again (Moreland & Levine, 2002). However, if negotiation is not successful, group members are likely to engage in a third strategy.

#### Exit

If individual and group goals are divergent and the other strategies are either unavailable or have failed, individuals can adopt a third strategy to regulate their current achievement needs: They can leave their group and join another group. This strategy is equivalent to individual mobility in the framework of SIT. Although the outcome is basically the same, namely to exit ones current group, the antecedents differ: The main antecedent of exit as an identity management strategy is the frustration of the need for self-esteem within the current group. The main antecedent of exit in the present research is the frustration of the need for achievement in the current group. Therefore, consistent with the findings of Knowles and Gardner (2008), when exiting a group because the need for self-esteem cannot be fulfilled, people are expected to search for a group that better serves the fulfilment of self-esteem. Conversely, when exiting a group because the need for achievement cannot be fulfilled, people are expected search for a group that better serves the fulfilment of achievement.

#### 2.4 The psychological implications of goal-divergence

Fit can refer to quite different states, for instance, the fit between the skills of the individual and the demands of a task, or a social role. The different concepts of fit have in common that they relate the concept of fit to individual need fulfilment and satisfaction with group membership. Research on social roles suggests that a good person-role fit determines role satisfaction, commitment to the group, and performance on behalf of the group (Bettencourt, Molix, Talley, & Sheldon, 2006). Also research on group member prototypicality implicitly uses the concept of fit. The extent to which a member is seen as prototypical for the group reflects how much this member is seen as representing what the group has in common and what differentiates it from other groups (Van Kleef, Steinel, van Knippenberg et al., 2006). Prototypicality is in essence the extent to which an individual fits within a specific group. This is nicely illustrated by a quote from Jetten and her colleagues (Jetten, Branscombe, Spears, & McKimmie, 2003): "Some ingroup members are "better" examples of the ingroup than others because they more closely *match* the group prototype" (p. 131, italics added). Individuals who are more prototypical (i.e., better fitting) are evaluated more positively by other group members, are more likely to occupy a leading role, and are more likely to define a group's norm and to act according to these norms (cf. Jetten et al., 2003). In the context of task groups this indicates that having individual goals that are divergent from the group's goals renders ones position in the group peripheral.

Individuals often actively engage in the search for the group that suits the fulfilment of their needs best (Moreland & Levine, 2002). Therefore, it seems plausible to assume that fit between individual needs and the group's potential to fulfil these needs constitutes the default setting within groups. With regard to task groups this means that fit between individual and group goals likely constitutes the normative standard. Goal-divergence implies that something is not as it should be and that one has not quite reached the optimal position in a group, where optimal refers to the state where the relation between the group and the individual is most rewarding for both parties (Moreland & Levine, 2002). Similarly, experiences of discrepancies between individual and group goals might imply that one's position within the group has changed. Prislin and Christensen (2005) recently argued that change within a group potentially erodes group functioning irrespective of whether it refers to an upgrading or to a down-

<sup>&</sup>lt;sup>1</sup> Of course, this refers only to groups that individuals can choose to join or to exit, thus to groups that have at least moderately permeable boundaries.

grading of group members' position. Specifically, the authors demonstrated that participants who changed from a majority position to a minority position within the group reported high levels of disengagement and little willingness to remain a group member. This is not too surprising, but Prislin and Christensen (2005) also reported that participants who changed from a minority position to a majority position within the group did not report decreased levels of disengagement or an increased willingness to remain a group member. These findings reflect the asymmetry between gains and losses (Kahneman & Tversky, 1979): The gains of moving upwards (from a minority to a majority position) are not enough to outweigh the losses of moving downwards (from a majority position to a minority position). In other words, change elicits more disintegrative forces than integrative forces and this asymmetry might ultimately impair the functioning of the group as a whole (Prislin & Christensen, 2005).

Finally, because goals are often positively associated with ability (Greene & Miller, 1996; Hoppe, 1930), having higher vs. lower individual goals than group goals indicates to a certain degree how capable one is compared to the majority of fellow group members. The above considerations show that the seeming simplicity of the concept of goal-divergence stands in sharp contrast to its potentially far reaching implications for the relation between an individual and the group. The next section elaborates on potential influences of the direction of goal-divergence and characteristics of the task on exit-intentions.

Based on the above examples, one might assume that divergent individual and group goals generally elicit a tendency to leave the group (Prislin & Christensen, 2005). However, two additional factors should be taken into account: First, responses to goal-divergence might differ as a function of the interdependence structure that is inherent to the type of task under investigation. Second, divergent individual goals and group goals can mean that individual goals are higher or lower than group goals. As will be outlined below, each direction of goal-divergence has fundamentally different implications for the relation between the individual and the group. Therefore, the general hypothesis will be refined in the following section with regard to the interdependence structure inherent to different task types and the direction of goal divergence.

# 2.4.1 Does the task emphasize loyalty toward the group or individual accomplishments?

Individual goals and group goals can be related to each other in different ways. In his classic taxonomy, Steiner (1972) differentiated between conjunctive and disjunctive tasks. According to Steiner (1972), conjunctive tasks require all team members to reach a minimum level of performance, because potentially, the performance of the worst group member determines the group's performance. This means that the group only performs the task successfully if all group members perform it successfully (Miller & Komorita, 1995). One example would be a group of people climbing a mountain who are connected to each other with a rope. This group can only go as fast as the slowest members of the group. By contrast, disjunctive tasks require only one group member (optimally the best) to perform well on the task. One example would be a group solving a problem to which only one correct answer exists. High performance of one member is sufficient to ensure that the group as a whole succeeds at the task. It is important to note that many group tasks combine a mixture of both conjunctive and disjunctive features (Faddegon, Ellemers, & Scheepers, 2009). Therefore, in line with suggestions by other researchers (Faddegon et al., 2009; Miller & Komorita, 1995), the tasks used in the present research will be differentiated based on their relative emphasis on individuals' responsibility for the group outcome vs. on individual accomplishments.

Tasks that emphasize loyalty toward the group

In conjunctive tasks, people are aware of their responsibility for the group outcome, because the contribution or performance of the least capable group member is likely to determine the group's outcome (Faddegon et al., 2009). Group members are aware that they can be blamed for group failure. In contrast, group members focus more on individual accomplishments in disjunctive tasks, because the best group member potentially determines the group's outcome (Miller & Komorita, 1995). In other words, tasks differ in the extent to which they emphasize loyalty toward the group vs. individual accomplishments. This different emphasis is likely to elicit different reactions of members whose individual goals are higher vs. lower than the group's goals. According to Zdaniuk and Levine (2001), group loyalty is defined as a greater concern for group welfare than for personal welfare. This also means that group loyalty is expressed differently by less vs. more capable group members. More capable group members express their loyalty toward the group through staying despite having good alternatives. Less capable group members express their loyalty toward the group through exiting

despite having poor alternatives. Thus, paradoxically, exiting a group can be an expression of group loyalty (Zdaniuk & Levine, 2001). Other factors might also influence the willingness to exit the group among less capable group members. Being less capable implies the risk of doing poorly in social comparison processes, which might negatively affect mood and self-worth (Kemmelmeier & Oyserman, 2001). Moreover, pressures that include sanctioning or even exclusion from the group might be experienced by less capable members especially in natural, interactive groups that engage in rather conjunctive tasks. Consider for instance sports teams, where less capable group members less often play actively in games, and spend more time sitting out. When the task emphasizes responsibility toward fellow group members and for the group outcome (i.e., the task has relatively more conjunctive features), members who perceive their individual goals as being lower (as opposed to higher) than the group's goals are expected to report stronger exit-intentions.

#### Tasks that emphasize individual accomplishments

In tasks that emphasize individual accomplishment (i.e. disjunctive tasks), the opposite pattern of exit-intentions is expected. When group loyalty is not salient, all group members are expected to orientate themselves to the unidirectional trend for upward comparisons and to striving to improve their current performance level (Festinger, 1954; Weber & Hertel, 2007). As is apparent, this striving can be easily aligned with staying in the group for members whose individual goals are lower than the group's goals. Less capable group members often try to match or even exceed standards provided by the environment (Weber & Hertel, 2007). In a task group, the environment is the group, and the standard that people adjust their standard (the individual goal) to is the standard provided by this group (the group goal). Moreover, less capable group members can benefit from the contributions of more capable group members. This could be via free-riding (Kerr & Bruun, 1983), or via basking in reflected glory (Snyder, Lassegard, & Ford, 1986). This is to say that lower individual and group goals are expected to elicit the same effects on exit-intentions as correspondence between individual and group goals. Conversely, aligning the striving to improve ones current performance level with staying in the group is much harder for members whose individual goals are lower than the group's goals. For more capable group members, group membership does not provide many opportunities for upward comparisons. To successfully regulate fulfilment of current achievement needs, more capable group members must leave the group and join another group. This is consistent with research that demonstrated that one way to predict the behaviours of peripheral group members is to take into account how these group members judge their future possibilities within the group (Jetten et al., 2003).

To conclude, the preceding section highlights that divergent individual and group goals have far reaching implications for group members' perceptions of the group as a resource for the fulfilment of individual achievement needs. These perceptions are expected to vary as a function of the direction of goal-divergence and of the task's focus on individual accomplishments or responsibility toward the group outcome. Finally, these perceptions are expected to manifest themselves in reported exit-intentions.

# 2.5 Which psychological processes influence responses to goal-divergence?

At this point, attention should be drawn to the psychological processes that connect goal-divergence with exit-intentions. In general, if a group's ability to satisfy the psychological needs of its members is reduced, individuals can be expected to look elsewhere for the satisfaction of their needs (Correll & Park, 2005; Packer, 2008). However, whether the group's ability to meet its members' needs is perceived as being reduced will depend on the direction of goal-divergence and the relative emphasis of the task of responsibility toward the group outcome or individual accomplishment. It seems likely that perception of the group as not fulfilling the individual's needs any more also impacts on the individual's cognitive and affective attachment to the group. After being member of a group for some time, one is identified with the group and has positive affective ties to the group (Tajfel, 1978). Group membership is an important part of the self-concept and is associated with positive value and emotions for high identifiers (McCoy & Major, 2003). The cognitive and affective bonds one has with the group usually go hand in hand with a very low willingness to exit the group. Consistent with this, high identifiers have been shown to be reluctant to leave their group (e.g., Ellemers, Spears, & Doosje, 1997). This means that before goal-divergence translates into exit-intentions, the cognitive and affective bonds to the group in focus must be cut. Consistent with this proposition, Ethier and Deaux (1994) argued that maintaining an identity in a new environment requires a person to detach from the old environment. Consequently, goaldivergence is expected to also impact on identification with the group and on affective responses to the group. These factors will be elaborated in more detail below.

#### 2.5.1 Identification

One aim of the current dissertation is to examine identification both as an antecedent and a consequence of goal-divergence. Identification might both influence individuals' perception of and reaction to goal-divergence and it might be influenced by goal-divergence. For instance, the study by Aharpour and Brown (2002) suggests that if an identity function that is important for a specific group (such as ingroup homogeneity is important for football supporters) is impaired, levels of identification will decrease. The authors treated identification as a consequence rather than an antecedent of identity functions, because the groups they studied were groups with which members identified by own choice. However, they explicitly referred to the possibility that identification might also be an antecedent of identity functions (Aharpour & Brown, 2002).

One line of research that is relevant for the investigation of group members' exitintentions is research on schisms (Sani, 2005). Schisms are very similar to individual mobility, but refer to the seceding of parts of groups rather than single group members. Sani proposed that dissent about a norm that is core to a group's identity leads to an experience of subversion of one's identity (Sani, 2005; Sani & Pugliese, 2008). He argued and showed that identity subversion leads to reduced identification, which in turn increases schismatic intentions. Given that one core feature of task groups are common goals (Sherman et al., 1999), the experience that individual goals diverge from the group's goals might lead to the perception that the group itself has changed. Using the terminology of Aharpour and Brown (2002), goal-divergence indicates that the identity function of a task group (i.e., common goals) has been impaired. Thus, based on both lines of research, goal-divergence is expected to lead to decreases of identification.

However, the path from identity subversion to identification seems not so self-evident on theoretical grounds. It appears equally plausible to assume that low identified group members are more susceptible to cues of identity subversion compared to high identified group members, as suggested in the model of Packer (2008). The author assumes that identification affects group members' susceptibility to goal-divergence. Whereas low identifiers dissent from group norms, because they just care little for the group's welfare, high identifiers dissent from group norms, because they believe these norms are harming the group (Packer, 2008). Consequently, low identifiers might be less tolerant with regard to discrepancies between group norms and alternate standards for behaviour. This means that relatively low levels of

normative conflict (as indicated by goal-divergence) might be enough to shift low identifiers from passive nonconformity to more active forms of nonconformity, such as exiting the group. In this regard, identification with the group would be an antecedent of (tolerance for) goal-divergence. This means that low identifiers who perceive their individual goal (the alternate standard) as divergent from the group goal (the group norm) can be expected to report stronger exit-intentions than high identifiers. The research reported below addresses the different conceptualisations of identification as an antecedent and a consequence of goal-divergence.

#### 2.5.2 Affective responses to the group

As indicated above, goal-divergence is expected to reduce individuals' affective attachment to the group. This affective response is expected to mediate the predicted effect of goal-divergence on exit-intentions. One can argue that neutral or indifferent affective responses are not sufficient to detach from a group. Rather, an individual might be expected to actively distance from the group. A concept that captures such a response is disidentification, which refers to individuals' motivation to increase the distance between themselves and a certain group (Elsbach & Bhattacharya, 2001; Kreiner & Ashforth, 2004). Whereas nonidentification is rather passive and means that the group is considered irrelevant, disidentification refers to an active distancing (Elsbach & Bhattacharya, 2001) from the still relevant group. Individuals actively seek out comparisons with the group and try to maximize the difference between themselves and the group (Carver & Scheier, 1998). One must keep in mind though that this response is expected to be an immediate response to goal-divergence in the present context. Once an individual has left the group and joined another group, this active distancing from the group might be alleviated and shift to indifference. However, in a situation where divergent goals become salient, the individuals' task is to detach from the group, and I suggest that this requires active distancing.

Despite the conceptual similarity between disidentification and negative affective responses, I will use the term "affective rejection" hereafter. On the one hand, this avoids semantic confusion of the concepts of identification and disidentification. On the other hand, although empirical evidence suggests that disidentification and identification are separate variables that represent unique psychological states (Kreiner & Ashforth, 2004), it cannot be ruled out that this goes back to a methodological artefact. The items usually used to measure disidentification are mainly of negative valence (e.g., "I am embarrassed to be part of this

organization", Kreiner & Ashforth, 2004), whereas the items used to measure identification are mainly of positive valence. Consequently, even if identification and disidentification can be separated factor analytically, a valence effect might be responsible for this finding. Moreover, other researchers have defined disidentification as a purely cognitive construct (Elsbach & Bhattacharya, 2001). The authors make clear that "although one may have positive or negative emotions about an organization, those emotions, by our definition, are not a part of the construct organizational disidentification" (Elsbach & Bhattacharya, 2001, p. 410).

This conceptualisation of disengagement as mere cognitive distancing from ones group should be seen with scepticism. Emotions often (or, some might argue, always) arise from appraisals of certain situations, where appraisals are cognitions about the specific features of a situation (e.g., Smith, 1999). To merely examine cognitive responses to a group thus means to investigate only one half of the process. It is my conviction that a thorough understanding of the complex processes that operate when people decide to exit their group requires examining affective responses to goal-divergence. Support for this proposition can be found in research on schisms that has demonstrated that perceived identity subversion elicits negative emotional responses (Sani, 2005; Sani & Pugliese, 2008). Summing up, the processes that are assumed to underlie the effects of goal-divergence on intentions to exit the group involve decreased perceptions that group membership serves the fulfilment of individual achievement needs, the affective rejection of the ingroup and decreased identification with the group.

#### 2.6 Overview of the studies

Four studies were conducted to examine how individuals respond to goal-divergence in task groups. Studies 1 and 2 were scenario studies in which goal-divergence was manipulated. Both studies used the example of a student learning group, thus the group task was to jointly prepare for an exam. This task stressed individual achievements over responsibilities toward the group (Faddegon et al., 2009; Miller & Komorita, 1995). Study 1 was designed to compare the impact of goal-divergence on willingness to exit the group, inner withdrawal from the group, and satisfaction of group membership. These responses are referred to as separation-intentions. The mediating role of affective rejection of the group for the effect of goal-divergence on separation-intentions was investigated in Study 1. Using the same paradigm with members of a natural task group, Study 2 extends the findings of Study 1 by explicitly measuring evaluations of perceived need fulfilment through group membership before

and after goal-divergence was induced. Study 2 also served to thoroughly investigate the effects of identification and affective rejection of the group. Studies 1 and 2 thus reveal insights into the effects of direction of goal-divergence on separation-intentions when the task emphasized individual accomplishments. The studies also yield insights into the processes underlying these effects. Study 3 adds to the aforementioned studies by investigating reactions to goal-divergence when the task emphasized responsibility toward the group outcome. The study was undertaken with a soccer team. Goal-divergence, identification, and exit-intentions were measured over a time period of 22 weeks (a complete soccer season). Additionally, because goal-divergence was measured, Study 3 also allowed examining the strategy of goal adjustment. Finally, to compare the joint effects of different task foci and the direction of goal-divergence in a more controlled setting, Study 4 employed a minimal group paradigm in which the task emphasized individual outcomes, group outcomes, or both individual and group outcomes. Again, goal adjustment and exit-intentions were investigated. Additionally, the impact of task foci and goal-divergence on factors that impact on group functioning was examined.

# 3 Empirical evidence

#### 3.1 Study 1

The aim of Study 1 was to test the assumption that experiences of divergent individual and group goals elicit intentions to separate from a task group. Goal-divergence was manipulated to allow for insights into its causal effects on the dependent variables. The task used was expected to raise concerns about individual achievements more than concerns about responsibilities towards the group. As outlined above, such a task is unlikely to trigger group loyalty among members whose individual goals are higher than the group goals (i.e., who are more capable than the majority of fellow group members). Consequently, it was expected that participants in the condition with higher individual than group goals would report stronger separation-intentions than participants in the condition where the individual goals were lower than or equal to the group's goals (Hypothesis 1: Separation-Hypothesis). Further, it was hypothesized that especially the where condition individual goals are higher than the group goals elicits affective rejection of the ingroup. This is because affective rejection is thought to be an expression of detachment from a group, which should be evident among those group members who want to separate from the group. Study 1 tested the expectation that having higher individual than group goals elicits affective rejection of the ingroup, which mediates the effect of this goal-relation on intentions to separate from the group (Hypothesis 2: Affective-Rejection-*Hypothesis*).

#### Method

#### Participants and Design

Sixty students of the University of Jena took part in the study (42 female, 18 male;  $M_{age} = 22.05$ , SD = 2.11; range 19 to 28). Participants were randomly assigned to the conditions of a one-factorial between-subjects design with three conditions (Goal Relation: Individual Goal > Group Goal, Individual Goal = Group Goal, Individual Goal < Group Goal, hereafter referred to as I>G, I=G, and I<G).

#### **Procedure**

Each participant received a questionnaire. The background of the study was introduced as interest in students' experiences with learning groups. Manipulations of goal-divergence took place via written scenarios. Participants were asked to imagine themselves being member

of a student learning group preparing for an important exam. In the I<G condition, participants read that their individual goal was to pass the exam (i.e., achieve a grade 4 in the German system), whereas the majority of members of their learning group had the goal of achieving grade 1 or 2. In the I>G condition, participants read that their individual goal was to achieve grade 1 or 2, whereas the majority of members of the learning group had the goal of passing the exam (i.e., achieve a grade 4 in the German system). The I=G condition stated that both the participant and the majority of members of the learning group had the goal of achieving grade 1 or 2 in the exam. This condition thus reflected correspondence of individual and group goals.

After reading the scenario, participants filled in the questionnaire assessing the dependent variables. After completion, participants were thanked and debriefed.

#### Dependent measures

Manipulation check. Two items assessed perceived differences between the group goal and the individual goal ("Was your individual goal in the scenario above or below the group goal?", from I = individual goal was below group goal to T = individual goal was above group goal and "Did the group described in the scenario have a higher or lower goal compared to your individual goal?", from T = group had a lower goal to T = group had a higher goal, reverse coded). The items were averaged to form a scale T = group had a higher

Reality check. Two items assessed whether participants perceived the scenario as realistic ("How realistic do you perceive the situation described in the scenario?", from I = not realistic at all to 7 = very realistic and "Have you ever been in a situation such as the one described in the scenario?", from I = no to 7 = yes).

Affective rejection. Participants' agreement with six items that referred to feelings of concerns and worries related to the group were assessed (e.g., "I feel bad when meeting the group" and "I don't like spending time with the group", from I = not at all to 7 = very much). The items were adapted from Matschke and Sassenberg (2008) and averaged to form a scale ( $\alpha = .88$ ).

Separation-intentions. Six items assessed participants' motivation to leave the group (e.g., "I am thinking about leaving this group"). Four items (adapted from Lauck, 2005) assessed participants' engagement in inner withdrawal from the group (e.g., "In the group, I do what I have to do, but without great enthusiasm"). Two items assessed how satisfied participants were with group membership ("Being a member of that group satisfies me" reverse

coded, and "Spending time with that group dissatisfies me"). All items were measured with 7-point Likert scales (from  $I = not \ at \ all$  to  $7 = very \ much$ ). The 12 items were averaged to form a single scale of Separation-Intentions ( $\alpha = .94$ ).

#### Results

All post-hoc comparisons reported in the empirical part were adjusted for multiple comparisons using the Sidak method to correct for multiple testing.

#### Manipulation Check

An analysis of variance was conducted with Goal-Relation as between-subject factor and the manipulation check as dependent measure. The analysis revealed the expected main effect of Goal-Relation on the manipulation check scale, F(2,56) = 10.45, p < .001,  $\eta_P^2 = .27$ . Participants in the I>G condition correctly indicated that their individual goal was above the group goal to a greater extent (M = 5.38, SD = 1.65) compared to participants in the I=G condition (M = 4.45, SD = 1.03) and in the I<G condition (M = 3.23, SD = 1.68). Post-hoc comparisons showed that means differed significantly between the I>G and the I<G condition (p < .001) and between the I=G and the I<G condition (p = .039). The manipulation can thus be considered successful.

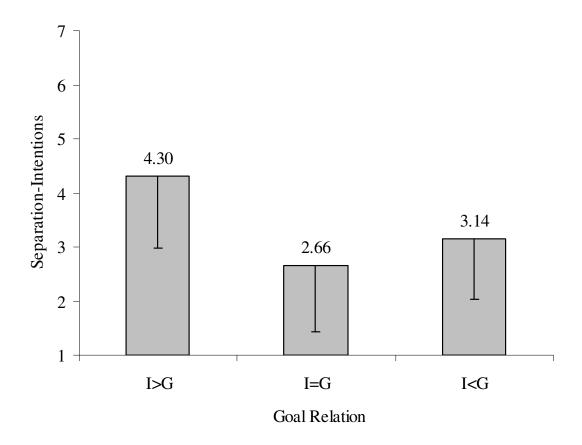
#### Reality Check

An analysis of variance was conducted with Goal-Relation as between-subject factor and the two reality check items as dependent measures. The analysis revealed that the three goal relations were perceived as being equally realistic, F(2,59) < 3.00, p > .05,  $\eta_P^2 = .10$ . The average level of perceived realism of the described situation (M = 4.27, SD = 1.82) was significantly above the mid-point of the scale, t(59) = 3.26, p = .002. The analysis further revealed that participants had experienced the situations described in the scenario to different extents, F(2,59) = 4.79, p = .012,  $\eta_P^2 = .14$ . Participants have experienced a I=G relation more often (M = 3.20, SD = 2.19) compared to a I>G relation (M = 2.60, SD = 2.01) and a I<G relation (M = 1.50, SD = 0.69). Post-hoc comparisons showed that only significant difference emerged between the I<G and the I=G condition (p = .010). All other p's > .150). Therefore, all subsequent analyses controlled for the experience-item as covariate.

#### Separation-Hypothesis

The analysis revealed that Goal-Relation significantly affected intentions to separate from the group, F(2,58) = 9.40, p < .001,  $\eta_P^2 = .26$ . Figure 1 displays means and standard de-

viations. In line with expectations, whereas means between the I<G and I=G condition did not differ (p > .800), the I>G condition differed significantly from the I=G condition (p < .001).



*Figure 1.* Mean levels of reported intentions to separate from the group as a function of Goal-Relations.

#### Affective-Rejection-Hypothesis

The analysis revealed that Goal-Relation significantly affected participants' reported levels of affective rejection, F(2,59) = 5.28, p = .008,  $\eta_P^2 = .16$ . Participants in the I>G condition rejected the ingroup more based on affect (M = 3.47, SD = 1.44) than participants in the I<G condition (M = 2.98, SD = 1.01) and in the I=G condition (M = 2.27, SD = 1.08). In line with expectations, means between the I<G and I=G condition did not differ (p > .100), but means between the I>G and I=G condition differed significantly (p = .006).

Mediation analyses were performed to test the prediction that affective rejection of the ingroup mediates the effect of Goal-Relation on reported intentions to separate from the group. The procedure followed Baron and Kenny (1986). A contrast was computed that reflected the above findings that I<G and I=G elicit the same effects on separation-intentions, and that the I>G relation elicited the strongest effects. Consequently, I=G and I<G were coded 1 each, and I>G was coded -2. Figure 2 depicts the standardized regression coefficients for the associations between Goal-Relation and reported intentions to separate from the group. The bootstrap confidence interval indicated that the indirect effect of affective rejection was significant (-.382 to -.018), as its confidence interval did not include zero. This provides evidence for a partial mediation of the effects of Goal-Relation on reported separation-intentions by levels of affective rejection.

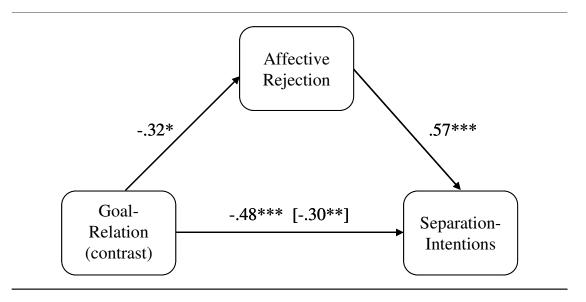


Figure 2. Mediation model of the association between Goal-Relation and separation-intentions mediated by affective rejection of the ingroup. The value in parentheses reflects the effect after mediation.

Note: \*\*\* p < .001, \*\* p < .01, \* p < .05.

#### Discussion

Study 1 aimed to demonstrate that experiences that individual goals are higher than group goals elicit intentions to exit the group in a task that emphasizes individual accomplishments. The manipulation of different relations between individual and group goals was

successful, but participants indicated that they have experienced a situation with lower individual than group goals less often compared to situations with higher or corresponding individual goals. However, participants did find all goal relations that were described as equally realistic. This indicates that although they might lack experience with a certain goal relation, participants could well imagine each of the situations described.

Consistent with expectations, participants whose individual goal was higher than the group's goal reported the strongest exit-intentions. The rationale behind this expectation was that higher individual goals than group goals are related to the perception that group membership cannot fulfil individuals' current achievement needs. Participants with corresponding goals or with lower individual than group goals did not differ regarding the exit-intentions they reported. Being a less capable member of a group can be aligned with the general striving to make upward social comparisons (Festinger, 1954; Weber & Hertel, 2007), this provides the rationale for the lesser exit-intentions of individual's with lower goals than those attributed to the group. Moreover, in the context of an imagined learning group, less capable group members may not have expected to be sanctioned by other (more capable) group members. Thus, for participants with lower, as opposed to higher, individual than group goals, group membership still constitutes a resource for the fulfilment of individual achievement needs. Put differently, when individual goals are lower than group goals, group members can "grow" with the group. Conversely, when individual goals are higher than group goals, group members have "outgrown" the group.

It was further hypothesized that affective rejection of the group would mediate the effect of goal-relation on exit-intentions. When higher individual goals indicate that group membership does not meet individual achievement needs, group members need to detach from the group before they join a new group (Ethier & Deaux, 1994). This process of detaching from ones group was expected to be reflected in high levels of affective rejection of the group. In line with expectations, levels of affective rejection of the group were higher among participants with higher, as opposed to lower or corresponding, individual goals than group goals. Importantly, levels of affective rejection mediated the effect of the relationship between individual and group goals on exit-intentions. Study 1 does not, however, give insight to the proposition that exit-intentions and affective rejection of the ingroup are indeed based on the perception that group membership does not meet individual achievement needs any more. Need fulfilment must be measured explicitly to test the assumption that perceived fulfilment

of individual achievement needs is impaired through having higher individual than group goals. Study 2 addresses this issue. Further, Study 2 aims to increase the ecological validity of the scenario paradigm by including members of natural learning groups in the study.

#### 3.2 Study 2

Study 2 was conducted with members of seminar-groups of students of medicine at the University of Jena. Students of medicine are put into these seminar groups from the first day of their study programme and stay together in these groups of 20 to 25 members for at least two and a half years (until the fifth semester). One important task of these groups is to prepare together for the high number of quite demanding exams. The context in which the goaldivergence scenario was embedded was thus meaningful and relevant for participants. The questionnaire was distributed among students in the third semester. These students looked back on more than one year of experience as a member of their seminar-group, and anticipated at least one more year of membership. The first aim of Study 2 was to assess need fulfilment through group membership explicitly. Therefore, need fulfilment regarding the three fundamental human needs discussed above was assessed before and after the manipulation of goal-divergence. Although one would expect that the achievement context made salient via the scenario would mainly affect achievement needs (DeShon & Gillespie, 2005), it cannot be ruled out that also other needs (affiliation, identity/esteem) are affected by the manipulation. Research demonstrates that specific groups are associated with a set of motivational needs (Aharpour & Brown, 2002; Deaux et al., 1999). Thus, the seminar groups under investigation can be characterized through any combination of the three needs that were measured. The groups' need profile might emphasize one of the three needs alone, but also a combination of achievement and affiliation needs, achievement and esteem needs, affiliation and esteem needs, or all three needs simultaneously.

A second aim was to examine the role of identification as an antecedent or consequence of experimentally induced experiences of discrepancy between the desired and the current state. Research indicates that identification can equally plausibly be assumed to be a determinant and a consequence of perceived need fulfilment through group membership (e.g., Aharpour & Brown, 2002; Packer, 2008; Sani, 2005). Therefore, Study 2 aimed to explore whether identification is a consequence of goal-divergence. Because goal-divergence was manipulated, identification could not reasonably be an antecedent. However, initial identification might buffer against the effects of having higher individual goals than the group on separation-intentions.

A third aim of Study 2 was to get a more complete picture of the relations that can exist between individual and group goals. Therefore, with all else being equal, a fourth condition

was included with equally *low* individual and group goals. Intuitively, one would expect that this is an aversive condition: Imagine yourself having no ambition other than to pass the exam in a group of people who also have no ambition other than to pass the exam. This is usually not quite the picture people want to have about themselves and their social groups. However, such a condition is relevant for two reasons: Firstly, it enables a critical test of whether it really is just fit between individual and group goals that makes membership rewarding with regard to need fulfilment, or whether "ambitious fit" is required. Secondly, a condition in which less capable members are part of a group of other less capable members helps to disentangle different explanations for less capable group members' motivation to remain a member of the group. If all group members' goals converge at a low level of ambition, free-rider effects and basking in reflected glory are unlikely to affect decisions to stay in the group among participants with lower individual than group goals. Thus, participants decision to stay in the group in this condition can be assumed to go back (at least in great parts) to the perception that group membership provides the possibility to fulfil individual achievement needs.

The following hypotheses were therefore tested in Study 2: It was expected that participants in the condition with higher individual than group goals perceive group membership as fulfilling achievement needs to a lesser extent than participants in the other goal-conditions (Hypothesis 1: Need-Hypothesis). Participants in the condition with higher individual than group goals were expected to report stronger separation-intentions than participants in the other goal-conditions. Measures of separation-intentions were completed through a measure of participants' willingness to reengage with other groups (Hypothesis 2: Separation-Hypothesis). It was expected that higher individual than group goals are associated with the perception that group membership does not serve the fulfilment of current achievement needs any more, and that this perception triggers affective rejection of the ingroup. Thus, a three-path mediation model (Taylor, MacKinnon, & Tein, 2008) was expected to fit the data well (Hypothesis 3: Affective-Rejection-Hypothesis). The role of identification as a consequence of goal-divergence was approached in an explorative way. The condition with corresponding low goals was expected not to differ from the condition with corresponding high goals (Hypothesis 4: Fit-Hypothesis).

#### Method

#### Participants and Design

Sixty-eight students of medicine of the University of Jena took part in the study (52 female, 16 male;  $M_{age} = 20.96$ , SD = 2.19; range 19 to 31). Participants were randomly assigned to the conditions of a one-factorial between-subjects design with four conditions (Goal Relation: Individual goal > Group goal, Individual Goal < Group Goal, High Individual Goal = High Group Goal Low Individual Goal = Low Group Goal; hereafter referred to as I>G, I<G, I<sub>H</sub> = G<sub>H</sub>, and I<sub>L</sub> = G<sub>L</sub>).

#### Procedure and Dependent measures

An overview over the dependent measures, the number of items and reliabilities of the respective scales is provided in Table 1. Please see the Appendix for a detailed description of the items used in Study 2. Participants first responded to a questionnaire assessing the extent to which they perceived membership in their seminar group to fulfil needs related to achievement, affiliation, and identity.<sup>2</sup> Afterwards, they responded to items that assessed initial levels of identification and affective rejection of their ingroup.<sup>3</sup> In the second part of the questionnaire, Goal-Relations were manipulated with regard to achievement needs, using the same scenario as in Study 1. After the manipulation participants again responded to the questionnaire assessing needs, identification, and affective rejection of the ingroup. Afterwards, separation-intentions were assessed using the same items as in Study 1. Additionally, three items were included that measured participants' willingness to reengage with other groups (e.g., "I tell myself that I have a number of other groups that I can get involved with"). The different facets of intentions to separate from the ingroup and to reengage with other groups were averaged to form a single scale. Finally, participants responded to the same items measuring the

<sup>&</sup>lt;sup>2</sup> A principal components factor analysis with Oblimin rotation revealed that achievement, affiliation and identity represent distinct needs. A three-factor solution (explained variance: T1 = 81.36%; T2 = 83.28%) was retrieved. Factor 1 (Eigenvalue: T1 = 7.01; T2 = 6.59) accounted for 50.08% (T2: 47.10%) of the explained variance, with the affiliation items loading from .81 (T2: .86) to .92 (T2: .96). Factor 2 (Eigenvalue: T1 = 2.56; T2 = 3.00) accounted for 18.30% (T2: 21.43%) of the explained variance, with the achievement items loading from .73 (T2: .85) to .94 (T2: .92). Factor 3 (Eigenvalue: T1 = 1.82; T2 = 2.07) accounted for 12.98% (T2: 14.76%) of the explained variance, with the identity items loading from .83 (T2: .86) to .95 (T2: .96).

<sup>&</sup>lt;sup>3</sup> A principal components factor analysis with Oblimin rotation revealed that affective rejection and identification are distinct constructs. A two-factor solution (explained variance: T1 = 74.78%; T2 = 71.45%) was retrieved. Factor 1 (Eigenvalue: T1 = 11.01; T2 = 10.91) accounted for 64.76% (T2: 64.16%) of the variance explained, with the identification items loading from .66 (T2: .61) to .87 (T2: .89). Factor 2 (Eigenvalue: T1 = 1.70; T2 = 1.24) accounted for 10.02% (T2: 7.29%) of the variance explained, with the affective rejection items loading from .70 (T2: .74) to .86 (T2: .87). However, the two-factor solution might also be a valence-effect.

impact of the manipulation and perceived realism of the situation described in Study 1. The items were averaged to form scales. All items were assessed using Likert-scales that ranged from I = not at all to 7 = completely. All scales were sufficiently reliable (see Table 1).

Table 1. *Reliabilities for scales used in Study 2 (N* = 68).

		Time 1	Time 2
Scale	Number of items	Cronbach's Alpha	Cronbach's Alpha
Achievement	5	.91	.93
Affiliation	5	.94	.94
Identity	4	.93	.95
Identification	10	.96	.95
Affective Rejection	6	.92	.96
Separation Intentions	15		.89
Manipulation Check	2		.73
Reality Check	2		.71

#### Results

Unless otherwise indicated, all analyses reported below were analyses of variance with goal-relation as a between-subject factor.

#### Manipulation Check

The analysis revealed the expected main effect of Goal-Relation on the scale, F(3, 64) = 8.81, p < .001,  $\eta_P^2 = .29$ . Table 2 provides an overview over means and standard deviations. Participants in the I>G condition correctly indicated that their individual goal was higher than the group goal to a greater extent than participants in the other conditions. One exception was the  $I_L = G_L$  condition, in which participants reported to have a higher individual than group goal to the same extent as in the I>G condition. This finding probably indicates that participants were somewhat reluctant to agree with the experimentally induced situation that they aimed for low goals.

#### Reality Check

The analysis revealed no impact of Goal-Relation on perceived realism of the situation and reported own experience with the situation, both F's < 1.00, p's > .400,  $\eta_P^2$  < .04. This indicates that participants perceived the described situation as equally realistic in all condi-

tions and have had experiences with each of the described relations between individual and group goals. Means and standard deviations are displayed in Table 2.

Table 2. Means and standard deviations for the manipulation- and reality check in Study 2 (N = 68).

	Goal-Relation								
	I>G		I	<g< th=""><th>I<sub>H</sub> =</th><th>= G<sub>H</sub></th><th colspan="3"><math>I_L = G_L</math></th></g<>	I <sub>H</sub> =	= G <sub>H</sub>	$I_L = G_L$		
	М	SD	М	SD	M	SD	M	SD	
Manipulation Check	5.21 <sup>a</sup>	1.41	3.18 <sup>b</sup>	1.61	3.88 <sup>bc</sup>	1.01	4.91 <sup>ac</sup>	1.08	
Reality Check									
Perceived realism	3.65 <sup>a</sup>	1.87	4.53 <sup>a</sup>	1.88	4.18 <sup>a</sup>	1.85	4.12 <sup>a</sup>	2.03	
Own experience	$2.82^{a}$	2.19	3.65 <sup>a</sup>	2.23	$3.94^{a}$	2.41	3.76 <sup>a</sup>	2.11	

Note. Different signs per column indicate significant differences according to Tukey posthoc tests (p < .05).

## Group Need Profile

To examine which need(s) were meaningful to characterize the profile of the seminar-groups investigated in Study 2, mean levels of participants reported fulfilment of the three needs at time 1 (prior to the manipulation) were examined. At time 1, participants reported that membership in the seminar groups served to fulfil the need for affiliation to a somewhat greater extent (M = 4.96, SD = 1.51) than the need for achievement (M = 4.69, SD = 1.17) and the need for identity (M = 4.48, SD = 1.36). This finding indicates that membership in the groups was perceived as serving affiliation and achievement needs more than needs for identity. Consequently, the manipulation of Goal-Relation might affect evaluations of fulfilment of achievement needs and affiliation needs through group membership.

## Need-Hypothesis

In order to analyse the impact of Goal-Relation on evaluations of need fulfilment through group membership, regression analyses were performed for each of the three needs. Two contrasts were computed. Contrast 1 tested the I<G condition against the two conditions with corresponding goals; Contrast 2 tested the I>G condition against the two conditions with corresponding goals. The analyses controlled for reported need fulfilment prior to the manipulation.

A regression model with Goal-Relation (contrast 1 and contrast 2) as independent variables and achievement needs as dependent variable explained a significant amount of variance, F(3, 66) = 7.25, p < .001, adjusted  $R^2 = .22$ . The analysis revealed a main effect of Contrast 2, but not of Contrast 1, on perceived fulfilment of achievement needs through group membership, ( $\beta = .48$ , p < .001 and  $\beta = .03$ , p > .800, respectively). Thus, participants in the I<G condition evaluated group membership as serving the fulfilment of achievement needs to the same extent as participants in the two conditions with corresponding goals. By contrast, participants in the I>G condition evaluated group membership as serving the fulfilment of achievement needs to a significantly lesser extent than participants in the two conditions with corresponding goals. Perceived fulfilment of achievement needs prior to the manipulation did not affect perceived fulfilment of achievement needs after the manipulation ( $\beta = .13$ , p > .200).

A regression model with Goal-Relation (contrast 1 and contrast 2) as independent variables and affiliation needs as dependent variable explained a significant amount of variance, F(3, 66) = 13.13, p < .001, adjusted  $R^2 = .36$ . The analysis revealed a main effect of Contrast 1 and of Contrast 2 on perceived fulfilment of affiliation needs through group membership, ( $\beta = .32$ , p = .004 and  $\beta = .29$ , p = .008, respectively). Thus, both participants in the I<G condition and in the I>G condition perceived group membership as serving the fulfilment of affiliation needs to a significantly lesser extent than participants in the two conditions with corresponding goals. Perceived fulfilment of affiliation needs prior to the manipulation had an impact on perceived fulfilment of affiliation needs after the manipulation ( $\beta = .39$ , p < .001).

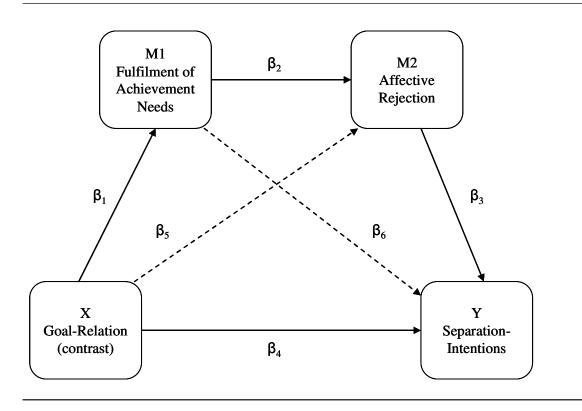
A regression model with Goal-Relation (contrast 1 and contrast 2) as independent variables and identity needs as dependent variable did not explain a significant amount of variance, F(3, 65) = 1.88, p > .120, adjusted  $R^2 = .04$ . Perceived fulfilment of identity needs through group membership was affected only by initial perceived fulfilment of identity needs ( $\beta = .27$ , p = .031), but not by Contrast 1 or Contrast 2 ( $\beta = .11$ , p > .400 and  $\beta = .03$ , p > .800, respectively). To conclude, the findings support the hypothesis that higher individual than group goals are associated with poorer evaluations of group membership regarding its potential to meet individuals' achievement needs (*Hypothesis 1*). Findings further show that both directions of goal-divergence were associated with poorer evaluations of group membership regarding its potential to meet individuals' affiliation needs. This finding will be dealt with in more detail in the discussion.

# Separation-Hypothesis

A regression analysis was performed with the two Contrasts as independent variables and separation-intentions as the dependent variable. The regression model explained a marginal amount of variance, F(2, 65) = 2.91, p = .062, adjusted  $R^2 = .06$ . The analysis revealed a main effect of Contrast 2, but not of Contrast 1, on reported intentions to separate from the ingroup, ( $\beta = -.30$ , p = .022 and  $\beta = .03$ , p > .700, respectively). Thus, regarding their intentions to leave the group, participants in the I<G condition were not different from participants in the two conditions with corresponding goals. By contrast, participants in the I>G condition were willing to separate from the group significantly more than participants in the two conditions with corresponding goals. This finding supports the hypothesis that participants who have higher, as opposed to lower, individual goals than the group report more separation-intentions than participants whose individual goals correspond with the group's goals (*Hypothesis 2*).

Affective-Rejection-Hypothesis – Three-Path Mediation Analysis

To test Hypothesis 3, a three-path mediation analysis (Taylor et al., 2008) was performed. The results reported above provide evidence that the I<G condition can be collapsed with the two conditions with corresponding goals. Therefore, the three-path mediation was performed with a Contrast that took on values of 1 (I<G), 1 (I<sub>H</sub> = G<sub>H</sub>), 1 (I<sub>L</sub> = G<sub>L</sub>), and -3 (I>G). Figure 3 depicts the mediation chain that was tested. The effect of Goal-Relation (X) on Separation-Intentions (Y) was expected to be mediated by perceptions that group membership serves the fulfilment of a specific need (M1) and by affective rejection of the group (M2). The dashed lines show relationships that are controlled for in the three-path model of mediation. The effect of Goal-Relation on reported separation-intentions ( $\beta_4$ ) was expected to be mediated through the associations represented by paths  $\beta_5$  and  $\beta_6$ .



*Figure 3*. Abstract illustration of a three-path mediation model (adapted from Taylor et al., 2008).

The model was estimated according to the suggestions of Taylor and his colleagues (Taylor et al., 2008). Three regression equations were estimated: The impact of the independent variable on the first mediator was estimated through  $M_1 = \beta_{01} + \beta_1 X + \epsilon_1$  (1). The impact of the first mediator and the independent variable on the second mediator was estimated through  $M_2 = \beta_{02} + \beta_2 M_1 + \beta_5 X + \epsilon_2$  (2). Finally, the impact of the independent variable controlling for both mediators was estimated through  $Y = \beta_{03} + \beta_4 X + \beta_3 M_2 + \beta_6 M_1 + \epsilon_3$  (3). Figure 4 shows the resulting paths. The mediation effect can be tested using the joint significance test (Taylor et al., 2008; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). The joint significance test offers good control of Type I errors and has good power (MacKinnon et al., 2002). For three-path mediation to be established, the test requires that each of the three paths in the mediated effect differs significantly from zero (Taylor et al., 2008). These paths are

represented by  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  in Figure 4.<sup>4</sup> Different from the position of Baron and Kenny (1998), the joint significance test does not require that path  $\beta_4$  is significant.<sup>5</sup>

The analysis revealed that Goal-Relation was positively associated with the perception that group membership serves the fulfilment of individual achievement needs (path 1,  $\beta$  = .43, p < .001). Thus, when individual goals were lower than or corresponding to group goals, group membership was perceived as serving the fulfilment of individual achievement needs more than when individual goals were higher than group goals. The analyses further revealed, in line with expectations, a significant impact of perceived need fulfilment through group membership on levels of affective rejection of the group (path 2,  $\beta = -.28$ , p = .034). Finally, separation-intentions were regressed on Goal-Relation, affective rejection of the ingroup, and on perceived fulfilment of achievement needs through group membership. The impact of affective rejection of the ingroup was significant (path 3,  $\beta = .44$ , p = .001), indicating that the more participants affectively rejected the ingroup, the stronger were their intentions to separate from the group. Results of the joint significance test (Taylor et al., 2008) indicate that for achievement-related functionality, path 1 was significant,  $t_{.999}(65) = 3.83$ , p < .001, path 2 was significant,  $t_{.975}(62) = -2.18$ , p < .05, and path 3 was significant,  $t_{.999}(60) = -3.65$ , p < .001. The bootstrap confidence interval indicated the indirect effect of perceived fulfilment of achievement needs and affective rejection was significant (-.178 to -.002), as its confidence interval did not include zero. This provides evidence for evaluations of group membership as serving the fulfilment of achievement needs and affective rejection as mediators between Goal-Relations and reported separation-intentions.

Summing up, the above results support Hypothesis 3. When individual goals are higher than group goals (as opposed to being lower than or equal to group goals), participants group membership is perceived as not fulfilling the need for achievement any more, which is related to increased levels of affective rejection of the ingroup, which ultimately elicits stronger intentions to separate from the group.

<sup>&</sup>lt;sup>4</sup> Specifically, at a test-level of  $\alpha$  = .05, the null hypothesis can be rejected if (b<sub>1</sub>)/SE<sub>b1</sub> > t<sub>.975(n-2)</sub> and (b<sub>2</sub>)/SE<sub>b2</sub> > t<sub>.975(n-3)</sub> and (b<sub>3</sub>)/SE<sub>b3</sub> > t<sub>.975(n-4)</sub>, where t<sub>.975(df)</sub> is the critical t-value for a two-tailed test given the df (cf. Taylor et al., 2008; see also MacKinnon et al., 2002).

<sup>&</sup>lt;sup>5</sup> The direct effect of the independent on the dependent variable needs not to be established to show mediation. For example, if the mediated and the direct effects have opposite signs, the total effect might be near zero, although the mediated effect is significantly non-zero (Taylor et al., 2008).

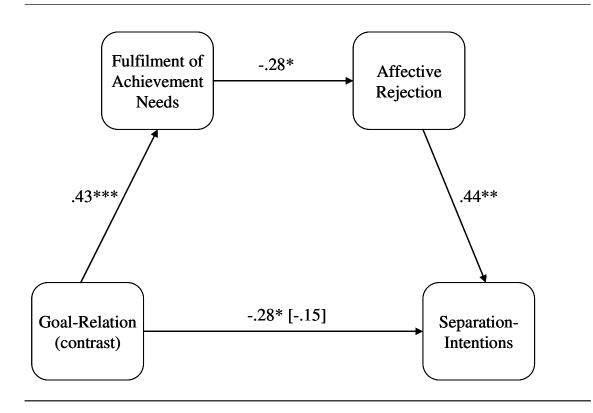


Figure 4. Mediation model of the association between Goal-Relation and separation-intentions mediated by perceived fulfilment of achievement needs through group membership and affective rejection of the ingroup for Study 2 (N = 68). The value in parentheses reflects the effect after mediation.

Note: \*\*\* p < .001, \*\* p < .01, \* p < .05.

## Explorative Analysis of Identification

Initial levels of identification were high (M = 5.18, SD = 1.41) and significantly above the midpoint of the scale, t(66) = 9.71, p < .001. To examine whether identification with the seminar-group was affected by the experimental manipulation of Goal-Relations, a regression analysis was performed with Contrast 1 and Contrast 2 as independent variables, identification prior to the manipulation as the covariate, and identification after the manipulation as the dependent variable. The regression model explained a significant amount of variance, F(3, 66) = 10.40, p < .001, adjusted  $R^2 = .30$ . Identification at time 2 was significantly higher when goals corresponded compared to when individual goals were lower than and when individual goals were higher than group goals ( $\beta = .23$ , p = .014 and  $\beta = .31$ , p = .004 for Contrast 1 and

Contrast 2, respectively). In addition, initial identification with the group affected identification after the manipulation ( $\beta$  = .40, p < .001). Transforming the t-values for Contrast 1 and 2 into effect sizes r revealed that the effect of Contrast 2 on identification at time 2 was marginally larger than the effect of Contrast 1, z = 1.42, p = .078 (one-tailed). Thus, identification clearly was affected by goal-divergence. By trend it was affected more when individual goals were higher opposed to lower than group goals.

To explore the question whether initial levels of identification buffered against the effects of higher individual than group goals, separate regression analyses were performed using the same contrast as for testing the mediation chain (Hypothesis 3), as well as initial identification and the resulting two-way interaction as independent variables and separation-intentions, achievement needs, affiliation needs, and affective rejection of the group as the dependent variables. In the latter three analyses, initial levels of the dependent variables were controlled for. The regression models were significant, all F's > 2.90, all p's < .05, all adjusted  $R^2$ 's > .08. Initial identification did not affect any of the dependent variables (all p's < .25, all p's > .100). The same result was revealed for the interaction term (all p's < .06, all p's > .300). The effect of the contrast was evident in every analysis (all p's > .25, all p's < .05). This finding indicates that initial levels of identification did not buffer against the effect of higher individual than group goals.

## Fit-Hypothesis

Inspection of mean differences between  $I_H = G_H$  and  $I_L = G_L$  revealed that the condition elicited the same responses regarding affective rejection of the group, separation intentions, and perceived fulfilment of affiliation needs (all p's > .150). The conditions differed significantly in the perceived fulfilment of achievement needs (p > .001), with participants in the  $I_H = G_H$  condition scoring higher (M = 5.51, SD = 1.11) than participants in the  $I_L = G_L$  condition (M = 3.89, SD = 1.08). This latter difference is not surprising and can be interpreted as a further manipulation check. In line with expectations, these findings indicate that the conditions with corresponding goals did not elicit different responses among participants.

#### Discussion

Study 2 applied the same scenario procedure as Study 1 with members of natural groups with members of natural groups, thereby increasing the ecological validity of the scenario approach. Checks for perceived realism and own experiences suggest that participants

indeed have experienced each of the four relations between individual and group goals during their membership in the seminar-groups under investigation. The manipulation was successful. However, manipulation checks also indicate that the condition where participants had to imagine both their individual and the group's goals to be low was not consistent with the way they wanted to look at themselves. Participants in this condition indicated that their individual goal was higher than the group goal to the same extent as participants in the condition where individual goals were said to be higher than the group's goals. Thus, in the I<sub>L</sub>=G<sub>L</sub> condition participants seemed to be reluctant to think of themselves as less ambitious members in a less ambitious task group. Nevertheless, analyses revealed that consistent with expectations, both correspondence conditions elicited largely the same effects. This suggests that fit between individual and group goals suffices to perceive group membership as serving the fulfilment of individual needs; "ambitious fit" is not required. The lower willingness to separate from the group among participants in the condition with low corresponding goals seems to go back on the perception that group membership provides the possibility to fulfil individual achievement. Alternative explanations might account for the finding, but are unlikely. Free-rider effects and basking in reflected glory are not a logical option when both the individual and the group converge at a goal level that is characterized by low ambition.

Study 2 explicitly tested the assumption that perceived need fulfilment through group membership is impaired if individual goals are higher than group goals. The findings support this assumption: Participants' perception of the group meeting their individual achievement need was significantly impaired when individual goals were higher than group goals. This perception was associated with affective rejection of the group, which ultimately led to intentions to separate from the group. Consistent with the results of Study 1, higher individual than group goals were the critical condition when the task emphasized individual accomplishments. Study 2 extends the findings of Study 1 by showing that exit-intentions arise from a lower perceived potential of the group to meet individuals' achievement needs. The strategy adopted to ensure that individual achievement needs are being fulfilled was the reported intention to separate from the group. A precedent of such intentions is the emotional detachment from the present group that was evident in higher levels of affective rejection of the group among participants with higher individual than group goals.

Several other findings of Study 2 are noteworthy. First, the natural groups under investigation were characterized by a need profile that contained both achievement and affiliation

needs. This finding replicates prior research that demonstrated that groups are signified by sets of needs or identity functions (Aharpour & Brown, 2002; Deaux et al., 1999). Divergent individual and group goals were generally related to a decrease in the perceived potential of the group to fulfil individual affiliation needs. However, the perceived potential of the group to fulfil individual achievement needs was evident only in the condition with higher, as opposed to lower individual than group goals. This finding raises a number of questions. For instance, what caused the effect on affiliation needs? One explanation might be that experiences of divergent goals makes salient how one is different from the group. Group members who experience themselves as different from the group might question whether, and how, they fit into the group irrespective of the direction in which they differ. Such concerns might have elicited the decrease in perceived fulfilment of affiliation needs through group membership. Due to the post-hoc nature of this explanation, future research should systematically investigate the impact of perceived misfit between the individual and the group on perceived need fulfilment using different types of groups and different types of needs. Further, one might speculate about the general relation between a group's need profile and the effects of goal-divergence. The findings of Study 2 indicate that divergence affected perceived need fulfilment only with regard to those needs that signified the group's profile, namely achievement and affiliation. However, future research should examine the effects of goal-divergence on needs that are relevant vs. irrelevant for a groups' need profiles systematically.

The study further revealed that identification was negatively affected by experiences of goal-divergence. This effect was evident for both directions of goal-divergence. Similar to the explanation offered for the perceived decreased potential of the group to meet individual affiliation needs, it might be that rumination about how one fits into the group leads to decreases of identification. An interesting question that arises from the observed effects of goals-divergence on affiliation needs and identification is how long this effect lasts? The answer to this question is especially meaningful with regard to those group members who have lower individual than group goals, because they are the individuals who are likely to remain in the group. Let us assume that group members with higher individual goals translate their exit-intentions into behaviour. The group actually benefits from an exit of individuals who are cognitively and emotionally detached from the group and thus might be an obstacle for group functioning. But those who have lower individual goals are also cognitively detached from the group, and also perceive the group's potential to meet their affiliation needs as low. In con-

trast to those individuals with higher individual goals, these group members stay in the group. They might thus well have a negative impact on group functioning over time. Therefore, future research should follow up the development of perceived need fulfilment through group membership and levels of identification after goal-divergence was experienced. The results of Study 2 suggest that initial levels of identification did not affect the relation between goal-relations and separation-intentions, perceived need fulfilment, and affective rejection of the group. This is plausible given that members with higher individual goals have to detach from the group to join other groups. However, it might well be that identification exerts buffering effects in the long-term. The experience of goal-divergence might have been too salient and fresh to allow for the detection of an impact of initial levels of identification.

Studies 1 and 2 contribute to our understanding of individuals' regulation of need fulfilment in task groups in a number of ways. The studies focused on one strategy that individuals can adopt, namely on exit. Findings clearly show that the direction of goal-divergence needs to be taken into account, if one wants to predict individuals' intentions to exit a task group. Group members who have lower individual goals than the group (i.e., less capable members) seem to be rather resilient to the misfit between themselves and the group. This finding is consistent with research on social comparison processes (Festinger, 1954; Weber & Hertel, 2007), which argues that the default in social comparison processes are upward comparisons, such that people generally strive to improve their current performance level. For less capable group members the orientation towards higher standards (as provided through the group goal) can easily be accomplished within the group. By contrast, for more capable group members the orientation towards higher standards is not provided through the group goal, because this standard is below their individual standard. Therefore, to improve their current performance level and ensure that their individual achievement needs are fulfilled through group membership, more capable group members have to exit the group and search for another group. However, utilizing this strategy is likely to be constrained by the task under consideration: The learning group scenario used in the first two studies adopted a task that emphasized individual accomplishments rather than responsibilities toward the group. If tasks emphasize responsibilities toward other group members, more capable group members might be more willing to stay in the group, whereas less capable group members might be more willing to exit the group (Faddegon et al., 2009; Miller & Komorita, 1995). Further, the scenario approach is limited because the merely imagined situation does not engender potential

social pressures on the less capable members. Finally, because participants in both studies responded to assigned individual goals, it is difficult to judge to what extent these goals were accepted by participants.

To address these limitations, Study 3 comprises a task that emphasized responsibility toward the group outcome and was conducted in the field. Study 3 was suited to descriptively examine the strategy of goal negotiation. A soccer team was accompanied throughout a complete soccer season, starting with the negotiation of the group goal before the season started, and going on with the adjustment of individual or group goals in order to reach correspondence again. As outlined before, people usually try to make sure that they fit into the groups they join. However, due to changes of the individual's needs over time or due to changes in the group's development, misfit might be induced (Correll & Park, 2005; Moreland & Levine, 2002). In these cases, group members can either try to re-install fit again, or they can opt for exiting the group. These two strategies were investigated in Study 3. Finally, the assumption was tested that the task's emphasis on responsibility for the group outcome and fellow group members should be associated with a greater willingness to exit the group among the less capable group members. The more capable group members, on the other hand, were expected to be more willing to stay in the group (Zdaniuk & Levine, 2001).

# 3.3 Study 3

Study 3 was conducted with a natural interactive group, namely a soccer team. A questionnaire was distributed in a training camp shortly before the beginning of the soccer season. This pre-study served to descriptively examine negotiation of the group goal. Correlational data of this event will be provided first. In the main study, the strategies of goal adjustment and exit were examined. Thus, the analyses are reported in an order that reflects the phases of group socialization (Moreland & Levine, 2002): First, goals are negotiated, then in the phases of entry and maintenance, goals are adjusted, and finally, if goal adjustment fails, group members think about exiting the group.

# 3.3.1 Pre-Study: Goal Negotiation

#### Method

## Participants and Design

A women's soccer team was accompanied throughout a complete soccer season (August, 2005 to June, 2006). The team was part of a University's sport society, but the players were not exclusively students. The complete team (N = 16) responded to the questionnaire ( $M_{age} = 21.56$ ,  $SD_{age} = 5.48$ ; range from 16 to 38). On average, the forthcoming season was the fifth active season for players (M = 5.25, SD = 4.80; range from 1 to 20). The main goal for the forthcoming soccer season was to be promoted to the first federal league (goal 1). All items referred to this goal. During a training camp which took place shortly before the soccer season started, a questionnaire was distributed that assessed features of the negotiation process, specifically whether players perceived the goal as having been assigned by the coach, by expectations of the public, self-set by the players, or set together by the coach and the players participative. Additionally, three items assessed levels of identification ( $\alpha = .73$ ), and three items assessed commitment to the goal ( $\alpha = .72$ ). Perceived goal difficulty, group efficacy, and importance of being a member of the team in the future were assessed with one item measures (see Appendix for a detailed description of the items used). All items were measured with 7-point Likert-scales.

The data were analysed descriptively. Table 3 provides an overview over means and standard deviations of the items and scales assessed. With regard to the goal negotiation process, the average agreement with the goal having been assigned by the coach and being participative was significantly above the scales midpoint, t(15) = 3.25, p = .005 and t(15) = 2.63, p = .005

.019, respectively. Average agreement with the other variables was significantly above the scales midpoint (3.5), all t's(15) > 7.00, all p's < .001. Regarding perceived difficulty of the goal, 11 players rated the goal to be "just right", and 5 players rated the goal as being slightly too high.

Table 3. Means and standard deviations of the variables assessed before the season's beginning in Study 3 (N = 16).

	Mean (SD)
Goal Negotiation Items	
Goal assigned by Coach	4.94 (1.77)
Goal assigned by expectations of Public	3.56 (1.79)
Goal Self-Set by Players	4.44 (2.13)
Goal Set Participative by Coach and Players	5.06 (2.38)
Group Items	
Group Efficacy	5.81 (0.83)
Identification	5.65 (0.91)
Stay Member in the Future	6.38 (0.96)
Goal Commitment	6.02 (0.88)

Correlational analyses were performed to explore the relationships between variables. First, the associations between the negotiation items were examined. Players seemed to distinguish quite clearly between the goal as having been assigned by the coach vs. having been set participatively, as indicated by a marginally significant negative correlation between the variables (r = -.47, p = .064). By contrast, perceptions that the goal has been self-set by the players correlated positively both with participative goal-setting (r = .72, p = .002) and with the perception that the goal has been affected by expectations of the public (r = .51, p = .044). No other associations between the goal negotiation items reached significance (all r's < .50, all p's > .100). Although these associations cannot be interpreted causally, they seem to indicate that the coach was clearly regarded as the group leader. The perception that the goal has

been assigned by her might be important for a group as cohesive as a soccer team. Of interest is how the goal negotiation items are associated with the other variables. Interestingly, the perception that the goal was assigned by the coach was positively associated with levels of identification (r = .59, p = .016) and marginally associated with reported importance of being a group member in the future (r = .45, p = .082). The only other marginally significant relation was evident between the perception that the goal was affected by expectations of the public and levels of identification (r = .47, p = .066). No other goal-negotiation item was associated with any other items (all r's < .41, all p's > .100).

#### *Interim summary*

These findings might suggest that highly identified, as opposed to low identified players and players for whom being a future member of the team was important were more receptive to and aware of expectations of the group leader and the public. This is consistent with the definition of social identification as "...processes by which the individual self is extended to include others as integral to the self-concept" (Brewer & Caporael, 2006, p. 159). This process of including others into the self involves the transformation of previously externally motivated goals into internally motivated goals (Moretti & Higgins, 1999). The observed associations between identification and goal assignment by the coach and the public are plausible, because for soccer players, both the group leader (i.e., the coach) and the public (i.e., the supporters and fans) are important. The findings are correlational, and they refer to a very specific group. Nevertheless, similar associations between identification and susceptibility to leader-assigned goals might emerge also in other groups that have clearly identifiable leaders.

## 3.3.2 Main Study: Goal Adjustment and Exit-Intentions

During the soccer season, participants indicated their individual goals and the goal they perceived the group to have after each match (22 times). This allowed calculating the divergence that naturally occurred between individual and group goals over time. Based upon the normative conflict model of dissent in groups as explicated by Packer (2008), identification was expected to moderate the relation between the absolute amount of goal-divergence experienced and the reported willingness to exit the group. Specifically, low identifiers were expected to be more susceptible to divergent goals, because divergence makes an alternate standard for behaviour salient. Based on the assumption that low identifiers care little for the group's welfare anyway, salience of an alternate standard (represented by the individual goal

as opposed to the perceived group goal) is expected to shift these group members from passive nonconformity to active nonconformity such as exiting the group (Packer, 2008). Soccer is a task that clearly emphasizes individuals' responsibilities for the group outcome. Research on group loyalty (Zdaniuk & Levine, 2001) therefore provided the background for the following prediction: Less capable members (i.e., who have lower individual goals than group goals) are more willing to leave the group compared to more capable group members (i.e., who have higher individual goals than group goals).

The hypotheses were tested in an order that reflects the sequences of the socialization process according to Moreland and Levine (2002). Therefore, the first hypothesis focused on goal adjustment and reflects the phases of entry and maintenance (Moreland & Levine, 2002). The second hypothesis focused on exit-intentions, reflecting the phase after adjustment of group goals and individual goals failed. The following hypotheses were tested: Experiences of goal-divergence were expected to trigger the strategy of goal-adjustment to re-install correspondence between individual and group goals (*Hypothesis 1: Goal-Adjustment-Hypothesis*). Usage of this strategy, however, was expected to be more pronounced among highly, relative to low, identified group members (*Hypothesis 1a: Identification-Hypothesis*). Goal-divergence was expected to be associated with intentions to exit the group, and this relation was expected to be evident among low identified group members only (*Hypothesis 2: Divergence-Hypothesis*). Because playing soccer is a task that emphasizes responsibility for the group outcome, lower individual goals than group goals were expected to be associated with stronger exit-intentions when compared to higher individual than group goals, or corresponding goals (*Hypothesis 3: Separation-Hypothesis*).

#### *Procedure and Dependent measures*

In the pre-study, players generated alternative goals they perceived as important for the forthcoming season. These were "To achieve the second place in the table" (goal 2), "To achieve the third place in the table" (goal 3), "To achieve the sixth place in the table" (goal 4), "To show good performance during the complete season" (goal 5) and "Not to perform worse than in last season" (goal 6). For the questionnaire that was distributed during the season (main study), the coach ordered the six goals into a scale that ranged from most ambitious (goal 1) to least ambitious (goal 6). Although the resulting scale is not interval scaled, it can be assumed to have sufficient face validity. Group performance was measured (success vs. tie

vs. failure) throughout the soccer season (22 time points). The questionnaire was distributed by the coach directly after each match.

Ingroup identification. Four items measured ingroup identification (e.g., "I feel strong ties with the members of my soccer team" from I = not at all to 7 = very much; adapted from Doosje et al., 1995). The items were averaged to form a scale ( $\alpha = .95$ ). Identification was measured at each of the 22 time points.

Individual and group goals. At each time point, participants were asked to indicate which goal they strived for individually and as a group member. The most ambitious goal that participants' agreed with at a given time point was chosen for the analysis. Consequently, participants' individual and group goals were indicated 22 times, and could vary from 1 to 6 at each time point.

Performance feedback. The result of each game served as a measure of performance feedback. The 22 games resulted in four failures, three ties and fifteen successes. The resulting variable took on values of 1 (success), 0 (tie), and -1 (failure). Performance feedback served as a control variable in the analysis of exit-intentions, to make sure players intended to leave the group due to experiences of discrepancies between individual and group goals, rather than due to experiences of group failure.

#### Analysis

The repeated measurement occasions were nested within persons. The advantage of such an approach is that the resulting model accounts for the dependency of the repeated measures taken from participants (for a similar procedure, see Gleibs, Mummendey, & Noack, 2008). Consequently, the unit of analysis was the number of observations. In the current sample, this was 16 (number of participants) times 22 (number of measurements). The resulting number of observations of 352 was reduced to 265, because not every player was present at each game (mainly due to injuries).

#### Results

## Identification

Ingroup identification ranged from 2.00 (minimum) to 7.00 (maximum) over time (M = 5.75, SD = 1.08). It was thus significantly above the midpoint of the scale, t(265) = 33.93, p < .001.

# Goal-Adjustment-Hypothesis

Divergent individual and group goals indicate a misfit between individual achievement needs and the group's potential to meet these needs. One strategy to cope with divergent individual and group goals is to adjust either the individual goal (assimilation) or the group goal (accommodation) so that correspondence between both is re-installed. For each direction of goal adjustment, a regression analysis was performed. In the first regression analysis, group goals were regressed on individual goals, ingroup identification, and the resulting interaction term. In the second regression analysis, individual goals were regressed on group goals, ingroup identification, and the resulting interaction term. Regressing individual goals on group goals, identification, and the resulting interaction term yielded a significant model, F(3,265) =3.11, p = .027,  $R^2 = .02$ . A main effect of identification was evident ( $\beta = .15$ , p = .012), indicating that high levels of identification were associated with more ambitious individual goals. Further, the interaction approached significance ( $\beta = -.11$ , p = .080). To provide more thorough insights into the strategies individuals use to regulate their need for achievement within task groups, however, the interaction will be interpreted although it is not significant (see Figure 5). The slopes show that levels of identification mattered most when group goals were perceived to be rather low. In this case, a trend was apparent that low identification was associated with the alignment of individual goals to the perceived group goals ( $\beta = .16$ , p = .146). By contrast, high identification was associated with high individual goals even when group goals were perceived as being rather low ( $\beta = -.14$ , p = .169). Thus, low levels of identification were associated with greater conformity, but this conformity resulted in less ambitious individual and group goals. Conversely, high levels of identification were associated with greater nonconformity, but this nonconformity resulted in more ambitious individual goals.

\_

<sup>&</sup>lt;sup>6</sup> Group goals and individual goals were highly correlated (r = .72, p < .001). To avoid the problem of multicollinearity in the regression analysis, residual scores were used as predictors. The residual score for individual goals was computed by regressing individual goals on group goals. Likewise, the residual score for group goals was computed by regressing group goals on individual goals (for a similar procedure, see Bizman & Yinon, 2002).

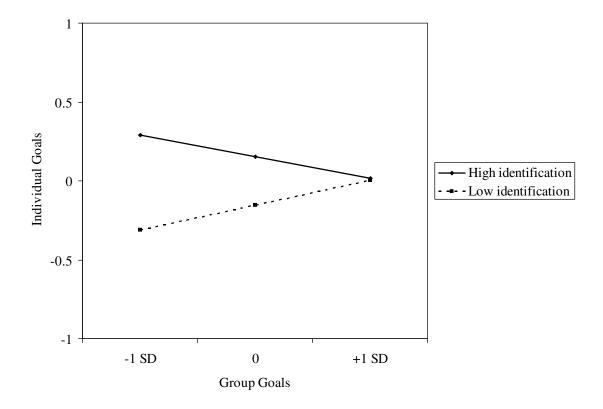


Figure 5. Simple slopes for the adjustment of individual goals to group goals as a function of different levels of identification.

Regressing group goals on individual goals, identification, and the resulting interaction term yielded a marginally significant model, F(3,265) = 2.51, p = .059,  $R^2 = .02$ . A marginal effect of identification was evident ( $\beta = .11$ , p = .078), indicating that high levels of identification were associated with more ambitious group goals. The interaction was significant ( $\beta = .13$ , p = .036). The interaction was dissolved into simple slopes (Figure 6). Again, levels of identification were relevant especially when individual goals were rather low. In this case, low identification was by trend associated with an adjustment of perceived group goals to the low individual goals ( $\beta = .16$ , p = .114). By contrast, high identification was by trend associated with high group goals even when individual goals were rather low ( $\beta = -.17$ , p = .081).

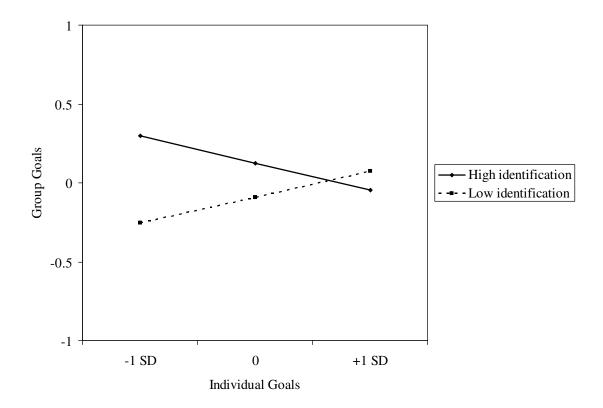


Figure 6. Simple slopes for the adjustment of group goals to individual goals as a function of different levels of identification.

To examine whether players preferred to adjust individual goals to group goals or vice versa, the t-values of the two interaction terms were transformed into effect sizes r. This procedure yielded r=.71 for adjustment of the individual goal to the group goal and r=.77 for adjustment of the group goal to the individual goal. The difference between effect sizes for the two directions of goal adjustment approached significance (z=-1.52, p=.064, one-tailed). This indicates that by trend, the strategy that players preferred to adopt was to adjust the group goal to their individual goal (accommodation) so that correspondence between individual and group goals was re-installed. This finding will be examined in more detail in the discussion. Overall, findings support the prediction that individual and group goals are adjusted to fit the respective other goal again (*Hypothesis 1*). However, this was the case only when individual or group goals were rather low. The expectation that high identification is associated with a more pronounced usage of goal adjustment (*Hypothesis 1a*) was not sup-

ported. In fact, low identification was associated with more pronounced goal adjustment, whereas high identification was associated with less pronounced goal adjustment.

# Divergence-Hypothesis

Individual goals were subtracted from group goals to create a variable for the absolute amount of goal-divergence. In order to examine the effects of absolute goal-divergence without information on the direction of goal-divergence, all resulting values were transformed to be positive. Increasing values thus indicate increasing goal-divergence. A regression analysis was performed to test whether low identification was associated with greater responsiveness to experienced divergences between individual and group goals. The independent variables were goal-divergence, identification, feedback and the resulting two-way interactions and the three-way interaction. The dependent variable was willingness to exit the group. The regression model was significant, F(7,265) = 43.80, p < .001,  $R^2 = .53$ . The expected two-way interaction of identification and goal-divergence was significant ( $\beta = -.15$ , p = .002), indicating that the relation between goal-divergence and exit-intentions was moderated by levels of identification. No other interaction terms reached significance (all  $\beta$ 's < .04, all p's > .400). Dissolving the interaction into simple slopes (Figure 7) revealed that goal-divergence did not affect exit-intentions when identification was high ( $\beta = -.06$ , p > .300). By contrast, increasing goal-divergence was associated with a significantly increased willingness to exit to group when identification was low ( $\beta = .34$ , p < .001). This finding supports the hypothesis that low, as opposed to high identification is associated with greater responsiveness to divergent goals (Hypothesis 2). High identification appeared to relate to less vulnerability by experienced discrepancies between individual and group goals with regard to exit-intentions.

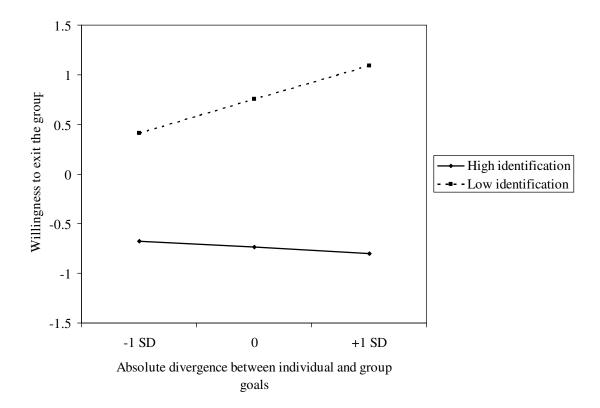


Figure 7. Simple slopes for the relation between absolute goal-divergence and exit-intentions as a function of different levels of identification.

## Separation-Hypothesis

To examine the prediction that a specific direction of goal-divergence is associated with greater willingness to leave the group, a variable was computed that took on values of 0 when individual and group goals corresponded (I=G), values of 1 when individual goals were lower (I<G), and values of -1 when individual goals were higher than the group goal (I>G). An interesting descriptive finding is that observations of the three goal-relations differed tremendously: Whereas 240 observations pertained to correspondence between individual and group goals, only 16 observations pertained to I<G, and 10 pertained to I>G. This distribution of observations indicates that experiences that individual and group goals were divergent were relatively scarce throughout the season. A regression analysis was performed with direction of goal-divergence, levels of identification and feedback as independent variables, and exitintentions as the dependent variable. All two-way interactions and the three-way interaction were included. The regression model was significant, F(7,265) = 42.33, P < .001,  $R^2 = .52$ .

The two-way interaction of identification and direction of goal-divergence approached significance ( $\beta$  = .08, p = .091). No other interaction terms were significant (all ( $\beta$ 's <.07, all p's > .110). Dissolving the interaction into simple slopes revealed that direction of goal-divergence had no effect when identification was high ( $\beta$  = .03, p > .700). By contrast, direction of goal-divergence was associated with a significantly increased willingness to leave to group when identification was low ( $\beta$  = .21, p = .001).

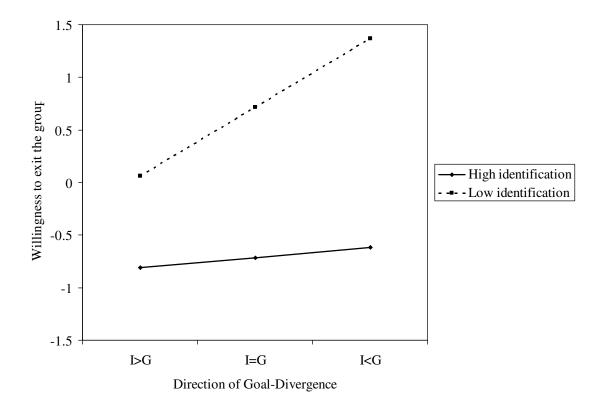


Figure 8. Simple slopes for the relation between the direction goal-divergence and exitintentions as a function of different levels of identification.

As can be seen in Figure 8, when individual goals were lower than group goals, low levels of identification elicited the strongest exit-intentions. High levels of identification were generally related to low intentions to exit the group. Low levels of identification were associated with somewhat stronger exit-intentions when individual goals were higher than group goals, but with significantly greater exit-intentions when individual goals were lower than group goals. This finding partly supports the hypothesis that in a task that emphasizes group

members' responsibilities for the group outcome, less capable members are more willing to leave the group (*Hypothesis 3*). However, one boundary condition for this relation appears to be low levels of identification.

#### Discussion

Study 3 contributes to an understanding of the effects of goal-divergence on exitintentions in natural, cohesive task groups. Unlike in Studies 1 and 2, goal-divergence was measured, not manipulated. This allowed setting the natural occurrence of divergent individual and group goals into relation to ingroup identification and exit-intentions. Although only correlational data were available to examine goal negotiation, findings suggest that high identification was associated with greater receptiveness for expectations of the group leader and the public. This finding is consistent with the notion that identification refers to the internalization of goals provided by important others (Brewer & Caporael, 2006; Moretti & Higgins, 1999). Clearly, expectations of and goals assigned by the coach and the public (i.e., fans and supporters) are relevant for members of a soccer team. The findings also indicate that assigned goals might result in greater motivation than self-set goals, depending on the type of group under consideration.

The main study revealed that divergence between individual and group goals is something that naturally occurs over time. In line with expectations, players adopted the strategy of goal-adjustment to cope with experiences of goal-divergence. This strategy presumably serves the re-matching of individual achievement needs with the group's potential to fulfil these needs. By trend, players preferred to adjust the group goal to their individual goals rather than the other way around. Thus, players preferred accommodation over assimilation. One possible explanation for this finding is the association of goals with ability (Greene & Miller, 1996). Playing soccer requires complex abilities that are not easily improved in the short-term. If an upward adjustment of individual goals involves an upward adjustment of individual ability, the observed preference for accommodation is plausible because it represents the only possibility to re-match individual goals with group goals. Other tasks that involve less complex abilities might produce a more balanced usage of accommodation and assimilation strategies.

Consistent with expectations, the strategy of goal-adjustment was affected by identification with the group. Interestingly, high identification was not associated with greater alignment of individual and groups goals. At the first glance, this finding is surprising given the

numerous studies that demonstrate greater conformity with group goals among high identifiers (e.g., Terry & Hogg, 1996). However, a closer examination of the observed relationship reveals that low identification was exclusively associated with the downward adjustment of goals. When individual or group goals were low, low identifiers aligned the goal at the respective other level with this low goal. High identifiers, by contrast, maintained high goals at the respective other level. Assuming that low goals are harmful for a group that tries to accomplish a rather ambitious goal, one can conclude that low identification elicited conformity harmful goals, whereas high identification elicited nonconformity with harmful goals. This pattern provides empirical evidence for the notion that high identifiers engage in dissenting behaviours when they perceive the current group norm as harming the ingroup (Packer, 2008). As such, dissent expresses loyalty toward the group. The normative conflict model of dissent (Packer, 2008) explicitly assumes that in cases where dissent is an act that aims to benefit the group, dissenters should only be interested in challenging those group norms they perceive as harming the group. Supporting this assumption, dissent among high identified members of the soccer team was evident only when individual or group goals were low.

Study 3 also provided evidence for the proposed impact of identification on tolerance for goal-divergence (Packer, 2008). This lower tolerance was manifest in a positive association of goal-divergence with exit-intentions among low identifiers. Experiences that individual and group goals are divergent make alternate standards of behaviour salient (Packer, 2008). Whereas usually the group goal is the focus of attention when group membership is salient, goal-divergence draws attention to the individual goal. According to Packer (2008), salience of an alternate standard of behaviour might suffice for low identifiers to go from passive to active nonconformity as expressed in enhanced intentions to exit the group. This assumption received empirical support. Goal-divergence was not associated with exit-intentions among high identifiers. This is intuitively plausible if one assumes that the intention of dissenting behaviour among those who care about the group is to benefit the group.

With regard to the impact of the direction of goal-divergence, a tendency was evident that lower, as opposed to higher individual than group goals elicited stronger intentions to exit the group. This finding supports the assumption that tasks that emphasize responsibility toward the group outcome elicit a greater willingness to exit the group among those members who are less capable than the majority of fellow group members. Unexpectedly, this tendency was evident only among low identifiers. This pattern challenges the assumption that stronger

exit-intentions are an expression of group loyalty among those members who have lower individual than group goals. Rather, it seems that in the current study, less capable group members rationally judged their future possibilities as group members as being poor. Specifically, less capable group members might play less often than the more capable group members, they might be blamed for failures of the soccer team, or experience other forms of normative pressure. Although Study 3 does not allow testing this explanation, existing research supports this reasoning. For example, group members who deviate from group norms run at risk of being excluded from the group (e.g., Fritsche, Kessler, Mummendey, & Neumann, 2009). One could argue that also group members with higher individual than group goals deviate from the group norm; however, within the context of a high performing sports team these members deviate in a socially desired direction.

A final point of discussion concerns the asymmetric distribution of observations that pertained to corresponding goals vs. divergent goals. The number of observations of goaldivergence was very low. This finding can be interpreted in several ways. On the one hand, the asymmetric pattern suggests that correspondence between individual goals and group goals indeed represents the default setting in task groups. The notion that people engage in investigations concerning how they will fit within the group and the group's potential to fulfil their individual needs before they join a group supports this assumption (Moreland & Levine, 2002; Packer, 2008). Such an interpretation would underscore the relevance and psychological impact of goal-divergence. Divergence might indeed be experienced as a shift from the normative majority to the nonnormative minority and might thus have severe consequences for group functioning (Prislin & Christensen, 2005). On the other hand, the asymmetric distribution of goal-correspondence vs. goal-divergence observations might have been due to the specific task group investigated in Study 3. Surely, sport teams, especially those who already play in the federal league, are characterized by a rather strict discipline. This might involve also not to question or challenge any goals that have been assigned by the group leader. The low number of goal-divergence experiences would then be a consequence of rather high conformity to group goals. In order to disentangle which of the above explanations is correct, the emergence of goal-divergence has to be examined in less cohesive or novel groups. In novel groups, where a discipline that prescribes conformity to group norms has not yet developed the distribution of goal-correspondence and goal-divergence should be as asymmetric if the first explanation holds, but less asymmetric if the second explanation holds.

Studies 1 and 2 examined strategies adopted by group members to regulate individual achievement needs when the task emphasizes individual accomplishments. Study 3 examined such strategies when the task emphasizes responsibilities toward the group outcome. Study 4 aimed to examine both task types within one design and to compare the effects in a controlled setting. Further, goal-adjustment and exit-intentions in novel task groups were examined in order to gain a better understanding of the nature of goal-divergence.

# 3.4 Study 4

Study 4 aimed to compare the effects of tasks that emphasize individual accomplishments and tasks that emphasize responsibilities toward the group outcome on individuals' exit-intentions within one design. Further, one condition was included that represented a mixed form where the task emphasized both individual accomplishments and responsibilities toward the group outcome. This latter condition might most closely reflect the situation that individuals encounter in everyday life, where the interdependence structure between individual goals and group goals is less easy to define. A minimal paradigm was adopted to investigate the strategies that individuals adopt to regulate their achievement needs within groups without any influence of experiences participants might have had in other groups. In order to still relate strategy usage to importance of the group, participants' self-construal was measured. Study 4 thus examined the impact of fit between participants' self-construal and an emphasis of the task on individual, group, or mixed outcomes on participants' reported exitintentions. The strategy of goal-adjustment was also examined. The specific predictions will be presented below. First, the concept of self-construal is introduced in more detail.

Independent and interdependent construal of the self

Cross-cultural psychology provides a vast amount of empirical evidence for the existence of scripts that encode individuals' general concern for ingroups (e.g., Hofstede, 1980; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). On a between-culture level, these scripts are reflected in the distinction between collectivism and individualism (Hofstede, 1979; Triandis et al., 1986). At a within-culture level, people can be differentiated with respect to their construal of the self as relatively independent or relatively interdependent (Markus & Kitayama, 1991; Singelis, 1994). Self-construal refers to differences between individuals regarding the extent to which they perceive themselves as separate from others or as connected to others (Markus & Kitayama, 1991; Singelis, 1994).

The two forms of self-construal represent relatively chronic differences regarding how the self is related to ingroups (Brown et al., 1992). Research demonstrates that these differing self-concepts systematically impact on cognition, emotion, and motivation (Cross & Madson, 1997; Markus & Kitayama, 1991). Important for the present research is that a high independent self-construal relates to a greater emphasis of interpersonal competition, individual achievement and independence from groups, whereas a high interdependent self-construal relates to a greater emphasis of intragroup cooperation, collective achievement and interde-

pendence with fellow group members (cf. Brown et al., 1992; Triandis et al., 1988). Likewise, the loci of obligation are self-interest and personal preferences when independent self-construal is high (and interdependent self-construal is low), and group welfare and conformity to group norms when interdependent self-construal is high (and independent self-construal is low; Brewer & Chen, 2007). In sum, this indicates that individuals' behaviour is likely to differ as a function of self-construal in novel social contexts: Groups matter more to individuals high in interdependent and low in independent self-construal.

Importantly, when the unit of analysis is the individual, both dimensions of self-construal have to be taken into account (Singelis, 1994). Thus, independent and interdependent self-construals do not represent a single, bipolar measure (Singelis, 1994). An individual's cultural background affects how complex independent and interdependent aspects of the self are. In collectivistic cultures, the collective self is more complex, whereas in individualistic cultures, the private self is more complex (Triandis, 1989). Consequently, although both aspects of the self coexist within a person (Trafimow, Triandis, & Goto, 1991; Triandis, 1989; Singelis, 1994), variations in independent aspects of the self are likely to be more diagnostic for behaviour in social contexts in individualistic societies than variations in interdependent aspects of the self.

## Hypotheses

Variations in self-construal are likely to affect individuals' behaviour in social situations. This might be especially relevant when people enter a novel group. In such a situation, not much is known about the group's norms, and the self-construal might matter more for the strategies of goal-adjustment and exit-intentions than it does among long standing group members. Specifically, it was therefore expected that low independent or high interdependent self-construal relate to a preference for the adjustment of individual goals to group goals, which is referred to as assimilation (Moreland & Levine, 2002). Conversely, high independent or low interdependent self-construal was expected to relate to a preference for the adjustment of group goals to individual goals, which is referred to as accommodation (Moreland & Levine, 2002). *Hypothesis 1* was composed of these assumptions (*Goal-Adjustment-Hypothesis*). Further, a main effect of self-construal on reported exit-intentions was expected, such that low independent or high interdependent self-construal relates to weaker exit-intentions compared to high independent or low interdependent self-construal (*Hypothesis 2: Self-Construal-Hypothesis*). However, the expected main effects are assumed to vary as a

function of task focus and direction of goal-divergence. Among members with high independent or low interdependent self-construal, tasks that emphasize individual accomplishments have better fit with their general weaker connectedness with others. Conversely, among members with low independent or high interdependent self-construal, tasks that emphasize responsibilities toward the group outcome have better fit with their general greater connectedness with others. Consequently, when independent self-construal is low or interdependent selfconstrual is high (i.e., group membership is important) exit-intentions should be especially low when the task emphasizes responsibility toward the group outcome. Conversely, when independent self-construal is high or interdependent self-construal is low (i.e., when group membership is less important) exit-intentions should be especially high when the task emphasizes individual accomplishments. These assumptions were summarized in Hypothesis 3 (Fit-Hypothesis). Further, individual and group-based commitment to goals was assessed, as were group efficacy and self-efficacy. These measures intended to show the impact of goaldivergence and task focus on factors that are relevant for group functioning. Goal commitment and efficacy beliefs are relevant both for individual goal striving and for group-based goal striving. Further, these measures served as manipulation checks.

#### Method

#### Participants and Design

One-hundred-and-eleven students of the University of Jena took part in the experiment  $(M_{age} = 21.59, SD = 2.19; range 18 to 31; all female)$ . Participants were randomly assigned to the conditions of a 2 (Performance Feedback: Success vs. Failure) by 3 (Task Focus: Individual Outcome, Mixed Outcome, Group Outcome) between-subjects design.

## Procedure and Dependent measures

Before the experiment started, participants were asked to fill in the Social-Autonomous Self-Esteem Scale (Pöhlmann et al., 2002). This scale consists of two sub-scales, of which one assesses independent self-construal and the other one assesses interdependent self-construal. Each sub-scale consisted of 11 items (e.g., "I like myself" and "So far, I experienced many positive things" for the independent sub-scale; "My family can rely on me" and "I feel comfortable if I am together with my friends" for the interdependent sub-scale; all from I = not at all to T = very much). The items were averaged to form two scales ( $\alpha_{independent} = .88$ ,  $\alpha_{interdependent} = .78$ ).

A minimal group paradigm was applied to examine the impact of importance of groups in general on the relationship between individual and group goals. The minimal group procedure aimed at preventing participants from relating the experimental group to any natural group they belonged to. The experiment was introduced as a study comparing performance of face-to-face work groups with computer-mediated work groups. Supposedly, the same study had been conducted during the last semester with face-to-face work groups, whose performance had been summarized in a ranking. Participants were told they belonged to a team of four students who are connected via the laboratory's computer network. The student teams had to work on four consecutive tasks with their group. Afterwards, their group's performance would be included into last semester's ranking. Participants were instructed to aim for "a good place in the ranking" with their group. The manipulation of task focus was accomplished through different framings of the outcome of the task. Participants read that after they finished working on the tasks with their group, the computer would calculate their individual score (task emphasized individual accomplishments), their group's score (task emphasized responsibility toward the group outcome) or both their group's and their individual score (task emphasized both individual accomplishments and responsibility toward the group outcome) in the ranking based on the number of points they earned.

In each of the four subsequent tasks, the computer screen was divided into four parts, with one member of the group supposedly responsible for each part. The assignment of participants to a certain part of the screen for each task occurred ostensibly randomly via the computer, but was pre-programmed in reality. Each participant was responsible for one of the four divisions, and had to press a green button as fast as possible if a sign appeared in this part of the screen. If a sign appeared in one of the three parts of the screen the participants' team members were responsible for, participants had to press a red button as fast as possible. Group performance was framed as a combined measure of team members' coordination and reaction.

Prior to each task, the average amount of points to be earned in that specific task was provided (task 1: 20; task 2: 30; task 3: 25; task 4: 25 points). *Group goals* were measured as follows: "Please think about the following task. How would the majority of members of your group answer the following questions? In the following task, we want to reach ... points". A text field appeared in which participants could type in their group goal. *Individual goals* were measured as follows: "Please answer the following questions from your individual perspective. In the following task, I want to reach ... points". A text field appeared into which par-

ticipants could type in their individual goal. After answering the goal-related questions, two items were presented that assessed *commitment to the group goal* set ("How important is achieving the present group goal for you personally?") and *commitment to the individual goal* set ("How important is achieving the present individual goal for you personally?"). Additionally, two items assessed perceived *group efficacy* ("I believe that my group has the abilities that are necessary to achieve the goal for the next task") and *self efficacy* ("I believe that I have the abilities that are necessary to achieve the goal for the next task"). These items were assessed on 7-point-Likert scales, and also served as manipulation checks. After responding to the questionnaire, participants worked on the task.

Following each task, participants received group-based performance feedback. In the negative feedback condition, participants learned that their group reached 15 (task 2: 23; task 3: 12; task 4: 11) points and would be likely to achieve a placing in the lower third of the ranking if their group's performance stays stable. In the positive feedback condition, participants learned that their group reached 25 (task 2: 37; task 3: 30; task 4: 29) points and would be likely to achieve a placing in the upper third of the ranking if their group's performance stayed stable. Following performance feedback, the next task was introduced. After completing the four tasks and the questionnaires, participants were thanked and debriefed.

#### Analysis

As in Study 3, the repeated measurement occasions were nested within persons in order to treat time explicitly as a factor (see Gleibs et al., 2008). The unit of analysis was again the number of observations. In the current sample, this was 111 (number of participants) times 4 (number of measurements). Because of missing values, the resulting number of observations of 444 was reduced to 387.

## Results

#### Self-Construal

Independent self-construal ranged from 3.09 (minimum) to 6.91 (maximum), with a mean of 5.44 and standard deviation of 0.95. Interdependent self-construal ranged from 4.09 (minimum) to 7.00 (maximum), with a mean of 5.87 and standard deviation of 0.68.

#### Goal-Adjustment-Hypothesis

As previously discussed, divergent individual and group goals indicate a misfit between individual achievement needs and the group's potential to meet these needs. One strategy to cope with divergent individual and group goals is to adjust either the individual goal or

the group goal so that correspondence between both is re-installed. Separately for the three task focus conditions, four regression analyses were performed to examine goal adjustment as a function of self-construal. First, group goals were regressed on individual goals, independent self-construal and the resulting interaction term (1). Group goals were regressed on individual goals, interdependent self-construal and the resulting interaction term (2). Individual goals were regressed on group goals, independent self-construal and the resulting interaction term (3). Finally, individual goals were regressed on group goals, interdependent self-construal and the resulting interaction term (4). In each regression, the respective other self-construal was controlled for. Table 4 summarizes the results of these regression analyses. For purposes of clarity, the number of the corresponding regression equation is displayed behind each predictor.

First, results for the adjustment of group goals to individual goals (regression equations 1 and 2) will be reported. Individual goals were positively associated with group goals when the task focused on individual outcomes and on mixed outcomes. Conversely, individual goals were negatively associated with group goals when the task focused on group outcomes. This finding suggests that in the conditions where individual outcomes or both individual and group outcomes were emphasized, the strategy participants' adopted was accommodation, thus group goals were adjusted to individual goals. By contrast, when the task focused on group outcomes, the strategy participants' adopted was to contrast the group goal to the individual goal. Thus, when the individual goal was high, the group goal was low and vice versa. Interestingly, these patterns were evident irrespective of participants' levels of independent and interdependent self-construal.

\_

<sup>&</sup>lt;sup>7</sup> Individual goals and group goals were highly correlated (r = .79, p < .001). Equivalent to the procedure applied in Study 3, residual scores of group goals and individual goals were used as predictors to avoid the problem of multi-collinearity in the regression analysis.

Table 4. Regression coefficients for goal-adjustment as a function of task focus and self-construal in Study 4 ( $N_{individual} = 141$ ,  $N_{mixed} = 130$ ,  $N_{Group} = 141$ ).

-	Task emphasized responsibility toward											
	Individual outcome				Mixed outcome				Group outcome			
	В	SE B	β	$R^2$	В	SE B	β	$R^2$	В	SE B	β	$R^2$
DV = Group Goal												
Independent SC (1)	08	.08	10		17	.11	16		.30	.13	.25*	
Individual Goal (1)	.27	.11	.24*	.06*	.24	.11	.18*	.05*	19	.07	22*	.09**
Interaction (1)	23	.13	$17^{\dagger}$		.25	.11	.19*		08	.06	10	
Interdependent SC (2)	.08	.13	.06		.08	.10	.09		10	.11	09	
Individual Goal (2)	.31	.11	.28**	$.04^{\dagger}$	.29	.12	.22*	$.04^{\dagger}$	19	.08	22*	.09**
Interaction (2)	08	.13	06		.15	.09	.15		01	.13	01	
$DV = Individual\ Goal$												
Independent SC (3)	.07	.09	.09		.01	.11	.01		.27	.13	.23*	
Group Goal (3)	.08	.13	.06	02	.28	.11	.22*	.08**	11	.07	14	$.03^{\dagger}$
Interaction (3)	.13	.16	.08		.21	.11	.18*		.02	.06	.02	
Interdependent SC (4)	11	.14	08		.15	.10	.17		05	.10	05	
Group Goal (4)	.01	.14	.00	.00	.32	.11	.26**	.07*	04	.08	05	.05*
Interaction (4)	.26	.15	$.18^{\dagger}$		.13	.09	.14		.20	.12	.18	

Note. \*\* p < .01, \* p < .05, † p < = .085.

Within the regression equations for independent self-construal, a marginal interaction between self-construal and individual goals was apparent when the task focused on individual outcomes. Further, a significant interaction between self-construal and individual goals was apparent when the task focused on both individual and group outcomes. No other interaction terms reached significance with respect to group goals as the dependent variable. The interaction terms were dissolved into simple slopes. Figure 9 shows the simple slopes when the task emphasized individual accomplishments only. As can be seen, levels of independent self-construal were especially relevant when individual goals were rather high. In this case, low levels of independent self-construal were associated with the adjustment of group goals to the high individual goals ( $\beta = .45$ , p = .001). By contrast, high levels of independent self-construal were not associated with the adjustment of group goals to individual goals ( $\beta = .03$ , p > .800). This finding is consistent with the assumption that low levels of independent self-construal reflect a greater importance of group membership. Among participants for whom group membership was more important, the strategy of goal-adjustment was more pronounced.

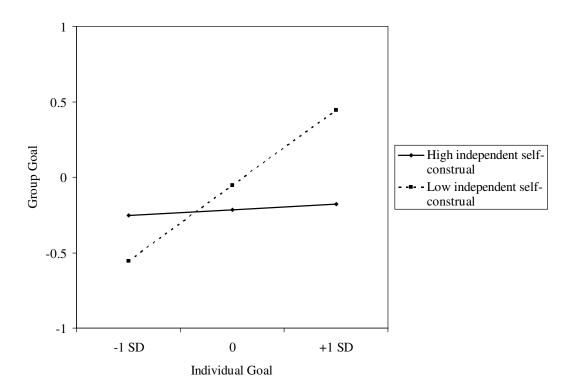


Figure 9. Simple slopes for the adjustment of group goals to individual goals as a function of different levels of independent self-construal when the task emphasized individual outcomes.

Figure 10 shows the simple slopes when the task focused both on individual and group outcomes. As can be seen, levels of independent self-construal were especially relevant when individual goals were rather low. In this case, high levels of independent self-construal were associated with the downward adjustment of group goals to the low individual goals ( $\beta = .38$ , p = .003). By contrast, low levels of independent self-construal were not associated with the downward adjustment of group goals to low individual goals ( $\beta = -.01$ , p > .900). This finding nicely fits with the findings of Study 3, where low identified group members (the weak general connectedness with others that pertains to high independent or low interdependent self-construal in the current study can be conceived of as low identification) showed greater goal-adjustment, especially when goals were low.

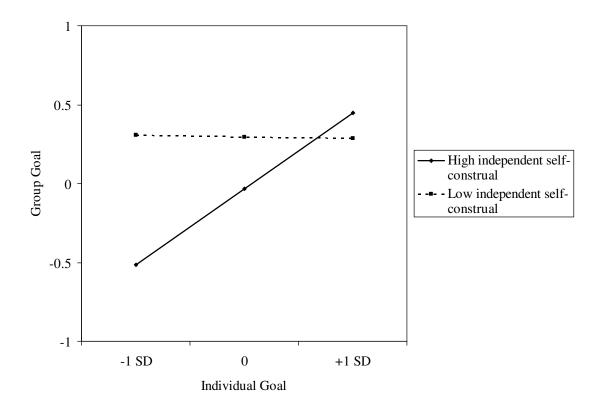


Figure 10. Simple slopes for the adjustment of group goals to individual goals as a function of different levels of independent self-construal when the task emphasized individual and group outcomes.

With respect to the adjustment of individual goals to group goals, a significant interaction between independent self-construal and group goals was apparent when the task empha-

sized both individual and group outcomes. No other interaction terms reached significance with respect to individual goals as the dependent variable. Figure 11 shows the simple slopes when the task focused both on individual and group outcomes. As can be seen, high levels of independent self-construal were associated with greater alignment of individual goals to both low and high group goals ( $\beta = .39$ , p = .001). By contrast, low levels of independent self-construal were not associated with the adjustment of individual goals to group goals ( $\beta = .05$ , p > .600). This finding reveals that when importance of groups in general was low, participants adjusted group goals in such a way that high individual goals related to high group goals and vice versa. On the other hand, this finding also indicates that when importance of groups in general was high (as indicated by low independent self-construal), low group goals did not elicit a downward adjustment of group goals. This result is similar to findings of Study 3, where high identification was associated with the maintenance of high goals at least at one level, either the individual or the group level.

As in Study 3, effect sizes of the interaction terms were compared. The aim of this procedure was to examine whether participants were more willing to adjust group goals to their individual goals (accommodation) or individual goals to group goals (assimilation). T-values of the eight interaction terms were transformed into effect sizes r. Table 5 provides an overview over the t-values and the resulting the effect sizes. For purposes of clarity, the numbers of the four regression equations are displayed. Within each task focus condition, comparison of effect sizes between regression equations 1 and 3 refers to goal-adjustment as a function of independent self-construal; comparison of effect sizes between regression equations 2 and 4 refers to goal-adjustment as a function of interdependent self-construal. Results of the effect size comparisons are reported for each condition separately.

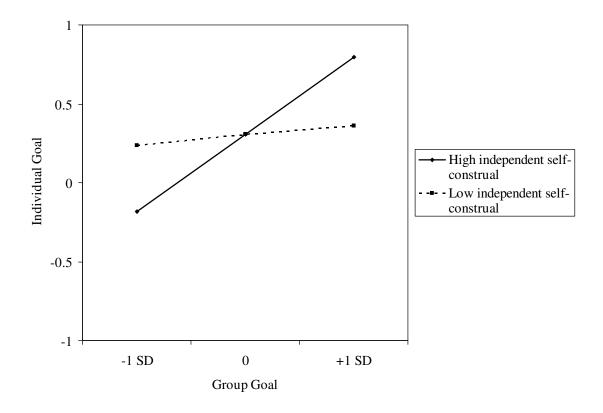


Figure 11. Simple slopes for the adjustment of individual goals to group goals as a function of different levels of independent self-construal when the task emphasized individual and group outcomes.

When the task emphasized individual accomplishments, independent self-construal was associated with a significantly greater adjustment of group goals to individual goals than vice versa (z = 4.86, p < .001). By contrast, interdependent self-construal was associated with a significantly greater adjustment of individual goals to group goals than vice versa (z = -5.14, p < .001). Put differently, when individual accomplishments were emphasized, independent self-construal elicited a strategy of accommodation, whereas interdependent self-construal elicited a strategy of assimilation. These findings thus support the expectation that preferences for different goal-adjustment strategies arise from independent and interdependent construals of the self (Hypothesis 1). When the task emphasized mixed outcomes, no preference for accommodation or assimilation was evident for either of the self-construals (z's < 1.00, p's > .300). When the task emphasized group outcomes, again no preference for assimilation or accommodation was evident regarding interdependent self-construal (z = 0.10, p > .900).

Conversely, a clear preference for the adjustment of group goals to individual goals (accommodation) was evident for independent self-construal (z = 4.47, p < .001).

Table 5. Transformation of t-values for the interaction terms into effect sizes r for Study 4  $(N_{individual} = 141, N_{mixed} = 130, N_{Group} = 141)$ .

Individual outcome Minute inter- action $r$ (1) -1.89 .74 2.02		Task emphasized responsibility toward									
action  r  actio	Mixed outcome		Group outcome								
action actio	1 1	t-value int									
(1) 180 $74$ 20°	on  r	action	<i>r</i>								
(1) -1.09 .74 2.02	2 .76	-1.41	.63								
(2) -0.55 .30 1.79	9 .72	0.80	.42								
(3) 0.65 .35 2.22	2 .79	0.35	.20								
(4) 1.83 .73 1.52	2 .66	0.78	.41								

## Divergence-Hypothesis

Individual goals were subtracted from group goals to create a variable for the absolute amount of goal-divergence. In order to examine the effects of absolute goal-divergence without information on the direction of goal-divergence, all resulting values were transformed to be positive, so that increasing values indicate increasing goal-divergence. A regression analysis was performed to test whether responsiveness to experienced divergences between individual and group goals was a function of self-construal. In the first regression model, the independent variables were goal-divergence, independent self-construal, feedback and task focus. Task focus was coded -1 (individual outcome), 0 (mixed outcome), and 1 (group outcome). The resulting two-way and three-way interactions were entered in a second step. The resulting three-way and the four-way interaction were entered in a third step. Interdependent self-construal was controlled for. The dependent variable was willingness to exit the group. The first regression model was significant, F(5.90) = 8.86, p < .001,  $R^2 = .30$ . The other two models did not explain significantly more variance compared to the first model,  $F_{change} < 1.00$ , p > .08. Goal-divergence did not affect exit-intentions ( $\beta = -.06$ , p > .400). Feedback had an effect on exit-intentions ( $\beta = -.54$ , p < .001), indicating that participants reported more exitintentions when they received negative feedback about their group's performance. Task focus marginally affected exit-intentions ( $\beta = -.16$ , p = .078), indicating that participants reported

more exit-intentions when the task emphasized individual as opposed to group outcomes. Finally, independent self-construal marginally affected exit-intentions ( $\beta$  = .19, p = .073), indicating that participants with higher levels of independent self-construal reported more exit-intentions. When performing the regression analysis for interdependent self-construal as the moderator, again only the first model which included all the main effects was significant. The results are thus equivalent to the results of the first regression analysis with independent self-construal as the moderator, and are therefore not reported again.

## Separation-Hypothesis

To test the prediction that direction of goal-divergence is associated with exitintentions, a variable was computed that took on values of 0 when individual and group goals corresponded (I=G), values of 1 when individual goals were lower (I<G), and values of -1 when individual goals were higher than group goals (I>G). An interesting descriptive finding is that observations of the three goal-relations differed tremendously: Whereas 240 observations pertained to correspondence between individual and group goals, only 87 observations pertained to I<G, and 61 pertained to I>G. This distribution of observations indicates that, similar to the findings in a natural group like the soccer team in Study 3, experiences of goal-divergence were relatively scarce also in a minimal, novel group.

Two univariate analyses of variance were performed with exit-intention as the dependent variable. First, the role of independent self-construal as moderator was examined. Independent variables were feedback, task focus, and direction of goal-divergence. Interdependent self-construal was controlled for. All resulting two-way, three-way, and the four-way interaction of feedback, task focus, direction of goal-divergence, and independent self-construal were included. The only significant main effect that emerged was interdependent self-construal, F(1,387) = 9.79, p = .002,  $\eta_P = .03$ . An examination of the effect revealed that higher levels of interdependent self-construal were associated with less reported exit-intentions (r = .40, p < .001). The three-way interaction of task focus, direction of goal-divergence, and independent self-construal was significant, F(4,378) = 4.80, p = .001,  $\eta_P = .05$  (see Figure 12 for means). When the task focused on group outcomes, direction of goal-divergence was unrelated to exit-intentions (all p's > .900). When the task focused on mixed outcomes, I>G were by trend related to stronger exit-intentions compared to I<G (p = .054). Finally, when the task emphasized individual outcomes, I<G were related to stronger exit-intentions as opposed to I=G (p = .054).

.028). These results are somewhat contradictory to the assumption that tasks that emphasize individual accomplishments would elicit stronger exit-intentions among group members who have higher as opposed to lower individual than group goals.

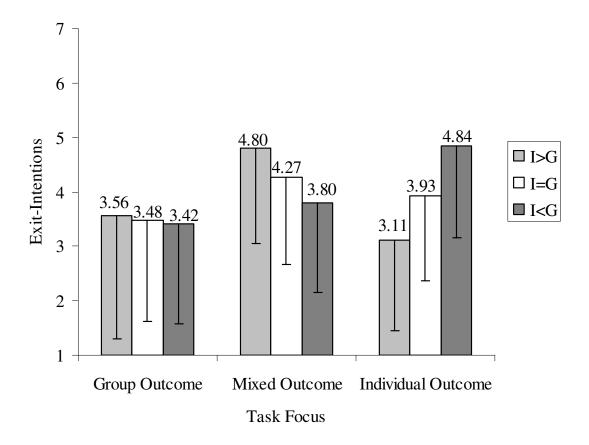


Figure 12. Mean levels of reported exit-intentions as a function of task focus and direction of goal-divergence.

To examine how independent self-construal affected the observed relations between task focus and direction of goal-divergence, the correlation between independent self-construal and exit-intention was examined for each condition separately. Table 6 displays the results. Generally, independent self-construal was positively associated with exit-intentions. This is theoretically plausible given the supposition that independent self-construal reflects a weaker general connectedness with others. Three exceptions to this pattern are noteworthy as

<sup>&</sup>lt;sup>8</sup> Although the absolute difference between I>G and I<G was higher than between I=G and I<G, this difference did not reach significance due to a relatively high standard error of the mean difference between I>G and I<G (se

they refer to a reversion of this relation. When goals were divergent and the task emphasized responsibility toward the group outcome, higher levels of independent self-construal were associated with weaker exit-intentions. This pattern also held when the task emphasized both individual and group outcomes, but only for the situation when individual goals were higher than group goals. This finding indicates that participants' general willingness to exit the group as a function of their weak connectedness was reversed by features of the task (i.e., an emphasis of responsibility toward group outcomes). In other words, a weaker general connectedness to others (reflected by high levels of independent self-construal) was amplified when the task focused on individual accomplishments, but was reversed when the task focused on responsibility toward the group outcome.

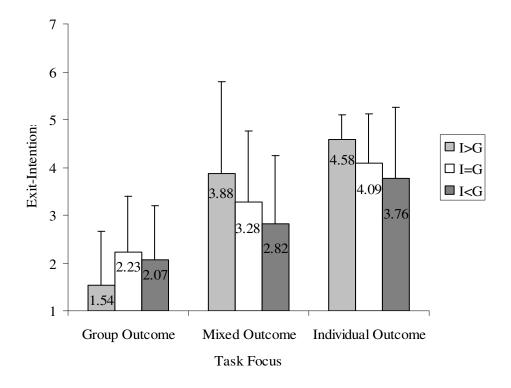
Table 6. Correlation coefficients for the relation of independent self-construal and exitintentions as a function of task focus and direction of goal-divergence in Study 4.

	Task Focus			
	Group	Mixed	Individual	
Goal-Divergence				
I>G	58**	68***	.71**	
I=G	.52***	.36**	.30**	
I <g< td=""><td>56**</td><td>.54**</td><td>.85***</td></g<>	56**	.54**	.85***	

Second, the role of interdependent self-construal as moderator was examined. Independent variables were feedback, task focus, and direction of goal-divergence. Independent self-construal was controlled for. All resulting two-way, three-way, and the four-way interaction of feedback, task focus, direction of goal-divergence, and interdependent self-construal were included. The only significant main effect that emerged was independent self-construal, F(1,387) = 9.79, p = .002,  $\eta_P = .03$ . An examination of the effect revealed that higher levels of independent self-construal were associated with more reported exit-intentions (r = .52, p < .001). The four-way interaction of feedback, task focus, direction of goal-divergence, and interdependent self-construal was significant, F(4,387) = 2.89, p = .022,  $\eta_P = .03$ . Figure 13

<sup>= .86,</sup> as opposed to se = .35 between I=G and I<G).

displays reported exit-intentions as a function of direction of goal-divergence and task focus for success feedback (top) and failure feedback (bottom). In the success feedback conditions, direction of goal-divergence did not impact on exit-intentions when the task focused on group outcomes (all p's > .900) or individual outcomes (all p's > .500). When the task focused on mixed outcomes, I>G was associated with marginally higher exit-intentions compared to I<G (p = .068). In the failure feedback conditions, I>G exit-intentions was associated with marginally higher exit-intentions compared to I=G (p = .063) when the task focused on group outcomes. The direction of goal-divergence did not impact on exit-intentions when the task focused on mixed outcomes (all p's > .700). When the task focused on individual outcomes, I=G was associated with significantly lower exit-intentions compared to I>G and I<G (p = .024 and p = .003, respectively).



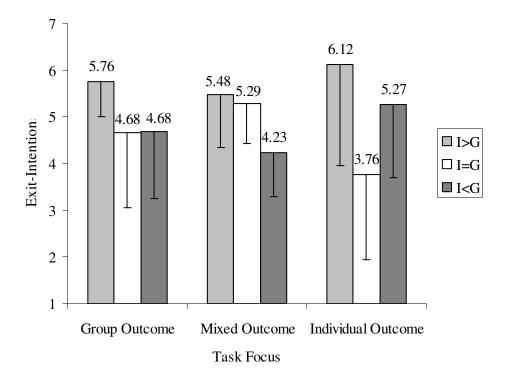


Figure 13. Reported exit-intentions as a function of task focus and direction of goal-divergence when success feedback (top) vs. failure feedback (bottom) was provided.

Table 7 displays the impact of interdependent self-construal on the observed relations between feedback, task focus, and direction of goal-divergence. In general and consistent with theoretical assumptions, interdependent self-construal was negatively associated with exitintentions. Thus, high levels of interdependent self-construal, which are assumed to reflect greater connectedness with others in general, were associated with fewer intentions to exit the group. Two exceptions of this relation were evident: When success feedback was provided, I>G and a task focus on individual accomplishments resulted in a perfect positive correlation between exit-intentions and interdependent self-construal. Although this relation might be an artefact caused by the low number of participants in this situation (N = 6), the finding fits with the observation for independent self-construal: It seems that participants' general unwillingness to exit the group as a function of their high general connectedness to others was reversed when the task focused on individual accomplishments and individual goals were higher than group goals. This suggests that the typical impact of interdependent self-construal on exitintentions is overridden by the specific combination of conditions that make salient individual accomplishments. By contrast, the typical impact of interdependent self-construal on exitintentions appeared to have been amplified when the task focused on responsibility toward the group outcome.

The second exception to the negative association of interdependent self-construal and exit-intentions emerged when failure feedback was provided, the task emphasized mixed outcomes, and individual and group goals corresponded. Also here, higher levels of interdependent self-construal were associated with higher reported exit-intentions. One might speculate that the task's focus on individual accomplishments paired with failure feedback and corresponding goals elicited a greater orientation to exit the group, especially because group membership was quite novel for participants. In failure feedback conditions, goal-divergence seemed to amplify the negative relation between interdependent self-construal and exit-intentions, whereas goal-correspondence reversed this relation. Conversely, in success feedback conditions, goal-correspondence was associated with the theoretically plausible negative relation between interdependent self-construal and exit-intentions.

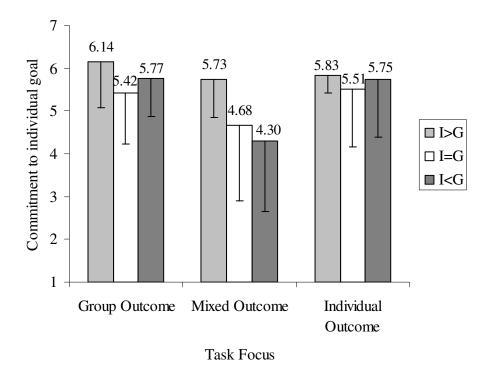
Table 7. Correlation coefficients for the relation of interdependent self-construal and exitintentions as a function of performance feedback, task focus, and direction of goal-divergence in Study 4.

	Feedback					
		Success Failure				
Task Focus	Group	Mixed	Individual	Group	Mixed	Individual
Goal-Divergence						
I>G	.15	68**	1.00***	79***	.13	86*
I=G	74***	.14	54**	.12	06	.37*
I <g< td=""><td>84***</td><td>48*</td><td>.15</td><td>75***</td><td>22</td><td>60*</td></g<>	84***	48*	.15	75***	22	60*

## Group Functioning

## Commitment to Goals

To demonstrate the psychological impact of goal-divergence on factors that relate to group functioning, the joint effects of performance feedback, task focus, and direction of goal-divergence on commitment to individual and group goals were examined. A multivariate analysis of variance was performed with commitment to group goals and commitment to individual goals as the dependent variables. Independent variables were feedback, task focus, and direction of goal-divergence. All resulting two-way interactions and three-way interaction of feedback, task focus, and direction of goal-divergence were included. The findings for commitment to the group goal are reported first. The only significant effect was a main effect of performance feedback, F(1,387) = 4.79, p = .029,  $\eta_P = .01$ . Commitment to group goals was higher in the success feedback conditions (M = 5.52, SD = 1.31) than in the failure feedback condition (M = 5.30, SD = 1.52). All other F's < 2.10, p's > .08.



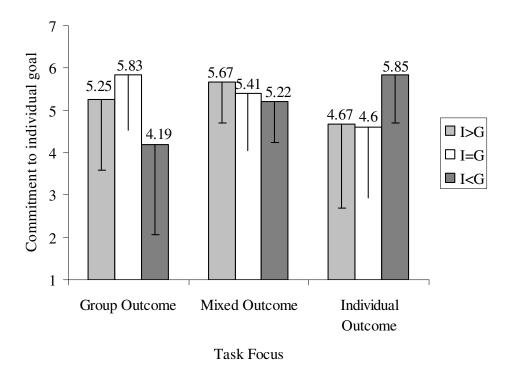


Figure 14. Commitment to individual goals as a function of performance feedback, task focus, and direction of goal-divergence (top: success feedback; bottom: failure feedback).

Commitment to individual goals varied as a joint function of performance feedback, task focus, and goal-divergence, F(4,387) = 3.20, p = .013,  $\eta_P = .03$ . Figure 14 displays means and standard deviations for success conditions (top) and failure conditions (bottom). In the success feedback conditions, task focus on either group or individual outcomes alone did not elicit different commitment to individual goals as a function of direction of goal-divergence (all p's > .500). When the task focused on mixed outcomes, I>G was associated with higher commitment to individual goals than when I=G (p = .044) and I<G (p = .011). In the failure feedback condition, task focus on mixed outcomes did not elicit different commitment to individual goals as a function of direction of goal-divergence (all p's > .800). When the task focused on group outcomes, I=G was associated with higher commitment to individual goals than I<G (p < .001). Conversely, when the task focused on individual outcomes, I=G was associated with lower commitment to individual goals than I<G (p = .019).

## Perceived Efficacy

A multivariate analysis of variance was performed to examine the joint effects of performance feedback, task focus, and direction of goal-divergence on group efficacy and self efficacy. Independent variables were feedback, task focus, and direction of goal-divergence. All resulting two-way interactions and three-way interaction of feedback, task focus, and direction of goal-divergence were included. The findings for group efficacy are reported first. A main effect of performance feedback was evident, F(1,387) = 14.10, p < .001,  $\eta_P = .04$ . Group efficacy was higher in the success feedback conditions (M = 5.90, SD = 1.03) than in the failure feedback condition (M = 5.34, SD = 1.17). Further, the interaction of task focus and direction of goal-divergence was significant, F(4,387) = 3.91, p = .004,  $\eta_P = .04$ . Figure 15 displays means and standard deviations. When the task focused on group outcomes, direction of goal-divergence did not relate to different perceptions of group efficacy (all p's > .600). When the task focused on mixed outcomes, I=G was related to more perceived group efficacy compared to I<G (p = .027). When the task focused on individual outcomes alone, I>G was associated with significantly lower perceived group efficacy than I=G and I<G (p = .010 and p = .002, respectively).

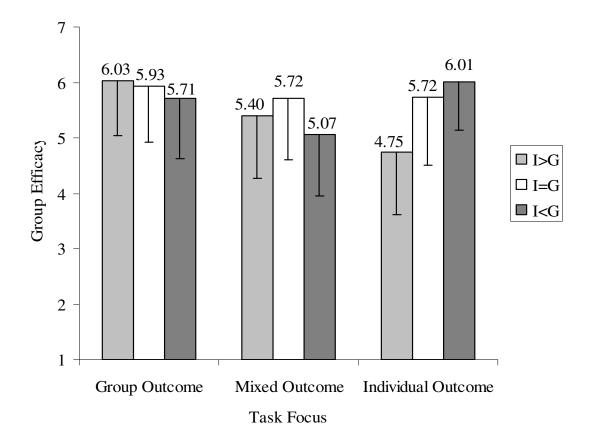


Figure 15. Group efficacy as a function of task focus and direction of goal-divergence.

Regarding self efficacy, a main effect of task focus was evident, F(2,387) = 3.02, p = .050,  $\eta_P = .02$ . Self efficacy was higher when the task emphasized responsibility toward the group outcome (M = 5.82, SD = 0.95) compared to a task focus on mixed outcomes (M = 5.61, SD = 1.05) and individual outcomes (M = 5.40, SD = 1.23). The difference between a task focus on group outcomes and individual outcomes was significant (p = .045). Further, a main effect of direction of goal-divergence was evident, F(2,387) = 4.53, p = .011,  $\eta_P = .02$ . Self efficacy was highest when individual and group goals corresponded (M = 5.83, SD = 1.07), followed by I>G (M = 5.55, SD = 1.05) and I<G (M = 5.45, SD = 1.07). The difference between I=G and I<G was significant (p = .017).

#### Discussion

Study 4 further corroborates the proposition that goal-divergence is an important cue that people respond to when working in task groups. Unlike Study 3, the task groups investigated in Study 4 were novel to participants. Participants did not have any prior experience with the groups and did not expect future interaction with their fellow members. Thus, the context in which regulation of individual achievement needs was studied was very different from Study 3. Nevertheless, the results of Study 4 fit nicely with the results of Study 3 in the main. First, results revealed that the strategy of goal-adjustment was adopted also in novel task groups. Different preferences for goal-adjustment were evident as a function of task focus: If individual outcomes or both individual and group outcomes were emphasized, individual and group goals were positively associated (an assimilation effect). By contrast, when group outcomes were emphasized, individual and group goals were positively associated (a contrast effect). However, in line with expectations, the observed relationships were partly affected by self-construal. When the task emphasized individual accomplishments, the preferred strategy was to adjust the group to the individual goal (accommodation) among participants with a high independent self-construal, but to adjust the individual to the group goal (assimilation) among participants with a high interdependent self-construal. The preference for assimilation among participants with a high interdependent self-construal was also evident when the task focused on group outcomes. These findings support Hypothesis 1 (Goal-Adjustment-Hypothesis).

Because self-construal was assumed to reflect individuals' chronic or general connectedness with others, the different goal-adjustment strategies participants preferred were theoretically plausible. When group membership is meaningful (as reflected by high interdependent or low independent self-construal), group members will likely adjust themselves to rematch their individual achievement needs with the group's potential to meet these needs. Conversely, if group membership is less meaningful (as reflected by low interdependent or high independent self-construal), group members will likely adjust the group to re-match their individual achievement needs with the group's potential to meet these needs. Consistent with the findings for low identification in Study 3, a weak general connectedness with others was more often associated with a downward adjustment of the goal on the respective other level. Conversely, a stronger general connectedness with others was more often associated with the maintenance of high goals on at least one of the two goal levels. One exception was the asso-

ciation of low connectedness with others and the upward adjustment of individual goals to group goals that was evident when the task focused on both individual and group outcomes.

In a further departure from Study 3, absolute levels of goal-divergence were unrelated to intentions to exit the group. Participants were most responsive to performance feedback and by trend to features of the task. A tendency was evident that higher levels of independent self-construal, which presumably reflect weaker general connectedness with groups, were associated with greater exit-intentions. Likewise, higher levels of interdependent selfconstrual, which presumably reflect greater general connectedness with groups, were associated with fewer exit-intentions. The latter finding supports Hypothesis 2 (Self-Construal-Hypothesis). This finding might be due to the novel social context in which participants acted. Whereas participants might have found it difficult to attribute the emergence of goaldivergence to the group, performance feedback was explicitly based on group performance. Thus, the most salient feature of the novel social context participants acted in was whether their group was performing successfully or not. It seems theoretically plausible that goaldivergence becomes more important over time, because its implications become even more meaningful. Expectations about sharing a future within the group may be especially relevant because these draw attention to the perceived opportunities to fulfil individual achievement needs within that group. Participants in Study 4 did not expect future interactions with their groups, which might be the reason for the absence of the relation between divergence and exit-intentions.

The Fit-Hypothesis (*Hypothesis 4*) was partly supported. It was assumed that a task focus on individual accomplishments would elicit the strongest exit-intentions among participants whose independent self-construal is high, because such a task fits best with their weak general connectedness with others. Results support this assumption: The positive relationship between levels of independent self-construal and exit-intentions was most pronounced when the task emphasized individual accomplishments, whereas both positive and negative correlation patterns were observed when the task emphasized group outcomes and mixed outcomes. Similarly, it was assumed that a task focus on group outcomes would elicit the lowest exitintentions among participants whose interdependent self-construal is high, because such a task fits best with their strong general connectedness with others. Results support this assumption: Both in the success and the failure feedback conditions, the negative relationship between levels of interdependent self-construal and exit-intentions was most pronounced when the task

emphasized group outcomes, whereas positive, negative, and zero correlations were observed when the task emphasized individual outcomes and mixed outcomes. Summing up, the findings indicate that intentions to exit a novel group arise from a complex interplay of task focus, performance feedback, the direction of goal-divergence, and group members' general connectedness with others as reflected by self-construal. There is some indication that if group outcomes are made salient, the typical positive relation between independent self-construal and exit-intentions is reversed. Similarly, if individual outcomes are made salient, the typical negative relation between interdependent self-construal and exit-intentions is reversed or disappears.

An important finding of Study 4 pertains to the distribution of experiences of goal-correspondence vs. goal-divergence. The distribution observed in the context of novel, minimal groups was equivalent to the distribution observed in a natural group with a past and a future. The same asymmetric distribution was apparent such that experiences of divergence were much scarcer than experiences of correspondence between individual and group goals. This finding supports the assumption that corresponding goals constitute the default setting in task groups. When group membership can be chosen freely, people search for groups they fit into and they judge as having the potential to fulfil their needs. A simple mind experiment illustrates this point: Imagine you are a young and ambitious researcher and you look out for a position. Surely, the reputation and rankings of universities affects your choice of where you are going to apply. It seems quite unlikely that you will apply to universities that are poorly evaluated and have a bad reputation. The reason for this is that you intuitively know that a position at a poorly evaluated university cannot meet your individual achievement needs.

Study 4 demonstrated the impact that goal-divergence exerts on how group members perceive their own and their group's ability to accomplish certain tasks and on how committed group members are to the goals they pursue within the group. The effects of goal-divergence varied as a function of task focus most clearly regarding efficacy beliefs participants held about their task group. Group efficacy was unaffected by goal-divergence when the task emphasized responsibility toward the group outcome. One explanation for this is that goal-divergence makes alternate standards salient, namely individual as opposed to group goals. A task that emphasizes group welfare might focus attention back to the group goal and thereby buffer against the adverse effects of goal-divergence on group efficacy beliefs. When the task emphasized individual and group outcomes, participants reported the highest group

efficacy beliefs when goals corresponded. This is intuitively plausible because the task stressed individual and group outcomes alike. Thus, participants can be expected to pay equal attention to individual goals and group goals. Goal-divergence indicates that the group's potential to meet individual achievement needs is low, which can be expected to be expressed in diminished group efficacy beliefs. When the task emphasized individual outcomes, perceived efficacy of the task group was lowest when participants had more ambitious individual goals than they thought the majority of fellow members would have. This finding further corroborates the suggestion that tasks that emphasize individual accomplishments cause more uneasiness about group membership among those who have higher as opposed to lower individual goals than the group. The rationale behind this is that group membership is still seen as a valuable resource for (future) need fulfilment among members with lower individual than group goals. Also reported self efficacy was highest when the task emphasized responsibility toward the group outcome and highest when goals corresponded. This is another indication that goal-correspondence is a psychologically desired state in task groups. One could expect self efficacy to be highest when individual goals are higher than group goals, because this goal relation indicates that one is more capable than the majority of fellow group members. However, it seems as if people are aware of the fact that within task groups, goalcorrespondence represents the state that is most rewarding for both the individual and the group.

# 4 General Discussion

The current dissertation demonstrated that in order to understand individuals' behaviour in groups, their current needs and the potential of the group to fulfil these needs must be taken into account. Specifically, I showed that divergent individual and group goals lead to group members' perceptions that a task group does not serve as a resource for the fulfilment of individual achievement needs. This perception was modified by features of the task and by the direction of goal-divergence. Goal-divergence elicited specific strategies that individuals adopted as a means to regulate the fulfilment of their current achievement needs. These strategies included intentions to exit the group, but also the adjustment of goals to re-install goal-correspondence.

The current dissertation's focus on the regulation of a specific need in a specific group type aims to prepare the ground for a more comprehensive framework of how individuals regulate need fulfilment in groups. I have argued for the need to integrate existing research and theory in order to develop a comprehensive and testable framework of how need regulation affects individuals' behaviour in, and attitudes toward, their ingroups. After a brief summary of the theoretical and empirical origins of the current dissertation, the empirical evidence that pertains to the research question under investigation is recapitulated and set in relation to this literature. Finally, suggestions are provided for the development of a research agenda that advances the theoretical refinement and modification of social identity mechanisms as explicated by SIT (Tajfel & Turner, 1979) that has been recently demanded (Brown, 2000).

This dissertation was based on a number of premises: First, research has shown that people readily distinguish between different types of groups (Brown & Torres, 1996; Lickel et al., 2000; Lickel et al., 2001; Hamilton, 2007). Secondly, different types of groups are associated with the fulfilment of specific types of needs (Aharpour & Brown, 2002; Deaux et al., 1999; Johnson et al., 2006). Thirdly, people are inclined to belong to groups that have the potential to fulfil their current individual needs (Correll & Park, 2005; Moreland & Levine, 2002; Packer, 2008). One related consequence of this perception that a specific group serves the fulfilment of current individual needs or identity functions is that people identify with that group (Aharpour & Brown, 2002; Correll & Park, 2005; Hamilton, 2007).

The current dissertation integrated these insights and extended them by investigating the complete picture of how being a group member relates to perceived need fulfilment

through group membership, how this perception is impaired, and what the consequences of such impairment are. Thus, the focus of the present research was the occurrence and impact of the perception that a specific group *does not* serve the fulfilment of current individual needs (any longer). Of such individual needs, three have been identified that are presumably fundamental: The need for self-esteem or identity, the need to belong, and the need for achievement (Baumeister & Leary, 1995; DeShon & Gillespie, 2005). While research exists that allows for conclusions regarding the regulation of the need for self-esteem or identity (e.g., Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999) and the need to belong (e.g., Brewer, 1991; Knowles & Gardner, 2008) in group contexts, to my knowledge, no comparable research exists regarding the regulation of achievement needs. To fill this gap and complete the picture, the current dissertation focused on the regulation of individual achievement needs in the context of task groups.

The hypothesis that goal-divergence per se elicits responses that serve the regulation of individual achievement needs was based on the integration of research showing that discrepancies between a desired state and the current state are experienced as psychologically aversive states (Carver & Scheier, 1998, 2000; Higgins, 1987) and research about the defining features of task groups (Johnson et al. 2006; Sherman et al., 1999). Task groups have been shown to be associated predominantly with the need for achievement, as opposed to the need for self-esteem or identity and the need to belong (Johnson et al., 2006). Discrepancies should thus be experienced when individual achievement needs cannot be fulfilled through group membership. Consistent with this, the studies presented in this dissertation showed that in the context of task groups, such discrepancies refer to experiences of divergent individual and group goals. In line with the notion that experiences of discrepancy elicit corrective actions (Carver & Scheier, 1998, 2000; Higgins, 1987), I have argued and shown that group members can adopt several strategies to cope with these experiences of goal-divergence. These strategies were to negotiate goals (exemplified in Study 3), to adjust goals so that they correspond again (investigated in Studies 3 and 4), and to exit the group (investigated in Studies 1 to 4). This array of strategies is by no means exhaustive; rather, it oriented towards the identity management strategies suggested by SIT (Blanz et al., 1998; Mummendey et al., 1999; Tajfel & Turner, 1979). The studies presented here convincingly showed that goal-divergence in task groups is part of individuals' social reality: When goal-divergence was manipulated (Studies 1 and 2), participants indicated that they have experienced these different relations

between individual and group goals before. Further, goal-divergence was shown to occur naturally, and over time, in task groups (Studies 3 and 4).

Responses to goal-divergence were expected to vary as a function of the direction of goal-divergence and of the task's focus on individual accomplishments vs. responsibility toward the group outcome. This assumption was based on the psychological implications that each direction of goal-divergence has: Because goals are often associated with ability (Greene & Miller, 1996), having lower (vs. higher) goals than the majority of fellow members indicates that one has lower (vs. higher) ability than the majority of fellow members. This perception is thought to fundamentally impact on whether or not the current task group is still seen as a resource for the fulfilment of individual achievement needs. For members with lower individual than group goals, remaining a group member can rather easily be aligned with the general striving for better performance levels and upward social comparisons evident among humans (Festinger, 1954; Weber & Hertel, 2007). By contrast, possibilities to fulfil individual achievement needs within the current group are seriously constrained for members with higher individual than group goals. Consequently, a greater willingness to exit the group would be expected among members with higher, as opposed to lower individual and group goals. However, whether the task focuses on individual accomplishments vs. on responsibility toward the group outcome (Faddegon et al., 2009; Miller & Komorita, 1995) will likely affect this general tendency: A task that emphasizes responsibility toward the group outcome was expected to reverse exit-intentions because it might raise concerns about group loyalty. In terms of group loyalty, group members with lower, as opposed to higher individual than group goals should be more willing to exit the group, because the group benefits from their leaving (Zdaniuk & Levine, 2001).

The impact of task focus on individuals' responses to goal-divergence was addressed across all four studies. Studies 1 and 2 comprised a task that emphasized individual accomplishments and manipulated goal-divergence. In line with expectations, both studies showed that higher individual than group goals elicited intentions to exit the task group and to join other groups. Affective rejection of the ingroup further mediated this effect in both studies, showing that goal-divergence elicited affective detachment from the group (Ethier & Deaux, 1994). Study 2 further refined the underlying processes by demonstrating that higher individual than group goals impaired the perceived potential of the task group to meet individual achievement needs. Thus, the process underlying the observed greater intentions to separate

from the group when individual goals were higher than group goals was the perception that the current task group does not have the potential to fulfil individuals' current achievement needs. This perception was associated with affective rejection of the ingroup, a response that is thought to facilitate emotional detachment from the group (Ethier & Deaux, 1994). Ultimately, impaired need fulfilment through group membership and affective rejection of the ingroup resulted in enhanced intentions to exit the group. Detachment from the group was also evident in decreased levels of identification that were evident for both directions of goal-divergence (Study 2).

Study 3 was conducted with a natural group and with a task that focused on responsibility toward the group outcome. The study demonstrated that goal-divergence occurs naturally over time; thereby backing up the assumption that goal-divergence is part of individuals' social reality. Study 3 illustrated the three regulation strategies that were introduced, namely goal negotiation, goal adjustment, and exit-intentions. Evidence was provided for both adjustment of the individual goal to the group goal and for adjustment of the group goal to the individual goal. Thus, both assimilation and accommodation strategies were adopted in order to re-match individual achievement needs with the group's potential to fulfil these needs. This finding supports the notion that both the individual impacts on the group and the group impacts on the individual, thereby emphasizing the necessity to investigate the relation between individuals and groups bidirectionally (Jetten & Postmes, 2006; Moreland & Levine, 2002; Packer, 2008).

One interesting finding was that observations of goal-divergence were much scarcer than observations of goal-correspondence. Two alternative explanations were offered to account for this finding. The cohesiveness and discipline of a high performance sports team might have prevented a more frequent occurrence of goal-divergence. Conversely, the asymmetric distribution might also reflect that goal-correspondence is the default setting in groups. This explanation is substantiated by the notion that people actively investigate features of the groups they might want to join in order to ensure that membership meets their current needs (Moreland & Levine, 2002). However, Study 3 alone did not allow disentangling both explanations.

Study 3 also showed the moderating role of identification with regard to strategy usage and tolerance for experiences of goal-divergence. In Study 2, initial levels of identification did not affect the relation between goal-divergence and exit-intentions, perceived need fulfilment,

and affective rejection of the ingroup. Study 3 seems to support the suggestion that identification might have a buffering effect on the consequences of goal-divergence, but that this effect might be apparent in the long-term rather than in the short-term, when the experience of goaldivergence is still very salient and fresh. With regard to goal adjustment, low, as opposed to high identifiers showed more conformity with goals that were potentially harmful for the group. Specifically, low identifiers adjusted individual and group goals downwards if the goal on the respective other level was low. By contrast, high identifiers kept one goal up, thereby ensuring that at least one high goal level was maintained. This finding is in line with the recent notion that dissenting behaviour is an act of group loyalty among high identifiers (Packer, 2008). Research suggests that leaving the group is an expression of group loyalty among less capable group members when the task emphasizes responsibility toward the group outcome (Zdaniuk & Levine, 2001). Consistent with this, players with lower, as opposed to higher, individual than group goals reported greater exit-intentions. However, in this study, this pattern was evident only among low, but not among high identifiers. Consequently, whether this response was an expression of group loyalty might be doubted. The finding is more consistent with the normative conflict model of dissent (Packer, 2008), which suggests that low identifiers tolerate divergent individual and group goals less than high identifiers. More generally, this finding points to the fact that goal-divergence focuses attention on how one is different from the group, which makes a standard other than the group goal salient, namely the individual goal. In a task that emphasized responsibility toward the group outcome, salience of an alternate standard had a greater impact on low, as opposed to high identifiers.

As different task foci might also trigger attention to alternate standards and thus affect responses to goal-divergence, Study 4 manipulated task focus to compare the effects of tasks that emphasize individual outcomes, group outcomes, or both, on responses to goal-divergence. In addition, goal-divergence was measured in novel, minimal groups. Here, goal-divergence was also shown to emerge naturally but was distributed asymmetrically. This finding further corroborates the assumption that goal-correspondence is the default setting in task groups, as it indicates a good fit between individuals' current needs and the group's potential to meet these needs (Correll & Park, 2005). Additionally, it underscores that goal-correspondence is a desired state not only in highly cohesive groups that have already established clearly defined group norms, but also in novel groups. Thus, consistent with sugges-

tions concerning the phase of investigation during group socialization (Moreland & Levine, 2002) people seem to actively search for groups they fit into and which they judge as having the potential to fulfil their current needs.

Study 4 underscored the notion of fit also with regard to group members' general connectedness with others as reflected by self-construal and the focus of the task. This was true for goal adjustment strategies as well as for exit-intentions. Firstly, a weak general connectedness with others (as indicated by high independent or low interdependent self-construal) resulted in a clear preference for the adjustment of group goals to individual goals. By contrast, a strong general connectedness with others (as indicated by low independent or high interdependent self-construal) resulted in a clear preference for the adjustment of individual goals to group goals. Thus, whereas accommodation strategies were preferred when group membership was less important, assimilation strategies were preferred when group membership was more important. Secondly, consistent patterns of the positive relationship between independent self-construal and exit-intentions were apparent only when the task emphasized individual accomplishments. Likewise, consistent patterns of the negative relationship between interdependent self-construal and exit-intentions were apparent only when the task emphasized group outcomes. In conclusion, this means that the task focus should fit with group members' general connectedness with others as reflected by self-construal in order to make reliable predictions regarding exit-intentions.

Finally, Study 4 underscored the impact of task focus and goal-divergence on factors that are likely to impact on group functioning and individual goal pursuit. The effects were most remarkable regarding efficacy beliefs. Self efficacy was generally rated higher when the task emphasized group outcomes compared to individual accomplishments, and when individual and group goals corresponded. This finding is noteworthy because one would intuitively expect the highest levels of self efficacy when individual goals are higher than group goals, because this goal relation indicates that one has higher ability (Greene & Miller, 1996) compared to the majority of fellow group members. By contrast, correspondence of goals was associated with the highest self efficacy beliefs, suggesting that goal-correspondence is the desired state in task groups. Group efficacy beliefs were also higher when goals corresponded compared to when they were divergent. This pattern was evident when the task focused on mixed outcomes and on individual outcomes. Again stressing the positive effect of emphasizing group outcomes alone, group efficacy beliefs did not differ here as a function of goal-

divergence. Thus, a number of factors are affected by task focus and goal-divergence that are meaningful for group functioning and for goal pursuit both at the individual and the group level. This again highlights that goal-divergence potentially has far reaching implications for the relation between an individual and the group.

#### Limitations

Some limitations of the studies presented here should be mentioned. The most obvious is that the current dissertation examined *intentions* to exit the group in each of the studies. Clearly, an examination of whether these intentions translate into behaviour remains a task for future research. Research on schisms indicates that exit is a consequence of divergent views about norms that are core to the ingroup's identity (Sani, 2005). This research focused on real schisms that occurred for instance within the Italian Communist Party (Sani & Reicher, 1998) or within the Church of England (Sani, 2005). It seems plausible to assume that single persons also exit groups when they perceive their own goals as being too divergent from the group's goals. However, this prediction still requires empirical testing.

Further, the strategies that individuals can adopt to regulate the fulfilment of achievement needs in groups examined in the current dissertation were restricted to three strategies which closely resemble the identity management strategies put forward by SIT (Tajfel & Turner, 1979). Specifically, the focus was on goal negotiation, goal adjustment, and on exit. Of these, goal adjustment and exit were tested empirically; goal negotiation was exemplified descriptively in Study 3. As noted in the theoretical part, more strategies might exist. It remains a task for future research to identify these and to provide tests that reveal when individuals use a certain strategy. This directly leads to another issue: With the current dissertation's focus on task groups, the results might hold only for other group types that have similar characteristics. Task groups, for instance, are defined through at least moderably permeable boundaries. Naturally, to exit ones group and join another group that potentially better serves the fulfilment of current individual needs is an option that is restricted to groups with permeable boundaries. On a more general level this means that the usage of specific achievement management strategies might be a function of socio-structural variables that define the group setting. Empirical evidence shows that the usage of specific identity management strategies depends on socio-structural variables such as group status, legitimacy of group status, stability of the status hierarchy, and permeability of group boundaries (e.g., Ellemers, 1993). However,

because the regulation of the fulfilment of individual achievement needs takes place within groups, rather than between groups, permeability of group boundaries is likely to be the most relevant factor for the choice of a specific strategy.

A final point for consideration is that the current dissertation gives no account of the potential sources and antecedents of goal-divergence in task groups. Research suggests that divergences between individual needs and groups' potential to meet these needs emerge both from changes in the individual and changes of the group's fortune (Correll & Park, 2005). Changes of a group's fortune might be caused by pressures from outside (i.e., mergers) or from inside (i.e., a change of the group leader, or changes of the group norms). Changes in the individual might in great parts go back to development, such as the striving to improve ones current performance level (Festinger, 1954; Weber & Hertel, 2007). The different levels of achievement needs that individuals strive for as a function of development are manifest in the normative change of group membership both within institutions and between institutions. It appears the most natural thing that children change from primary to secondary school (a change within one institution) or that adolescents change from high school to university (a change between institutions). However, as the current dissertation showed this striving for higher performance levels (and consequently for membership in groups which meet the corresponding higher achievement need) does not end when formal education ends. Especially in natural groups, the question remains as to what causes changes in individuals' current achievement needs.

## Practical Applications

The current dissertation highlights a number of practical applications in the context of individuals' behaviour in groups. Among these, perhaps the most intriguing one arises from the finding that goal-divergence *per se* elicits decreases in identification and perceived fulfilment of affiliation needs through group membership and increases in affective rejection of the group. However, only one direction of goal-divergence also translated in intentions to exit the group. This means that group members, specifically those with lower individual than group goals, remain in the group despite perceiving a decreased potential of their group to meet their current affiliation needs, decreased levels of identification with the group, and increased affective detachment from the group. Thus, employee turnover might be as harmful to organizations as the retention of employees who are dissatisfied with group membership. Many or-

ganizations will have to deal with employees whose attitudes towards the group are unfavourable. Although the retention of such employees might not be desired by organizations, Kreiner and Ashforth (2004) noted that these employees might engage in behaviour that benefits the organization. For instance, they might stimulate whistle-blowing, innovation, and conscientious dissent (Kreiner & Ashforth, 2004). Challenging this latter assumption and consistent with recent research (Packer, 2008), the current dissertation clearly showed that conscientious dissent is behaviour that high, not low, identified group members engage in. Summing up, organizations might benefit from monitoring emerging goal-divergence and from developing procedures to enhance levels of satisfaction with group membership again among those employees who remain in the group. According to Moreland and Levine (2002), role negotiation in the phase of resocialization might constitute such a method that, if successful, can result in rises of the commitment levels of both parties again.

A second important practical application that the current dissertation instigates is to rethink the target of persuasion when group goals are controversial. Specifically, parliamentary groups are often concerned with Fraktionsdisziplin. This means that in order to accomplish certain political decisions, all members of the group have to vote uniformly. Because the voting procedure is confidential, parliamentary groups sometimes somewhat surprisingly have to deal with dissenters from the group norm. Such an incidence occurred in November, 2008, and turned into a major scandal. In order to become premier, Andrea Ypsilanti, leader of the Hessian social democratic party (SPD), needed to form a coalition with another party. This coalition was highly controversial, but Ypsilanti in the end demanded allegiance among the members of her party when voting in favour vs. against this coalition. Ultimately, the coalition failed due to four party members who voted against it. Media coverage was occupied with the question whether these four members were traitors or heroes. This example illustrates that whenever there is controversy about group goals, attempts to convince other group members should target at those who care about the group most. In fact, low identifiers are even more likely to conform to controversial group norms than high identifiers, because the former are more likely to exhibit strategic conformity (Packer, 2008).

## Implications for theory and future research directions

The present research suggests that goal-correspondence is the default setting in task groups. The studies presented here convincingly demonstrate that the psychological impact of

goal-divergence is immense; it affects identification with the group, affective rejection of the group, intentions to exit the group, individual goals and group goals, beliefs about group efficacy and self efficacy and commitment to individual goals. Given these findings, one can conclude that goal-divergence impacts on group functioning, on individual functioning within groups, and on the relation between individuals and groups.

Although the research presented herein focused on a specific type of group and a specific type of need, the findings can be synthesized into a greater framework for strategies that refer to individual need fulfilment within group contexts. SIT (Tajfel & Turner, 1979) provides such a framework, and an inclusion of other human needs besides the need for selfesteem would stimulate a fertile and theoretically sound extension of SIT. SIT assumes that people join groups, remain within groups, or exit groups as a function of the extent to which group membership allows for positive self-esteem or positive distinctiveness. These propositions have received enormous empirical support (e.g., Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999). However, SIT has also been criticized for its rather narrow focus on identity or self-esteem as the underlying motivation for inter- and intragroup behaviour (Brown, Hinkle, Ely, et al., 1992; Brown, 2000). According to Brown (2002), this narrow focus is due to the implicit assumption of SIT that all groups are psychologically equivalent. This means that the way SIT looks at social identity mechanisms cannot encompass the variety of groups and needs that obviously exist (Brown, 2002). Broadening the scope of SIT to encompass other types of needs or identity functions would be an opportunity to refine the theory. By doing so, the theory's current strong focus on intergroup relations would necessarily be modified to also involve intragroup processes. This is due to the fact that many of the needs (or identity functions) that people stress with respect to their membership in certain groups do not tap into intergroup relations, but into functions such as self-insight, cohesion, social interaction opportunities, intragroup comparison, or self and social learning (Aharpour & Brown, 2002; Deaux et al., 1999; Forsyth et al., 1999). In the following, I will outline how these considerations can possibly be synthesized into a more comprehensive framework, and will illustrate the various research questions that can be derived from such a framework.

In terms of need fulfilment, SIT makes predictions about individuals' needs for identity and self-esteem needs and how these needs are being met by membership in social groups. Moreover, SIT also makes explicit predictions about the strategies that individuals

adopt when their need for self-esteem is not met (any longer) by group membership. These strategies are called identity management strategies. The strategies that have been in focus of the current dissertation resemble these identity management strategies. In fact, they might be termed achievement management strategies. In the theoretical part, I have also outlined how people can regulate their need to belong if this need was frustrated by reliving experiences of social exclusion and rejection (Knowles & Gardner, 2008). Such responses to need frustration might then be called belongingness management strategies. In fact, optimal distinctiveness theory (Brewer, 1991) is also concerned with individuals' need regulation. The theory holds that people are inclined to create a balance between their need to belong and their need to differentiate from others. The strategy people use to regulate these opposite needs is identification with different groups at different times (Brewer, 1991). Thus, there seems to be evidence that people actively regulate the three fundamental needs of esteem, achievement, and affiliation. These rather broad need types can be extended by the identity functions that precede identification with specific groups (Aharpour & Brown, 2002; Deaux et al., 1999). So far, these strands of research stand separate. Social psychological research would benefit from an integration of these different lines of research as well as from a joint terminology. Such a synthesis would be grounded on the notion that different types of groups serve the fulfilment of different needs or combinations of needs.

A first step then involves the investigation of these needs or combinations of needs and how these are related to specific types of groups. Researchers have already started to accomplish this task (Aharpour & Brown, 2002; Deaux et al., 1999; Forsyth et al., 1999). Once these needs (or identity functions) that characterize specific groups have been identified, the focus should be to examine the precedents of divergence experiences. This is to say that the situations must be specified in which group members perceive the group as not meeting their current individual needs (any more). To identify the causes of divergence experiences is of utmost important to the field, because divergence stimulates change. As introduced in the theoretical part, and shown in the empirical part, experiences of goal-divergence in task groups are associated with changes at different levels: The group is changed through accommodative goal-adjustment, group members change through assimilative goal-adjustment, and the relation between the individual and the group changes through alterations of identification, affective rejection of the group, the group's perceived efficacy, commitment to the group goal, and ultimately through the exit of the individual.

This massive impact of divergence experiences is not restricted to task groups. Many existing research findings appear to fit with the findings of the current dissertation if the same terminology was used. For instance, research on the seceding of subgroups shows that exit is preceded by identity subversion (Sani, 2005). Identity subversion is in essence a divergent perception of what is core to a group's identity. Also research in the tradition of SIT can be interpreted in this way. If, for instance, low group status triggers the experience of divergence regarding current individual self-esteem or identity needs and the group's potential to fulfil these needs, group members adopt strategies that aim to ensure individual need fulfilment by means of identity management strategies (Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999). From reporting just these two lines of research, it is obvious that individuals must have a rich repertoire of strategies that all more or less explicitly serve to guarantee that individuals' current needs are fulfilled. It seems a fruitful and inspiring task for future research to identify and classify these strategies using a joint terminology.

This last paragraph stresses the necessity to differentiate, on a metatheoretical level, needs, motivations, and wants. There seems to be sufficient agreement on the three fundamental human needs (Baumeister & Leary, 1995; DeShon & Gillespie, 2005). According to Baumeister and Leary (1995), needs and wants can be distinguished by examining the consequences of their frustration. Whereas frustration of a fundamental human need causes pathologies, frustration of a want causes temporal distress. Consequently, it seems important to know whether divergences between a desired state and a current state that group members experience refer to the frustration of a need or a want. Individuals might react more strongly when they are under the impression that group membership does not meet a fundamental need as opposed to a want. Moreover, this reaction is likely to be affected by the type of group under consideration. Thus, in order to integrate existing research, a theoretical distinction is required that allows to deduct whether for instance the identity functions that Aharpour and Brown (2002) reported are needs or wants. Certainly, a theoretical and empirical discussion about how to differentiate needs, wants, and motivations is welcomed by social psychologists. In fact, some researchers have started to work on a better differentiation of needs and motives (e.g., Sheldon & Gunz, 2009).

In my view, the accommodation strategy (i.e., adjustment of the group goal to the individual goal) is especially interesting, because it shows how group members cognitively change properties of the group, namely its goal. Future research should investigate the effects

of these mental alterations of group goals for two reasons. On the one hand, common goals are the defining feature of task groups (Sherman et al., 1999). Thus, if group members cognitively alter this feature, this might affect a number of variables that are important for group functioning, such as perceptions of group homogeneity or cohesiveness. It seems plausible that at some point in time, group members will become aware the operating group goal is controversial, which might stimulate negotiation and a new definition of the goal. Finally, research indicates that group performance will be affected by alterations of the group goal, because goals are positively associated with performance (Locke & Latham, 2002). Moreover, evidence of the accommodation strategy opens up new perspectives on research on conformity. Conformity is usually defined in terms of how individuals align their behaviour or attitudes with the group norm (e.g., Willis, 1965). I am not aware of any studies that have conceived of conformity in such a way that group goals are adjusted to individual goals. However, in adjusting the group goal such that it corresponds to the individual goal, group members conform to the group goal. This strategy certainly requires more research attention.

# Conclusions

Let me emphasize that the current dissertation by no means indicates that individuals treat group membership in a cost-benefit stressing manner. Rather, the studies suggest that especially those individuals who regard group membership as important find very creative ways to re-install a match between their current needs and the group's potential to fulfil these. This means that individuals do not just drop out of group when they experience divergence. Rather, they are involved in a dynamic and ongoing process of adjusting themselves to the group and of adjusting the group to themselves. Using the example of task groups and achievement needs, the current dissertation has highlighted the importance of including different types of groups and different types of needs in the equation that social psychologists use to predict individuals' behaviour within groups. In a nutshell, the current dissertation demonstrates that individuals and groups are intertwined in a bidirectional relationship and that they act and react in order to make this relationship rewarding for both parties. Thus, also within groups, individuals are still responsive to the fulfilment of their current needs and do not turn into blockheads. Individuals pay attention and react to divergences between what they need and what they get through membership in certain groups. If individuals' behaviour in, and attitudes towards, groups is to be fully understood, the bidirectional relationship be-

tween individuals and groups has to be taken into account. A promising and inspiring way to accomplish this is to further discover how individuals regulate the fulfilment of needs through group membership. Hopefully, the present work stimulates the further refinement of SIT (Tajfel & Turner, 1979) that has been instigated by other researchers before (e.g., Brown, 2002) to enrich our understanding of social identity mechanisms.

# References

Aharpour, S. & Brown, R. (2002). Functions of group identification: An exploratory analysis. *Revue Internationale de Psychologie Sociale*, 15, 157–186.

- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182.
- Baumeister, R. F. & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Bettencourt, B. A., Molix, L, Talley, A. E., & Sheldon, K. M. (2006). In T. Postmes & J. Jetten (Eds.), *Individuality and the group: Advances in social identity* (pp. 196-214), Thousand Oaks, CA, US: Sage Publications, Inc.
- Bizman, A. & Yinon, J. (2002). Social self-discrepancies and group-based emotional distress. In D. M. Mackie & D. R. Smith (Eds.), *From Prejudice to Intergroup Emotions* (pp. 13-30), NY: Pychology Press.
- Blanz, M., Mummendey, A., Mielke, R., & Klink, A. (1998). Responding to negative social identity: A taxonomy of identity management strategies. *European Journal of Social Psychology*, 28, 697-729.
- Brendl, C. M. & Higgins, E. T. (1996). Principles of judging valence: What makes events positive or negative? In M. P. Zanna, (Ed.), *Advances in experimental social psychology*, 28 (pp. 95-160), San Diego, CA, US: Academic Press.
- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, 17, 475-482.
- Brewer, M. B. & Caporael, L. R. (2006). An evolutionary perspective on social identity: revisiting groups. In M. Schaller, J. A. Simpson, & D. T. Kenrick, *Evolution and Social Psychology* (pp. 143-161), Madison, CT, US: Psychosocial Press.
- Brown, R. & Torres, A. (1996). Recognising group diversity. Paper presented to the International Congress of Psychology, Montreal, August.
- Brown, R. (2000). Social Identity Theory: Past achievements, current problems and future challenges. *European Journal of Social Psychology*, *30*, 745-778.
- Carver, C. S. & Scheier, M. F. (Eds.). (1998). *On the self-regulation of behavior*. New York, NY, US: Cambridge University Press.

Carver, C. S. & Scheier, M. F. (2000). Scaling back goals and recalibration of the affect system are processes in normal adaptive self-regulation: understanding 'response shift' phenomena. *Social Science & Medicine*, *50*, 1715-1722.

- Correll, J. & Park, B. (2005). A model of the intergroup as a social resource. *Personality and Social Psychology Review*, 9, 341-359.
- Deaux, K., Reid, A., Mizrahi, K., & Cotting, D. (1999). Connecting the person to the social: The functions of social identification. In T. R. Tyler, R. M. Kramer, & O. P. John (Eds.), *The psychology of the social self* (pp. 91-113), Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Deci, E. L. & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- DeShon, R. P. & Gillespie, J. Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology*, *90*. [Special issue: Special Section: Theoretical Models and Conceptual Analyses-Second Installment], 1096-1127.
- Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology*, *31*, 410-436.
- Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together of falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology*, 72, 617-626.
- Elsbach, K. D. & Bhattacharya, C. B. (2001). Defining who you are by what you're not: Organizational disidentification and the national rifle association. *Organization Science*, 12, 393-413.
- Ethier, K. A. & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding *Journal of Personality and Social Psychology*, 67, 243-251.
- Faddegon, K., Ellemers, N., & Scheepers, D. (2009). Eager to be the best, or vigilant not to be the worst: The emergence of regulatory focus in disjunctive and conjunctive group tasks. *Group Processes & Intergroup Relations*, 12, 653-671
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117-140.

Forsyth, D. R., Elliot, T. R., & Welsh, J. A. (1999). The functions of groups: A psychometric analysis of the group resources inventory. *International Journal of Action Methods*, 52, 1-14.

- Fritsche, I., Kessler, T., Mummendey, A., & Neumann, J. (2009). Minimal and maximal goal orientation and reactions to norm violations. *European Journal of Social Psychology*, 39, 3-21.
- Gleibs, I., Mummendey, A., & Noack, P. (2008). Predictors of change in postmerger identification during a merger process: A longitudinal study. *Journal of Personality and Social Psychology*, 95, 1095-1112.
- Greene, B. A. & Miller, R. B. (1996). Influences on achievement: Goals, perceived ability, and cognitive engagement. *Contemporary Educational Psychology*, 21, 181-192.
- Hoppe, F. (1930). Untersuchungen zur Handlungs- und Affektpsychologie. IX. Erfolg und Misserfolg. (Investigations of the psychology of action and affection. IX. Success and failure). *Psychologische Forschung*, *14*, 1-62.
- Jetten, J., Branscombe, N. R., Spears, R, & McKimmie, B. M. (1993). Predicting the paths of peripherals: The interaction of identification and future possibilities. *Personality and Social Psychology Bulletin*, 29, 130-140.
- Jetten, J. & Postmes, T. (2006). *Individuality and the group: Advances in social identity*. Thousand Oaks, CA, US: Sage Publications.
- Johnson, A. L., Crawford, M. T., Sherman, S. J., Rutchick, A. M., Hamilton, D. L., Ferreira, M. B., & Petrocelli, J. B. (2006). A functional perspective on group memberships: Differential need fulfillment in a group typology. *Journal of Experimental Social Psychology*, 42, 707-719.
- Kemmelmeier, M. & Oyserman, D. (2001). The ups and downs of thinking about a successful other: Self-construals and the consequences of social comparisons. *European Journal of Social Psychology*, *31*, 311-320.
- Kerr, N. L. & Bruun, S. E. (1983). Dispensability of member effort and group motivation losses: Free-rider effects. *Journal of Personality and Social Psychology*, 44, 78-94.
- Kessler, T. & Mummendey, A. (2002). Sequential or parallel processes? A longitudinal field study concerning determinants of identity-management strategies. *Journal of Personality and Social Psychology*, 82, 75-88.

Knowles, M. L. & Gardner, W. L. (2008). Benefits of membership: The activation and amplification of group identities in response to social rejection. *Personality and Social Psychology Bulletin*, *34*, 1200-1213.

- Kreiner, G. E. & Ashforth, B. E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior*, 25, 1-27.
- Lauck, G. (2005). Die Messung der Inneren Kündigung. Ein Vorschlag zur Operationalisierung mit Bezügen zur angloamerikanischen Personalforschung. Zeitschrift für Personalforschung, 19, 139-158.
- Lickel, B., Hamilton, D. L., & Sherman, S. J. (2000). Elements of a lay theory of groups: Types of groups, relationship styles, and the perception of group entitavity. *Personality and Social Psychology Review*, 5, 129-140.
- Lickel, B., Hamilton, D. L., Wieczorkowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78, 223-246.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, *7*, 83-104.
- Matschke, C. & Sassenberg, K. (2008). Does rejection lead to disidentification? The role of internal motivation and avoidance strategies. Unpublished manuscript, Knowledge Media Research Center, Tuebingen, Germany.
- McCoy, S. K. & Major, B. (2003). Group identification moderates emotional responses to perceived prejudice. *Personality and Social Psychology Bulletin*, 29, 1005-1017.
- Miller, C. E. & Komorita, S. S. (1995). Reward allocation in task-performing groups. *Journal of Personality and Social Psychology*, 69, 80-90.
- Moreland, R. M. & Levine, J. M. (2002). Sozialisation and Trust in Work Groups. *Group Processes and Intergroup Relations*, 5, 185-201.
- Moretti, M. M. & Higgins, E. T. (1999). Own versus other standpoints in self-regulation: Developmental antecedents and functional consequences. *Review of General Psychology*, *3*, 188-223.
- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999a). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology*, 76, 229-245.

Mummendey, A., Klink, A., Mielke, R., Wenzel, M., & Blanz, M. (1999b). Socio-structural characteristics of intergroup relations and identity management strategies: Results from a field study in East Germany. *European Journal of Social Psychology*, 29, 259-285.

- Packer, D. J. (2008). On being both with us and against us: A normative conflict model of dissent in social groups. *Personality and Social Psychology Review*, 12, 50-72.
- Pöhlmann, C., Hannover, B., Kühnen, U., & Birkner, N. (2002). Independent and interdependent self-concepts as determinants of self-esteem. *Zeitschrift für Sozialpsychologie*, 33, 111-121.
- Prislin, R. & Christensen, P. N. (2005). The effects of social change within a group on membership preferences: To leave or not to leave? *Personality and Social Psychology Bulletin*, *31*, 595-609.
- Sani, F. (2005). When subgroups secede: Extending and refining the social psychological model of schism in groups. *Personality and Social Psychology Bulletin*, 31, 1074-1086.
- Sani, F. & Reicher, S. D. (1998). When consensus fails: An analysis of the schism within the Italian Communist Party (1991). *European Journal of Social Psychology*, 28, 623-645.
- Sani, F. & Pugliese, A. C. (2008). In the name of Mussolini: Explaining the schism in an Italian right-wing political party. *Group Dynamics: Theory, Research, and Practice, 12*, 242-253.
- Sherman, S. J., Hamilton, D. L., & Lewis, A. C. (1999). Perceived entitativity and the social identity value of group memberships. In D. Abrams & M. A. Hogg (Eds.), *Social Identity and Social Cognition* (pp. 80-110), Malden: Blackwell Publishing.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, [Special issue: The self and the collective], 580-591.
- Smith, E. R. (1999). Affective and cognitive implications of a group becoming a part of the self: New models of prejudice and of the self-concept. In D. Abrams & M. A. Hogg (Eds.), *Social Identity and Social Cognition* (pp. 183-196). Malden: Blackwell Publishing.

Snyder, C. R., Lassegard, M. A., & Ford, C. E. (1986). Distancing after group success and failure: Basking in reflected glory and cutting off reflected failure. *Journal of Personality and Social Psychology*, *51*, 382-388.

- Steiner, I. D. (1972). Group process and productivity. New York: Academic Press.
- Tajfel, H. (Ed.) (1978). Differentiation between social groups: Studies in the social psychology of intergroup relations. London, UK: Academic Press.
- 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, Calif: Brooks/Cole.
- Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel, & W. G. Austin (Eds.), *Psychology of Intergroup Relations* (pp. 7-24). Chicago, IL: Nelson-Hall Publishing.
- Taylor, A. B., MacKinnon, D. P., & Tein, J.-Y. (2008). Tests of the three-path mediated effect. *Organizational Research Methods*, 11, 241-269.
- Trafimow, D., Triandis, H. C., & Goto, S. G. (1991). Some tests of the distinction between the private self and the collective self. *Journal of Personality and Social Psychology*, 60, 649-655.
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, *96*, 506-520.
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Blackwell.
- van Leeuwen, E., van Knippenberg, D., & Ellemers, N. (2003). Continuing and changing group identities: The effects of merging on social identification and ingroup bias. *Personality and Social Psychology Bulletin*, 29, 679-690.
- Van Kleef, G. A., Steinel, W., van Knippenberg, D., Hogg, M. A., & Svensson, A. (2006). Group member prototypicality and intergroup negotiation: How one's standing in the group affects negotiation behaviour. *British Journal of Social Psychology*, 46, 129-152.
- Weber, B. & Hertel, G. (2007). Motivation gains of inferior group members: A metaanalytical review. *Journal of Personality and Social Psychology*, 93, 973-993.
- Willis, R. H. (1965). Conformity, independence, and anticonformity. *Human Relations*, 18, 373-388.

References 107

Zdaniuk, B. & Levine, J. M. (2001). Group loyalty: Impact of members' identification and contributions. *Journal of Experimental Social Psychology*, *37*, 502-509.

# **Appendix**

### Study 1

All items were assessed on a 7-point scale ranging from 1 (not at all) to 7 (very much).

### Affective rejection of the ingroup

When I meet the group I have to make an effort to dissemble my discomfort. [Wenn ich die Gruppe treffe, muss ich mich bemühen, mir mein Unbehagen nicht anmerken zu lassen.]

I feel bad when meeting the group. [Ich fühle mich schlecht, wenn ich mit der Gruppe zusammentreffe.]

Often I do not want to meet the group at all. [Oft will ich gar nicht mit der Gruppe zusammentreffen.]

When I am with the group I sometimes have "bellyache". [Ich habe manchmal richtig "Bauchschmerzen", wenn ich in der Gruppe bin.]

Often I go to the group's activities with an unpleasant feeling. [Ich gehe oft mit einem mulmigen Gefühl zu den Gruppenaktivitäten.]

I don't like spending time with the group. [Ich verbringe ungern meine Zeit mit der Gruppe.]

#### **Separation-intentions**

#### **Exit**

I doubt that I will remain in this group for long. [Ich bezweifle, dass ich noch lange in dieser Gruppe bleiben werde.]

I am thinking about leaving this group. [Ich überlege, die Gruppe wieder zu verlassen.]

I am thinking about backing out of this group. [Ich denke darüber nach, aus der Gruppe wieder auszusteigen.]

I will definitely leave this group. [Ich werde diese Gruppe mit Sicherheit verlassen.]

I will leave this group as soon as possible. [Ich werde diese Gruppe so schnell wie möglich verlassen.]

I will definitely remain a member of this group. [Ich werde mit Sicherheit Mitglied dieser Gruppe bleiben.] (reverse coded)

### Inner withdrawal

I come to the decision to only do what is essential form e as a member of this group. [Ich fasse den Entschluss, nur noch das zu tun, was für mich als Mitglied dieser Gruppe unbedingt notwendig ist.]

I attend my tasks in the group in such a way that my potential is not fully exhausted. [Ich erledige meine Aufgaben in der Gruppe auf eine Art und Weise, dass mein Potenzial nicht voll ausgeschöpft wird.]

I reduce my load by diminishing my commitment to the group. [Ich reduziere meine Belastung, indem ich meinen Einsatz für die Gruppe entsprechend verringere.]

I do what I have to do in the group, but without great dedication. [Ich tue in der Gruppe, was ich tun muss, aber ohne besonderes Engagement.]

## Satisfaction with group membership

Being a member of this group satisfies me. [Es erfüllt mich mit Zufriedenheit, Mitglied dieser Gruppe zu sein.]

Spending time with this group dissatisfies me. [Zeit mit dieser Gruppe zu verbringen macht mich unzufrieden.] (reverse coded)

### Study 2

All items were assessed on a 7-point scale ranging from 1 (not at all) to 7 (very much).

Please indicate in how far membership in your seminar group satisfies each of the needs listed below. [Bitte geben Sie an, inwieweit jedes der unten aufgelisteten Bedürfnisse im Allgemeinen durch die Mitgliedschaft in Ihrer Seminargruppe erfüllt wird.]

#### **Achievement needs**

Mastery [Können oder Meisterschaft]

Achievement [Leistung]

Success [Erfolg]

Accomplishing goals [Erreichen von Zielen]

Competence [Kompetenz]

#### **Affiliation needs**

Connectedness [Verbundenheit mit anderen]

Acceptance [Akzeptanz]

Comfort [Behaglichkeit und Trost]

Belonging [Zugehörigkeit]

Affiliation [Unterstützung und Rückhalt]

#### **Identity needs**

Sense of identity [Sinn für die eigene Identität]

Uniqueness [Einzigartigkeit]

Distinctiveness [Besonderheit]

Individuality [Individualität]

## **Identification with the group**

## Affective identification

I like being a member of my seminar group. [Ich bin gern Mitglied meiner Seminargruppe.]

I appreciate being a member of my seminar group. [Ich schätze es, Mitglied in meiner Seminargruppe zu sein.]

To be a member of my seminar group means very much to me. [Mitglied in meiner Seminargruppe zu sein bedeutet mir persönlich sehr viel.]

I often regret being a member of my seminar group. [Ich bedaure oft, Mitglied in meiner Seminargruppe zu sein.]

I am glad to belong to the members of my seminar group. [Ich freue mich, zu den Mitgliedern meiner Seminargruppe zu gehören.]

I feel strong ties with the members of my seminar group. [Ich fühle mich den Mitgliedern meiner Seminargruppe stark verbunden.]

## Cognitive identification

I feel as a member of my seminar group. [Ich fühle mich als Mitglied meiner Seminargruppe.]

I see myself as a member of my seminar group. [Ich sehe mich selbst als Mitglied meiner Seminargruppe.]

Being a member of my seminar group is important to me. [Es ist mir wichtig, ein Mitglied meiner Seminargruppe zu sein.]

I identify with the members of my seminar group. [Ich identifiziere mich mit den Mitgliedern meiner Seminargruppe.]

I am aware of being a member of my seminar group. [Ich lebe im Bewusstsein, ein Mitglied meiner Seminargruppe zu sein.]

## Affective rejection of the ingroup

Disidentification was measured using the same items as in Study 1.

#### **Separation-Intentions**

Exit, inner withdrawal, and satisfaction wit group membership were measured using the same items as in Study 1. In Study 2, the scale was extended by measures of willingness to reengage with other groups.

#### Group reengagement

I tell myself that I have a number of other new groups to draw on. [Ich sage mir selbst, dass ich eine Reihe anderer Gruppen habe, in die ich mich einbringen kann.]

I put effort toward other meaningful groups. [Ich investiere meine Zeit und Kraft lieber in andere Gruppen.]

I convince myself that I have other meaningful groups. [Ich mache mir bewusst, dass ich andere Gruppen habe, die mir wichtig sind.]

### Study 3

#### **Goal items**

The following items were assessed on a 6-point scale ranging from 1 (goal 1) to 6 (goal 6).

Group goal: Which goal does your team pursue in the current soccer season?

Individual goal: Which goal do you personally pursue in the current soccer season?

- 1. To be promoted to the first federal league
- 2. To achieve the second place in the table
- 3. To achieve the third place in the table
- 4. To achieve the sixth place in the table

5. To show good performance during the complete season

6. Not to perform worse than in last season

### **Social identification items**

All items were assessed on a 7-point scale ranging from 1 (not at all) to 7 (very much).

I feel strong ties with the members of my soccer team. [Ich fühle mich sehr mit meiner Fußballmannschaft verbunden.]

I like being a member of my soccer team. [Ich bin gern Mitglied meiner Fußballmannschaft.]

It is important for me to belong to my soccer team in the future. [Es ist mir wichtig, auch in Zukunft Mitglied meiner Fußballmannschaft zu sein.]

I feel as belonging to my soccer team. [Ich fühle mich meiner Fußballmannschaft zugehörig.]

### Study 4

### **Goal items**

Please think about the following task. How would the majority of members of your group answer the following question?

In the following task, we want to reach ... points.

Please answer the following question from your individual perspective.

In the following task, I want to reach ... points

#### **Self-construal items**

All items were assessed on a 7-point scale ranging from 1 (not at all) to 7 (very much).

## <u>Interdependent sub-scale</u>

I find it difficult to understand other people. [Es fällt mir schwer, mich in andere Menschen hineinzudenken.] (*reverse coded*)

I can comprehend others feelings only poorly. [Ich kann Gefühle von anderen nur schlecht nachvollziehen.] (reverse coded)

I can appraise others mood only insufficiently. [Ich kann die Stimmung anderer nur unzureichend einschätzen.] (reverse coded)

It does not matter whether I am there or not. [Es ist egal, ob ich da bin oder nicht.] (reverse coded)

I am a great support for my family. [Ich bin eine große Stütze für meine Familie.]

I am irreplacable for my friends. [Für meine Freunde bin ich unersetzbar.]

My family can count on me. [Meine Familie kann sich auf mich verlassen.]

My friends and acquaintances regard me. [Meine Freunde und Bekannten schätzen mich.]

I like being together with my friends. [Ich bin gern mit meinen Freunden zusammen.]

I feel comfortable with my friends. [Bei meinen Freunden fühle ich mich wohl.]

It is important to me to cultivate friendships. [Mir ist es wichtig, meine Freundschaften zu pflegen.]

#### Independent sub-scale

I have a fulfilled life. [Ich habe ein ausgefülltes Leben.]

I feel unwell in my skin. [Ich fühle mich unwohl in meiner Haut.] (reverse coded)

Only few things I do are really important. [Nur weniges, was ich tue, ist wirklich wichtig.] (reverse coded)

I am afraid there is only little that I can be proud of. [Ich fürchte, es gibt nur wenig, worauf ich wirklich stolz sein kann.] (reverse coded)

I like myself the way I am. [Ich mag mich, so wie ich bin.]

I have experienced much positive so far. [Bisher habe ich viel Positives erlebt.]

I am easy to replace. [Ich bin leicht ersetzbar.] (reverse coded)

In general, I am satisfied with myself. [Allgemein betrachtet, bin ich mit mir zufrieden.]

I like myself. [Ich habe mich gern.]

I am unimportant. [Ich bin unwichtig.] (reverse coded)

I see myself as a valuable person. [Ich sehe mich als einen wertvollen Menschen.]

(Adapted from Pöhlmann, C., Hannover, B., Kühnen, U., & Birkner, N., 2002))

Summary 114

# Summary

This dissertation was based on a number of premises: First, research has shown that people readily distinguish between different types of groups (Brown & Torres, 1996; Lickel et al., 2000; Lickel et al., 2001; Hamilton, 2007). Secondly, different types of groups are associated with the fulfilment of specific types of needs (Aharpour & Brown, 2002; Deaux et al., 1999; Johnson et al., 2006). Thirdly, people are inclined to belong to groups that have the potential to fulfil their current individual needs (Correll & Park, 2005; Moreland & Levine, 2002; Packer, 2008). One related consequence of this perception that a specific group serves the fulfilment of current individual needs or identity functions is that people identify with that group (Aharpour & Brown, 2002; Correll & Park, 2005; Hamilton, 2007).

The current dissertation integrated these insights and extended them by investigating the complete picture of how being a group member relates to perceived need fulfilment through group membership, how this perception is impaired, and what the consequences of such impairment are. Thus, the focus of the present research was the occurrence and impact of the perception that membership in a specific group does not serve the fulfilment of current individual needs (any longer). Of such individual needs, three have been identified that are presumably fundamental: The need for self-esteem or identity, the need to belong, and the need for achievement (Baumeister & Leary, 1995; DeShon & Gillespie, 2005). While research exists that allows for conclusions regarding the regulation of the need for esteem or identity (e.g., Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999) and the need to belong (e.g., Brewer, 1991; Knowles & Gardner, 2008) in group contexts, to my knowledge, no comparable research exists regarding the regulation of achievement needs. To fill this gap and complete the picture, the current dissertation focused on the regulation of individual achievement needs in the context of task groups. Task groups have been shown to be associated predominantly with the need for achievement, as opposed to the need for selfesteem or identity and the need to belong (Johnson et al., 2006). Discrepancies should thus be experienced when individual achievement needs cannot be fulfilled through group membership. In line with the notion that experiences of discrepancy elicit corrective actions (Carver & Scheier, 1998, 2000; Higgins, 1987), I have argued and shown that group members can adopt several strategies to cope with these experiences of goal-divergence. These strategies were goal negotiation, goal adjustment so that correspondence is re-established, and to exit the group.

Summary 115

Four studies were conducted that manipulated vs. measured goal-divergence, that involved tasks that emphasized individual accomplishments vs. responsibility toward the group outcome, and that used experimental vs. natural groups. The studies convincingly demonstrated that experiences of divergent individual and group goals are part of individuals' social reality. The psychological impact of goal-divergence was immense. Goal-divergence was shown to affect identification with the group (Study 2), affective rejection of the group (Studies 1 and 2), intentions to exit the group (Studies 1 to 4), individual goals and group goals (Studies 3 and 4), beliefs about group efficacy and self efficacy and commitment to individual goals (Study 4). In addition, findings indicate that group members' responses to goaldivergence vary as a function of how important they regard group membership (Studies 3 and 4). For example, in the context of a soccer team (Study 3), low, as opposed to high identifiers reported more exit-intentions when goals were divergent. Finally, Studies 3 and 4 suggest that especially those individuals who regard group membership as important find very creative ways to prolong the group's potential to fulfil their current needs, for instance by adjusting the individual goal (assimilation) or by adjusting the group goal (accommodation). Given these findings, one can conclude that goal-divergence impacts on group functioning, on individual functioning within groups, and on the relation between individuals and groups.

Responses to goal-divergence can be understood as strategies that individuals adopt as a means to regulate the fulfilment of current achievement needs within task groups. Although the research presented herein focused on a specific type of group and a specific type of need, I have argued for the need to integrate these findings into a greater framework for strategies that refer to individual need fulfilment within group contexts. Social identity theory (SIT; Tajfel & Turner, 1979) provides such a framework. However, due to the implicit assumption of SIT that all groups are psychologically equivalent, the theory has a rather narrow focus on needs for self-esteem and identity (Brown, 2002). Taking into account the variety of groups and needs that obviously exist would stimulate a fertile and theoretically sound extension of SIT and allow for a better understanding of social identity mechanisms (Brown, 2000).

The current dissertation contributes to a better understanding of the role of needs for individuals' behaviour in groups. It underlines that the relationship between individuals and groups must be approached bidirectionally (Jetten & Postmes, 2006; Packer, 2008) and demonstrates the dynamic and ongoing usage of need regulation strategies that individuals use to make the relationship between themselves and their groups most rewarding for both sides.

Zusammenfassung 116

# Zusammenfassung

Die vorliegende Dissertation basiert auf mehreren Forschungsbefunden. Zum einen wurde gezeigt, dass Menschen verschiedene Arten von Gruppen unterscheiden (Brown & Torres, 1996; Lickel et al., 2000; Lickel et al., 2001; Hamilton, 2007). Des Weiteren werden verschiedene Arten von Gruppen mit der Befriedigung unterschiedlicher Bedürfnisse assoziiert (Aharpour & Brown, 2002; Deaux et al., 1999; Johnson et al., 2006). Menschen streben außerdem eine Mitgliedschaft in solchen Gruppen an, welche potentiell ihre aktuellen individuellen Bedürfnisse befriedigen können (Correll & Park, 2005; Moreland & Levine, 2002; Packer, 2008). Eine Konsequenz aus der Wahrnehmung, dass eine Gruppe der Befriedigung eines aktuellen individuellen Bedürfnisses dient, ist die Identifikation mit dieser Gruppe (Aharpour & Brown, 2002; Correll & Park, 2005; Hamilton, 2007).

In der vorliegenden Dissertation wurden diese Erkenntnisse integriert und erweitert. Es wurde Gruppenmitgliedschaft untersucht, wie mit wahrgenommener Bedürfnisbefriedigung in Verbindung steht, was diese Wahrnehmung beeinträchtigt, und was die Folgen einer solchen Beeinträchtigung sind. Der Fokus der vorliegenden Arbeit lag demzufolge auf der Wahrnehmung, dass die Mitgliedschaft in einer bestimmten Gruppe die Befriedigung aktueller individueller Bedürfnisse nicht (mehr) gewährleistet. Drei fundamentale menschliche Bedürfnisse sind identifiziert worden: Das Bedürfnis nach Selbstwert bzw. Identität, das Bedürfnis nach Zugehörigkeit, sowie das Bedürfnis nach Leistung (Baumeister & Leary, 1995; DeShon & Gillespie, 2005). Während es Forschungsarbeiten gibt, welche Schlüsse über die Regulation der Bedürfnisse nach Selbstwert bzw. Identität (z.B. Blanz et al., 1998; Kessler & Mummendey, 2002; Mummendey et al., 1999) und nach Zugehörigkeit (z.B. Brewer, 1991; Knowles & Gardner, 2008) in Gruppenkontexten zulassen, existiert nach meinem Wissen keine vergleichbare Forschung zur Regulation von Leistungsbedürfnissen. Um diese Lücke zu schließen und das Bild zu komplettieren, wurde in der vorliegenden Dissertation die Regulation von individuellen Leistungsbedürfnissen im Kontext von Arbeitsgruppenuntersucht. Arbeitsgruppen werden überwiegend mit Leistungsbedürfnissen und weniger mit dem Bedürfnis nach Selbstwert bzw. Identität oder nach Zugehörigkeit assoziiert (Johnson et al., 2006). Diskrepanzerleben sollte daher aus der Wahrnehmung entstehen, dass individuelle Leistungsbedürfnisse nicht durch die bestehende Gruppenmitgliedschaft befriedigt werden können. Ausgehend davon, dass Diskrepanzerleben korrektive Handlungen auslöst (Carver &

Zusammenfassung 117

Scheier, 1998, 2000; Higgins, 1987) habe ich angenommen und gezeigt, dass Gruppenmitglieder verschiedene Strategien anwenden können, um auf dieses Diskrepanzerleben zu reagieren. Diese Strategien waren Zielverhandlungen, Zielanpassung, sowie das Verlassen der Gruppe.

In vier Studien wurde Zieldivergenz manipuliert vs. gemessen, es wurden Aufgaben verwendet, die individuelle Leistungen vs. Verantwortung für das Gruppenergebnis betonten, und es wurden experimentelle vs. natürliche Gruppen verwendet. Die Studien zeigten überzeugend, dass das Erleben von Zieldivergenz Teil der sozialen Realität von Menschen ist. Zieldivergenz hat bedeutenden Einfluss auf psychologische Variablen: Zieldivergenz beeinflusst Identifikation mit der Gruppe (Studie 2), affektive Ablehnung der Gruppe (Studie 1 und 2), Intentionen, die Gruppe zu verlassen (Studien 1 bis 4), individuelle Ziele und Gruppenziele (Studie 3 und 4), Annahmen über die Wirksamkeit der Gruppe und des Selbst, sowie die Verbundenheit mit individuellen Zielen (Studie 4). Darüber hinaus weisen die Befunde darauf hin, dass Reaktionen auf Zieldivergenz in Abhängigkeit davon variieren, wie wichtig einem Individuum die Mitgliedschaft in der Gruppe ist (Studien 3 und 4). So berichteten niedrig, nicht jedoch hoch identifizierte Mitglieder einer Fußballmannschaft stärkere Intentionen, die Gruppe zu verlassen wenn Ziele divergierten (Studie 3). Schließlich geben Studie 3 und 4 Hinweise darauf, dass besonders die Individuen, denen die Gruppenmitgliedschaft wichtig ist, sehr kreative Wege finden, um das Potential der Gruppe aufrecht zu erhalten, ihre individuellen Bedürfnisse zu befriedigen, beispielsweise indem sie ihre individuellen Ziele dem Gruppenziel anpassen (Assimilation) oder aber die Gruppenziele ihrem individuellen Ziel anpassen (Akkommodation). Aus diesen Befunden lässt sich schließen, dass Zieldivergenz das Funktionieren einer Gruppe, das Funktionieren von Individuen innerhalb von Gruppen, sowie die Beziehung zwischen Individuen und Gruppen beeinflusst.

Reaktionen auf Zieldivergenz sollten als Strategien verstanden werden, welche Individuen zur Regulation aktueller Leistungsbedürfnisse innerhalb von Arbeitsgruppen anwenden können. Trotz des Fokus' der vorliegenden Dissertation auf einer bestimmten Art von Gruppe und auf einem bestimmten Bedürfnis, habe ich dafür plädiert, diese Befunde in einen übergreifenderen Rahmen für Strategien zur individuellen Bedürfnisbefriedigung innerhalb von Gruppen zu integrieren. Die Theorie der sozialen Identität (SIT; Tajfel & Turner, 1979) bietet einen solchen Rahmen. Leider beschränkt die SIT, basierend auf der

Zusammenfassung 118

impliziten Annahme, alle Gruppen seien psychologisch äquivalent, ihren Fokus auf Bedürfnisse nach Selbstwert bzw. Identität (Brown, 2002). Die offensichtlich bestehende Vielfalt von Gruppen und Bedürfnissen anzuerkennen würde eine fruchtbare und theoretisch plausible Erweiterung und Verfeinerung der SIT erlauben (Brown, 2000).

Die vorliegende Dissertation erweitert unser Verständnis dafür, welche Rolle Bedürfnisse für das Verhalten von Individuen in Gruppen spielen. Die Arbeit unterstreicht, dass die Beziehung zwischen Individuen und Gruppen bidirektional untersucht werden muss (Jetten & Postmes, 2006; Packer, 2008) und demonstriert, wie Strategien zur Bedürfnisregulation von Individuen dynamisch und überdauernd angewendet werden, um die Beziehung zwischen sich selbst und der Gruppe so zu gestalten, dass diese für beide Seiten lohnenswert ist.

Curriculum Vitae 119

# **Curriculum Vitae**

Name: Susanne Täuber
Geburtsdatum: 04.03.1980
Geburtsort: Erfurt

Familienstand: Lebensgemeinschaft, zwei Kinder

Bildungsweg

Universitäten

06/2004-11/2009 Doktorandin (Forschungsstipendium der DFG) am Internationalen

Graduierten Kolleg "Conflict and Tolerance Between Social Groups",

Friedrich-Schiller-Universität Jena

10/1999-04/2004 Studium der Psychologie an der Friedrich-Schiller-Universität Jena

(Diplom), im Nebenfach Studium der Interkulturellen

Wirtschaftskommunikation

Schulen

09/1991-07/1998 Gymnasium Albert Einstein Erfurt (Abitur)

08/1986-06/1991 Grundschule POS 48 Erfurt

Freiwilliges Soziales Jahr

09/1998-09/1999 Freiwilliges Soziales Jahr, Jugendherberge Erfurt

Jena, 18. 11. 2009

Ort, Datum Unterschrift

Ehrenwörtliche Erklärung

120

Ehrenwörtliche Erklärung

Ich erkläre hiermit, dass mir die Promotionsordnung der Fakultät für Sozial- und

Verhaltenswissenschaften 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 Datenerhebung haben mich Johanna Maier und Vivien Raffel in ihrer Funktion als

Forschungsstudentin bzw. studentische Hilfskraft unterstützt. Weitere Personen waren an der

Erstellung der Arbeit nicht beteiligt.

Insbesondere habe ich nicht die Hilfe eines Promotionsberaters in Anspruch genommen und

Dritte haben weder unmittelbar noch mittelbar geldwerte Leistungen von mir für Arbeiten

erhalten, die im Zusammenhang mit dem Inhalt der vorgelegten Dissertation stehen.

Die vorliegende Dissertation wurde weder im In- noch im Ausland in gleicher oder ähnlicher

Form bei einer anderen staatlichen oder wissenschaftlichen Prüfungsbehörde eingereicht.

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.

Jena, 18. 11. 2009

Ort, Datum

Unterschrift