# Similarity as a source of differentiation: the role of group identification

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*Abstract*

*The present research examines the relation between perceived intergroup distinctiveness and positive intergroup differentiation. It was hypothesised that the distinctiveness–differentiation relation is a function of group identification. In two studies group distinctiveness was varied and level of identification was either measured (Study 1) or manipulated (Study 2). Results support the prediction that low group distinctiveness leads to more positive differentiation for high identifiers, although we found less support for the prediction that increased group distinctiveness leads to enhanced positive differentiation for low identifiers. The difference in emphasis between social identity theory and self-categorisation theory concerning the distinctiveness–differentiation relation is discussed and the importance of group identification as a critical factor of this relationship is stressed. Copyright © 2001 John Wiley & Sons, Ltd.*

The notion that perceptions of intergroup distinctiveness can affect the level of intergroup differentiation is central to intergroup theories such as social identity (Tajfel, 1978; Tajfel & Turner, 1986), and the closely related self-categorisation theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Group distinctiveness is defined as the perceived difference or dissimilarity between one's own group and another group on a relevant dimension of comparison (e.g. attitude, status). It is assumed that group distinctiveness will affect the behaviours and perceptions of group members, and influence the level of positive differentiation they are willing to display (defined as the process of differentiating the ingroup positively from the outgroup on a relevant dimension). However, previous research findings in this domain are rather equivocal. It appears that the relation between perceived intergroup distinctiveness and positive differentiation is complex and far from straightforward (Brown, 1984a; Henderson-King, Henderson-King, Zhermer, Posokhova, & Chiker, 1997; Jetten, Spears, & Manstead, 1996, 1998, 1999; Moghaddam & Stringer, 1988; van Knippenberg, & Ellemers, 1990). In the present research we propose that the moderating effect of group identification can

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help to resolve both the empirical and theoretical complexity of the distinctiveness–differentiation relation.

It is often observed that groups feel threatened when they are too similar to an outgroup on an important dimensions of comparison, and that this stimulates differentiation between them. For example, for political parties an ideology that is *different* on fundamental issues from other political parties is central to their existence (Roccas & Schwartz, 1993). Too much similarity in political agendas may be perceived as a threat to distinct identity and even the group's *raison d'être*. Religious groupings keen to protect their distinctiveness from competing groups can evoke similar fervour among their members (Sani & Reicher, 1998). The notion that groups will feel threatened when groups become too similar, and want to restore clear water between them, was referred to by Freud (1922) as 'the narcissism of small differences'. There is now considerable empirical evidence, mostly from a social identity framework (Tajfel, 1978, 1982; Tajfel & Turner, 1986), that positive differentiation increases when group distinctiveness is low and threatened by similarity of a relevant outgroup (e.g. Diehl, 1988; Dovidio, Gaertner, & Validzic, 1998; Moghaddam & Stringer, 1988; Roccas & Schwartz, 1993; Spears, Doosje & Ellemers, 1997; Turner, 1978).

However, there is also empirical evidence that increased differentiation occurs between groups when groups and their values clearly differ (e.g. Berry, Kalin, & Taylor, 1977; Brewer & Campbell, 1976; Hensley & Duval, 1976; Mummendey & Schreiber, 1984; Rokeach, 1960). Linguistic, national and cultural differences can sometimes be used as the basis for differentiation and even discrimination, whereas intergroup similarity can sometimes form the basis of a common group membership and mutual attraction. This finding and prediction is consistent with similarity-attraction theory (Byrne, 1971) as applied to social groups (e.g. Rokeach, 1960). It is also consistent with many models of the social categorisation process (e.g. Doise, 1978), and perhaps most notably self-categorisation theory (Turner, 1987).

## THE MODERATING ROLE OF GROUP IDENTIFICATION

A number of factors have been proposed that are assumed to moderate the distinctiveness–differentiation relationship. These include the importance of the dimension of comparison on which distinctiveness is threatened (Brown, 1984b, Brown & Abrams, 1986; Henderson-King *et al.*, 1997; Roccas & Schwartz, 1993), perceived threat to important versus more peripheral dimensions of comparison (Moghaddam & Stringer, 1988; Mummendey & Schreiber, 1984; Roccas & Schwartz, 1993; Wilder, 1986), the imposition of a superordinate categorisation on ingroup and outgroup (Dovidio *et al.*, 1998; Hornsey and Hogg, 2000), the degree of prototypicality of the ingroup member (Jetten *et al.*, 1997) and the nature of intergroup contact (Brown, 1984b; Brown & Abrams, 1986). However, the moderating factor that has received most attention within previous research is the degree of identification with the group (e.g. Deschamps & Brown, 1983; Henderson-King *et al.*, 1997; Jetten *et al.*, 1996; Moghaddam & Stringer, 1988; Roccas & Schwartz, 1993).

The present research attempts to clarify the conditions under which group distinctiveness increases or decreases positive differentiation between groups as a function of level of identification. On the basis of social identity theory it is argued that a significant part of our identity is derived from the groups to which we belong (Tajfel & Turner, 1986). However, it is also apparent that not all groups are equally important to us and that not all groups contribute to the same extent to our positive identity (Branscombe, Wann, Noel, & Coleman, 1993; Doosje, Ellemers, & Spears,

1995; Spears *et al.*, 1997; Turner, Hogg, Oakes, & Smith, 1984). In this research it is generally found that high identifiers are more willing than low identifiers to defend the group when group identity is threatened. In short, to the extent that intergroup similarity threatens group distinctiveness, high identifiers should be particularly motivated to differentiate themselves from the outgroup on relevant dimensions. Low identifiers, on the other hand, may be insufficiently invested in or aware of their group identity to maintain this as a separate identity when it seems that their group is virtually identical to the outgroup. In this event, they may be more likely than high identifiers to embrace a superordinate identity that includes both groups, or to focus on individual or alternative social identities, resulting in a reduced tendency to positively differentiate the groups. If the groups become more distinctive, however, the entitativity and reality of the groups may be harder to miss or to deny, and positive differentiation may become a meaningful strategy of self-enhancement. Low identifiers may therefore be more concerned with establishing clear ingroup-outgroup distinctiveness as a prerequisite for differentiation (Jetten *et al.*, 1996), such that for them high group distinctiveness should result in most positive differentiation. It could be argued that high identifiers might also appreciate the separateness of groups when group distinctiveness is high, leading them to engage in increased positive differentiation. Thus, although we predict differences as a function of group identification when distinctiveness is low, it remains an empirical question whether group identification moderates the relationship between distinctiveness and differentiation to the same extent when intergroup distinctiveness is high.

What is the empirical evidence to support this rationale? To our knowledge only a recent study by Henderson-King *et al.* (1997) has directly examined the moderating role of this variable on differentiation by measuring identification with Russia and classifying group members as high-and-low-identifying Russians. Perceptions of similarity to Ukrainians, Moldavians and Georgians were measured in this study, but no support was found for the prediction that similarity to these groups would lead to increased ingroup favouritism by high identifiers. Spears *et al.* (1997) also examined the interaction between perceived threats to group distinctiveness and identification, and they found more support for the prediction that high identifiers would react more strongly than low identifiers to a distinctiveness threat. However, their main dependent measure was self-stereotyping rather than positive differentiation, although self-stereotyping was assumed to underlie positive differentiation processes.

Further indirect support for the proposed moderating effect of identification comes from two studies by Jetten *et al.* (1996). Here group distinctiveness was manipulated by providing feedback about ingroup and outgroup norms in a minimal group (Experiment 1) and in a more natural group where the identification with the group was higher (Experiment 2). The *combination* of ingroup and outgroup norms proved to be an important determinant of level of positive differentiation. Dissimilarity of group norms (an ingroup norm of fairness and an outgroup norm of discrimination, or vice versa) led to more positive differentiation in the minimal group study than did similarity of intergroup norms (both groups had norms of fairness or discrimination). However, in a more natural group setting, similarity of intergroup norms led to more ingroup bias and ingroup favouritism. In line with the reasoning in the present research, it was argued that because the general level of identification tends to be higher in natural groups compared to laboratory groups, low group distinctiveness might be threatening in natural groups, leading to increased differentiation. Conversely, it may help to define the groups when groups are relatively unestablished. However, it should be noted that the moderating role of identification was not explicitly examined in the Jetten *et al.* (1996) research, and empirical evidence for an explanation in terms of differences in identification *per se* was lacking. Direct empirical evidence for the moderating role of identification would extend this research.

## SOCIAL IDENTITY VERSUS SELF-CATEGORISATION THEORY

Although it has been acknowledged within social identity theory that similarity between groups is not necessarily detrimental for intergroup relations (e.g. Brown & Abrams, 1986; Moghaddam & Stringer, 1988), the prediction that dissimilarity might motivate increased intergroup differentiation is better grounded in the cognitive counterpart of social identity theory: self-categorisation theory (see Jetten *et al.*, 1996, 1998, 1999). In fact, these opposing predictions with respect to low versus high committed group members parallel the opposing emphases of social identity theory and self-categorisation theory. Social identity theory (Tajfel & Turner, 1986) stresses the motivational aspects of group distinctiveness and proposes that the more group distinctiveness is threatened by similarity of an outgroup, the more group members will try to re-establish their threatened identity by differentiating the ingroup positively from the outgroup (Brown, 1984a,b; Brown & Abrams, 1986; Dovidio *et al.*, 1998; Moghaddam & Stringer, 1996; Jetten *et al.*, 1996; Tajfel, 1982; Turner, 1978). On the other hand, self-categorisation principles might be helpful in this research context to theoretically explain that distinctiveness might also lead to increased differentiation. Self-categorisation theory (Turner *et al.*, 1987) focuses on the cognitive and perceptual aspects of the distinctiveness– differentiation relation. It is predicted that separateness of and distinctiveness between ingroup and outgroup (e.g. high meta-contrast and high comparative fit) increase the perceived intergroup salience of the categorisation and that this will lead to increased levels of positive differentiation (Jetten *et al.*, 1996, 1998; Oakes, 1987).

We have argued that these predictions from social identity theory and self-categorisation theory should not be seen as being in opposition but rather as representing different theoretical emphases open to theoretical integration (Jetten *et al.*, 1998, 1999). Supporting this integration, we found support for a curvilinear relation between group distinctiveness and intergroup differentiation, such that positive differentiation was highest at a moderate level of group distinctiveness (Jetten *et al.*, 1998; see also Rokeach, 1960). In line with self-categorisation theory, it was found that low intergroup distinctiveness undermined the separateness of groups and led to less intergroup differentiation compared to the case where groups were close but clearly separate (moderate level of group distinctiveness). This research demonstrates the importance of being aware of how the continuum of group distinctiveness is defined.[1]

## THE PRESENT RESEARCH

The two studies reported below test the prediction that level of identification with the group is a critical moderator, predicting when distinctiveness will reduce or increase positive differentiation. In order to assess the robustness of this prediction we employ the two different paradigms used to manipulate distinctiveness in our previous research: (a) by providing graphical feedback about group distributions

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[1]The present research (in particular, Study 1) also aims to extend the Jetten *et al.* (1998) finding of a curvilinear relationship between group distinctiveness and positive differentiation. It seems at first sight that the Jetten *et al.* (1998) research is inconsistent with the above reasoning that identification is an important moderating variable, because the curvilinear pattern of results was remarkably consistent across a minimal (Experiment 1) and a more natural group setting (Experiment 2). In line with the reasoning here for low identifiers, low distinctiveness led to reduced positive differentiation in minimal groups (Experiment 1). However, contrary to the present reasoning, we also found that low distinctiveness led to reduced differentiation in natural groups where the identification is assumed to be higher (Experiment 2). In retrospect this may have been because the dimension used to manipulate distinctiveness was not sufficiently important to group members and thus did not evoke a threat to group distinctiveness. The present studies therefore employ dimensions that are more important to group members.

(Study 1; see Jetten *et al.*, 1998), and (b) by providing feedback about similar versus different group norms (Study 2; see Jetten *et al.*, 1996). Furthermore, the role of identification is examined by both measuring (Study 1) and manipulating (Study 2) this construct, in order to maximise external and internal validity, thereby providing a more compelling test of the moderating potential of this variable.

## STUDY 1

The first study builds on previous research by Jetten *et al.* (1998) where it was argued that distinctiveness is not only determined by the mean difference between ingroup and outgroup, but also by information about the distributions or variability of ingroup and outgroup (see also Doosje *et al.*, 1995; Ford & Stangor, 1992; Lambert, 1995; Oakes, Haslam, & Turner, 1994). In line with this reasoning, group distinctiveness was manipulated by providing graphical feedback about group distributions in which the variability of ingroup and outgroup information was varied while intergroup distance was kept constant.[2] For high identifiers, in line with social identity principles, positive intergroup differentiation should be higher when group distinctiveness is low and thus most threatened (i.e. assuming the dimension of comparison is valued). For low identifiers, in contrast, positive differentiation should be lowest under conditions of low distinctiveness because the groups will be difficult to distinguish meaningfully. Conversely moderate distinctiveness (no overlap between the groups) should provide a sufficient basis for low identifiers to distinguish the groups meaningfully and to positively differentiate the ingroup (Jetten *et al.*, 1998). However, it remains an empirical question how powerful the latter process will be, and whether it is more influential for low than for high identifiers.

Identity as a student of the University of Amsterdam was made salient and group identification was measured. The criteria for selecting a dimension of comparison were that it was meaningful to group members but also relatively evaluatively neutral. Neutrality of the comparison dimension is important in order to avoid a confound between the manipulation of group distinctiveness and the valance of the dimension. With these criteria in mind we chose 'level of extroversion', which previous research had shown to be relatively neutral, but which as a central personality dimension we thought would be relatively important. Positive differentiation was measured by tapping the extent to which participants cognitively differentiated the ingroup from the outgroup on a range of dimensions seen as stereotypic of each group (see Jetten *et al.*, 1998).

### Method

*Participants and Design*

Participants were 119 students (66 females and 53 males, with an average age of 22 years) at the University of Amsterdam. Participants received 10 Dutch guilders (approximately $6) for their participation. The design consisted of one manipulated variable: group variability (homogenous/distinctive vs. heterogeneous/similar) and one measured variable: group identification. Participants were randomly allocated to the group variability manipulation.

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[2]In order to create a less complex design we decided to replicate only the low and moderate distinctiveness conditions of the Jetten *et al.* (1998) design. The intergroup distance was similar to the low intergroup distance condition of the earlier studies. Group distinctiveness was at a moderate level when both groups were homogeneous, and low when ingroup and outgroup scores were heterogeneous and thus overlapping. The high intergroup distinctiveness condition was therefore excluded. However, this should still allow the testing of the differential predictions for high and low identifiers.

*Procedure*

The experiment was run on personal computers. Participants were told that the study involved a comparison between students of the University of Amsterdam and students of the Free University on the dimension 'extroversion'. Participants first completed a 12-item questionnaire to measure their own level of extroversion. Example items are: 'I do not like crowded parties' and 'I like being the centre of attention'. Next, as in the Jetten *et al.* (1998) research, a group task was performed (see Doosje *et al.*, 1995) in order to increase the meaningfulness of the ingroup and the salience of the groups.

*Independent Variables*

Participants were then informed that they would be provided with some preliminary results of this research. They would see the distribution of scores of University of Amsterdam and Free University students who had previously completed the extroversion questionnaire. Scores of the University of Amsterdam (ingroup) and Free University (outgroup) on the extroversion scale were displayed for 20 seconds on a continuum ranging from 'very low in extroversion' (0) to 'very high in extroversion' (100). In accordance with existing stereotypes of students at these universities, the University of Amsterdam was situated near the 'high in extroversion', and the Free University near the 'low in extroversion' extreme in all conditions. Intergroup distance was kept constant in both conditions. The mean score for the outgroup was 38 and that for the ingroup was 62. Variability was manipulated by varying the *range of scores* of the two groups. The difference between the most introvert and most extrovert Free University student was 43 points on the continuum in the heterogeneous condition and 20 points in the homogeneous condition. The same ranges were used for University of Amsterdam students. As a consequence of the variability manipulation, the heterogeneous distance condition resulted in an 'Overlap' area between the two groups. Scores of both Free University and University of Amsterdam students were located in this area (18 points on the continuum). The homogeneous conditions had no overlap area. After participants had studied these histograms for 20 seconds, they were provided with a written interpretation of the results (projected on the screen together with the histogram).

*Dependent Variables*

Before participants were exposed to the manipulations, identification as a student of the University of Amsterdam was measured using four items such as: 'I identify with students of the University of Amsterdam' (100-point scales) (Jetten *et al.*, 1996). Furthermore, before giving (false) feedback for University of Amsterdam and Free University students, the perceived importance of this dimension of comparison was measured with the item 'The dimension "level of extroversion" is important to me'. We also measured how positively participants evaluated the extroversion dimension with the item 'I think extroversion is a positive personality trait'. These two items were rated on 100-point scales ranging from 'not at all' (0) to 'very much' (100). The manipulation of group variability was checked by asking participants to indicate on a 9-point scale, ranging from 'not at all' (1) to 'very much' (9), the extent to which University of Amsterdam students can be seen as different from each other, and the extent to which Free university students can be seen as different from each other ($\alpha = 0.78$). Perceived intergroup distance was measured with the item 'To what extent did you think the *means of both groups* (which you can find in the middle of the distribution) were different?' [rated on a 9-point scale ranging from 'not at all' (1) to 'very much' (9)].

*Stereotypic Differentiation*

Stereotypes of the ingroup and of the outgroup were measured by 11 traits selected on the basis of a pilot study as being stereotypical for University of Amsterdam *or* Free University students (Jetten *et al.*, 1997, 1998). Participants were asked to indicate the position of a trait on a bipolar scale on which the ingroup was located at the left (0) and the outgroup on the right pole (100). The reason for using such a scale is that we wanted to examine not only whether a trait was applicable to the ingroup or outgroup, but also the extent to which a trait was seen as applicable (see Jetten *et al.*, 1998, Experiment 2). As in the Jetten *et al.* (1998) study, six of the 11 dimensions (original, independent, social, outgoing, politically aware, slovenly) were more strongly associated with University of Amsterdam students, as indicated by a significant deviation from the neutral midpoint. The traits serious, quiet, conventional, dull, and diligent were judged to be more typical of Free University students. The ingroup and outgroup traits were separately averaged ($\alpha s = 0.51$ and 0.71, respectively) and recoded as the difference from 50 (the neutral scale point), with higher scores indicating more ingroup or outgroup stereotyping. Although the Cronbach's alphas are only moderate, this is perhaps not surprising given that they cover a range of stereotypic dimensions. Given that we are primarily interested here in stereotypic differentiation *per se* it seems warranted to aggregate over scales.

## Results

*Manipulation Checks*

The dimension extroversion was rated as quite important ($M = 64.4$) and as a neutral personality trait ($M = 47.78$). Neither group identification nor perceived importance of the dimension of comparison varied as a function of group variability.

Analysis of the manipulation check for group variability revealed a significant difference between the homogeneous and heterogeneous condition, $t(117) = 6.47$, $p < 0.001$. Ingroup and outgroup were perceived as less variable in the homogeneous condition ($M = 4.08$), than in the heterogeneous condition ($M = 5.69$). Furthermore, as predicted, participants did not perceive the intergroup distance differently in the homogeneous than in the heterogeneous condition, $t(117) = 1.19$, *ns*.

*Stereotypic Differentiation*

The ingroup and outgroup stereotyping scores were analysed using multiple regression procedures in which the group identification score was centred and the manipulation of group variability dummy coded (Jaccard, Turrisi, & Wan, 1990). In two analyses, outgroup and ingroup stereotyping were regressed on identification, group variability and the interaction between identification and group variability.

Analysis of the outgroup stereotyping scores revealed that group variability and identification did not account for a significant amount of variance in outgroup stereotyping, $R = 0.16$, $F(2, 115) = 1.57$, *ns*. Introduction of the interaction term explained a significant amount of additional variance ($R_{Ch.} = 0.12$, $F(1, 115) = 6.25$, $p < 0.05$), and the interaction term was significant, $t(117) = 2.55$, $p < 0.05$ (see Figure 1 for the interaction between group variability and identification on outgroup stereotyping). Analysis of the slopes revealed, in line with predictions, that when groups were heterogeneous, the more participants identified with their group, the more they stereotyped the outgroup, $\beta = 0.34$, $p < 0.01$. The effect for homogeneous groups was negative but weaker, $\beta = -0.08$, *ns*.
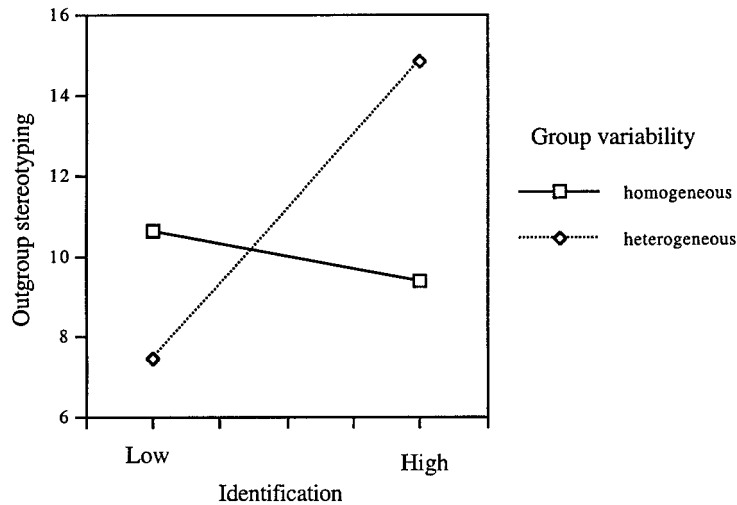
Figure 1.   *Study 1*: Outgroup stereotyping as a function of group variability and group identification

Group variability and identification failed to account for a significant amount of variance in ingroup stereotyping, $R = 0.15$, $F(2, 115) = 1.25$, *ns*. Introduction of the interaction term explained a marginally significant amount of additional variance ($R_{ch.} = 0.07$, $F(1, 114) = 3.75$, $p < 0.10$), and the interaction term was marginally significant, $t(117) = 1.81$, $p = 0.07$. The interaction between group variability and identification on ingroup stereotyping is displayed in Figure 2. Analysis of the slopes revealed that when groups were heterogeneous, the more participants identified with their group, the more they stereotyped the ingroup, $\beta = 0.24$, $p = 0.06$. When the groups were perceived as homogeneous, a non-significant negative relationship was found between identification and ingroup stereotyping, $\beta = -0.09$, *ns*.
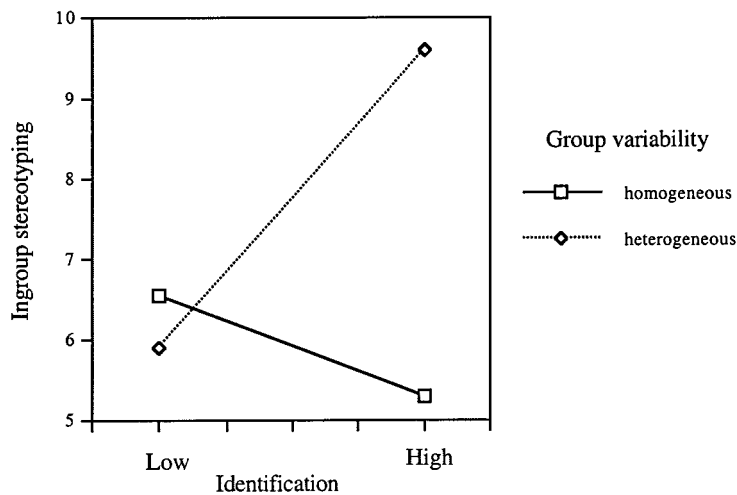


Figure 2.   *Study 1*: Ingroup stereotyping as a function of group variability and group identification

**Discussion**

The results this study support the prediction that group identification moderates the group distinctiveness–differentiation relation. High identification led to more outgroup and ingroup stereotyping when group distinctiveness was low (heterogeneous groups) than when it was moderate (homogeneous groups). Although there was a tendency for outgroup and ingroup stereotyping to increase when identification was low and when groups were homogeneous (in line with the self-categorisation prediction), slope analysis revealed that this difference did not reach acceptable levels of significance. It is possible that the weak support for the prediction that low identifiers would display higher levels of positive differentiation when distinctiveness is high rather than low was due to the fact that the dimension 'extroversion' was more personally involving than the dimensions used in previous research (e.g. Jetten *et al*., 1998). The use of a more involving dimension might have heightened perceptions of threat when group distinctiveness was low (see General Discussion for further discussion of this point).[3]

## STUDY 2

A possible weakness of the explanation in terms of group identification in Study 1 is that this factor was measured rather than manipulated. In a second study we examined the basis of such differences by experimentally manipulating the proposed moderating variable. The influence of group identification on ingroup bias was examined in a modified minimal group setting. We manipulated identification by means of a 'bogus pipeline' procedure (see Doosje *et al.*, 1995; Ellemers, Spears, & Doosje, 1997).

Following Jetten *et al.* (1996), we examined the effect of distinctiveness by manipulating the similarity or dissimilarity of norms of the ingroup and the outgroup. Intergroup norms were manipulated in a manner similar to the Jetten *et al.* (1996) studies. However, the Jetten *et al.* (1996) design was only partly replicated. Ingroup norm was kept constant (i.e. discrimination) whereas the outgroup norm was varied (i.e., discrimination or fairness). Note that in addition to a descriptive component, ingroup norms also comprise an influential prescriptive component. Group members should be sensitive to the content of the ingroup norm because acting in accordance with salient group norms expresses the salient identity (Jetten *et al.*, 1996).

Positive differentiation was also the central dependent variable in this study. Evaluative differentiation of ingroup and outgroup was measured rather than the more cognitive stereotyping measure, because we assumed that no clear stereotypes about ingroup and outgroup would exist in this minimal group, making such a measure less applicable. In addition, behavioural differentiation was measured by having participants allocate resources between ingroup and outgroup on allocation matrices. It was assumed that the evaluative and behavioural differentiation measures would be similarly affected by

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[3]It might be worth while to examine predictions from Optimal Distinctiveness Theory (Brewer, 1991, 1993a,b) in which the distinctiveness issue is approached from a more intragroup and interpersonal perspective. It is proposed that people are driven by conflicting motives for distinctiveness and inclusiveness. However, from our reading of Optimal Distinctiveness Theory, main effects for group variability with more differentiation in the homogeneous condition than in the heterogeneous condition would be predicted (see Jetten *et al.*, 1998). Because heterogeneity of the ingroup might undermine feelings of inclusiveness, group members in heterogeneous groups would be more concerned with intragroup and interpersonal comparisons, and information about similarity or dissimilarity of outgroups should be irrelevant (Brewer, 1991, p. 478). In homogeneous groups, intergroup comparisons are more salient which should lead to a search for intergroup distinctiveness by means of increased positive differentiation. Thus, Optimal Distinctiveness Theory cannot account for the patterns of results observed in Study 1. Moreover, it remains unclear how distinctiveness would interact with group identification. However, measures of need for inclusion and perceived need for distinctiveness are required to conduct a proper test of Optimal Distinctiveness Theory in this research setting.

group norms and group distinctiveness. As in Study 1, the question at issue is whether level of identification can explain differences in patterns of positive differentiation prescribed by this norm (see Jetten *et al.*, 1996), depending on the (dis)similarity of the outgroup norm. It was predicted that high identifiers would differentiate the ingroup more strongly from the outgroup when group norms were similar in content, whereas low identifiers would display increased differentiation when the content of group norms differ.

## Method

### *Participants and Design*

Participants were 91 students at the University of Amsterdam (78 female and 13 male, distributed evenly over conditions). Their mean age was 20. Participants received course credits. The design consisted of a 2(group identification: low versus high) × 2(group norms: similar versus dissimilar) factorial with random allocation of participants to conditions.

### *Procedure*

Participants came to the laboratory in groups varying in size from 5 to 10. They were seated behind a computer in one room and informed that measurements would be taken with the computer and also with electrodes that would be attached to their hand. The experimenter first attached three electrodes to the non-writing hand. Gel was placed on the electrodes before attaching them to the hand, allegedly in order to ensure that the electrode made good contact with the skin. At the start of the session the use of the electrodes was explained. Participants were reassured that the measurement was safe and that these electrodes would measure their galvanic skin response (GSR).

   The experiment was, as in Study 1 of Jetten *et al.* (1996), introduced as an investigation into 'modes of perceiving'. Participants were led to believe that previous research had shown that there are two kinds of perceivers: detailed and global. They were told that the purpose of the present study was to examine which kind of perceiver they themselves were. A 'dot estimation task' followed. In this task participants were presented with seven separate trials in which the computer screen was filled with dots of different size for three seconds. The participants task was to estimate the number of dots on each trial. After completion of this task the computer started 'calculating' their score and after a couple of seconds participants received (false) feedback about their mode of perceiving (all of them were categorised as detailed perceivers). After this feedback, a group task similar to that used in Study 1 was conducted in order to make group identity salient.

### *Independent Variables*

The manipulation of group identification was similar to the procedure used by Doosje *et al.* (1995). After the group task, participants were asked to indicate how much they agreed with a number of statements concerning contact with other people and group membership in general (e.g. 'I do not really mind what others think of me' and 'Relationships with other people are very important to me'). Then it was explained that responses to this questionnaire, in combination with the previous group task and with the electrode measurement, would provide important information about degree of identification with the group of detailed perceivers. Participants were told that norm scores for level of identification

were established on the basis of previous research, and that the average score was 40 points. Participants in the *low identification* condition were told that their own score (27) was below the norm, indicating that they did not identify much with the detailed perceivers group. Participants in the *high identification* condition were told that their own score (54) was higher than the norm, indicating that they identified more than average with the detailed perceivers group. Participants were requested to write their identification score on a form.

Next, similarity and dissimilarity of group norms was manipulated in the same way as in Jetten *et al.* (1996). Participants were presented with an example of an allocation matrix and were instructed in how to use the matrix by allocating money between two anonymous participants: a detailed and a global perceiver. It was stressed that they could not allocate money to themselves. Participants were told that they could use four allocation strategies to distribute the money: (1) maximise the joint profit of the detailed and global perceivers; (2) allocate the same amount of money to the detailed and global perceiver (i.e. fairness); (3) maximise the profit for the detailed perceiver; and (4) maximise the profit for the global perceiver. These strategies were explained by showing examples. Next, participants had to indicate which strategy they expected detailed and global perceivers would use. The questions were: 'What strategy do you think the majority of the detailed/global perceivers will use when distributing money?' The group norm manipulation was introduced by informing participants that they would receive feedback in relation to these two questions so that they could examine whether their assumptions about the group detailed and global perceivers had been correct.

*Similarity of group norms* was manipulated by informing participants that 10 out of 15 detailed perceivers and also 10 out of 15 global perceivers had generally favoured their own group members. *Dissimilarity of group norms* was manipulated by giving feedback indicating that whereas detailed perceived generally favoured their own group (10 out of 15), global perceivers were generally fair in their allocations (10 out of 15). The number of ingroup or outgroup members who used a maximising joint profit strategy was in a clear minority in all conditions. Their number varied from 2 to 4 persons. Furthermore, the feedback indicated that no detailed or global perceiver used an outgroup favouritism strategy. The following questions were asked immediately after the manipulation of the ingroup norm and outgroup norm: (1) 'What strategy was predominantly used by the 15 *detailed perceivers* in allocating the money?' and (2) 'What strategy was predominantly used by the 15 *global perceivers* in allocating the money?'

## Dependent Variables

The effectiveness of the ingroup identification manipulation was measured with the item 'To what extent were you involved with the ingroup, according to the information provided?' (responses could range from 1 'clearly below average' to 9 'clearly above average'). Other dependent variables were: allocation matrices, evaluation of ingroup and outgroup and a group cohesiveness scale.

## Behavioural Differentiation

As in Jetten *et al.* (1996), three types of matrices were used to assess behavioural strategies of distribution of points between members of the two groups:

(a) Maximising Difference and Maximising Ingroup Profit versus Fairness (MD & MIP versus F) (Billig & Tajfel, 1973), which distinguishes between strategies of ingroup favouritism and fairness.
(b) Maximising Difference versus Maximising Joint Profit and Maximising Ingroup Profit (MD versus MJP & MIP) (Tajfel, Billig, Bundy, & Flament, 1971; Turner, Brown, & Tajfel, 1979),

which distinguishes between strategies of maximising difference between ingroup and outgroup and strategies of joint profit and maximum ingroup profit.

(c) Maximising Joint Profit versus Maximising Difference and Maximising Ingroup Profit (MJP versus MD & MIP) (Tajfel *et al.*, 1971), which distinguishes between strategies of joint profit and strategies of ingroup favouritism (see Bourhis, Sachdev, & Gagnon, 1994, for a discussion of pull scores).

The matrices MD versus MJP & MIP and MJP versus MD & MIP were presented twice: once in the version used by Tajfel *et al.* (1971) and once in the version used by Turner *et al.* (1979). Following standard practice, each of the five types of matrices was presented twice: the labels 'ingroup' and 'outgroup' were reversed in the second presentation of each matrix.

Pulls that were designed to measure similar constructs were combined and averaged. The pulls measuring *ingroup favouritism* in its purest form were combined and consisted of two MD and MIP versus MJP, one MIP & MD versus F, and two MD versus MIP & MJP strategies ($\alpha = 0.83$). In contrast to this ingroup favouritism composite score, the purest form of *fairness* is measured by the F versus MIP & MD pull. Other pulls that can be seen as measuring more subtle forms of *maximising versus differentiating* strategies consisted of two MIP & MJP versus MD strategies ($\alpha = 0.82$). These strategies must be distinguished from two pulls measuring MJP versus MIP & MD strategies: *maximising versus favouritism* ($\alpha = 0.71$), that distinguish most clearly between joint profit strategies and ingroup favouritism strategies. These four strategies are in line with the strategies identified in the Jetten *et al.* (1996) studies.[4]

## Evaluative Differentiation

We measured evaluations of the ingroup and outgroup on several traits. These evaluations consisted of 100-point scales on which participants had to indicate the central tendency of the traits (nice, easily irritated, stiff, intelligent, creative, accurate and knowledge of human character) for both detailed and global perceivers (adapted form Jetten *et al.*, 1996). Note that these scales were different to the bipolar scales measuring group stereotyping in Study 1. Whereas the group stereotyping measure reflected the extent to which a trait was applicable to the ingroup or the outgroup, the evaluative scales employed in the present study were unipolar and were asked separately for the ingroup and the outgroup. The reliability of these scales (after recoding the negative traits) was acceptable after omitting the items 'accurate' and 'intelligent' (judgements of the ingroup: $\alpha = 0.54$, and judgements of the outgroup: $\alpha = 0.51$; the modest alphas again reflect the descriptive heterogeneity of these scales but since we are primarily interested here in evaluative differentiation *per se*, aggregation does not seem problematic).

## Results

### Manipulation Checks

As intended, participants assigned to the low identifiers condition reported that their identification score was well below the norm ($M = 2.36$) whereas high identifiers reported that their score was above

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[4]The construction of these four composite scores on the basis of theoretical reasoning was confirmed by a principal components analysis with varimax rotation, performed on the pull scores. This analysis yielded three components which together explained 71.1% of the variance. The pulls labelled *ingroup favouritism* all loaded on the first factor (36.4% of the variance). The F versus MIP & MD pull (*fairness*) loaded negatively on this first factor ($-0.74$) and was treated separately. The pulls of the *maximising versus differentiating* composite score loaded on the second factor (24.3% of the variance explained) and the pulls of the *maximising versus favouritism* composite score loaded on the third factor (10.4% of the variance).

the norm ($M = 6.74$), $F(1, 87) = 401.13$, $p < 0.001$. The responses of three participants did not accord with the manipulation. As in previous studies, we nevertheless decided to retain the data of these participants in the analyses.

Expectations about the allocation behaviour of ingroup and outgroup (measured before the manipulation of norms) did not differ between conditions. Participants expected that the majority of the ingroup and outgroup members would allocate the money equally between the ingroup and outgroup member (54.9% and 47.3%, respectively); 22% of the participants expected that ingroup members would use a maximising joint profit strategy and 23.1% expected that they would use a maximising ingroup profit strategy. For the outgroup, 35.1% of the participants expected that outgroup members would use a maximising joint profit and 17.6% that they would use a maximising ingroup profit strategy.

*Behavioural Differentiation*

First, the amount of money allocated to both groups was averaged separately for the ingroup and outgroup. The difference between the two averages provides an indication of behavioural differentiation (Diehl, 1988). In order to investigate the influence of group norms and identification on the level of ingroup bias, the ingroup points and outgroup points were submitted to an ANOVA in which the factors were group norms, group identification and target group (with repeated measures on this last factor). This analysis revealed an effect for target group indicating that overall ingroup bias (the difference between ingroup and outgroup allocations) was significant, $F(1, 87) = 29.09$, $p < 0.001$. This main effect for target group was qualified by an interaction effect between group norms and target group, $F(1, 87) = 4.17$, $p < 0.05$. Ingroup bias was significantly higher when group norms were similar ($M = 2.52$) than when group norms were different ($M = 1.13$). Although the interaction between group norms, identification and target group was not significant ($F < 1$), given the specificity of our prediction it seems warranted to consider specific between-cell comparisons using simple main effect analysis (see Figure 3). As predicted,
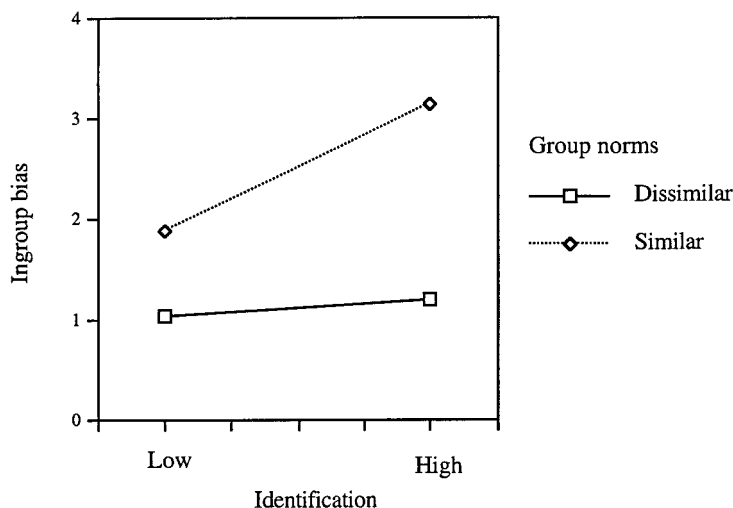


Figure 3.   *Study 2*: Ingroup bias as a function of group norms and identification. Higher scores indicate more ingroup favouritism

the similar condition led to reliably more ingroup bias for high identifiers ($M = 3.14$), compared to the dissimilar norm condition ($M = 1.21$), $F(1, 87) = 4.13$, $p < 0.05$. Low identifiers' allocation behaviour was not significantly affected by the norm manipulation ($M = 1.88$ versus $1.05$ for similar and dissimilar conditions, respectively), $F < 1$.

The second method consisted of the calculation of pull-scores in order to investigate specific allocation strategies of ingroup favouritism, fairness, maximising versus differentiating and maximising versus favouritism strategies. ANOVAs on the composite pull scores revealed a main effect of group norms on *ingroup favouritism*, $F(1, 87) = 4.42$, $p < 0.05$. Similar group norms led to more use of ingroup favouritism strategies ($M = 2.46$), than did dissimilar group norms ($M = 1.08$). The interaction between group identification and group norms was not significant, $F < 1$. This parallels the effects found with the averaged profit measure. Once again, simple main effect analysis revealed that high identifiers displayed more ingroup favouritism when group norms were similar ($M = 3.11$) rather than dissimilar ($M = 1.26$), $F(1, 87) = 4.04$, $p < 0.05$, whereas there were no reliable differences between the similarity ($M = 1.81$) and dissimilarity conditions ($M = 0.90$) for low identifiers, $F < 1$.

A significant interaction was also found between group identification and group norms in the analysis of maximising versus favouritism pulls, $F(1, 87) = 5.59$, $p < 0.05$. The relevant means are displayed in Figure 4 (note that higher scores indicate greater maximisation relative to favouritism). In this case the prediction is that high identifiers will exhibit greater maximisation and less favouritism under dissimilar than under similar norms, whereas low identifiers will show greater maximisation and less favouritism under similar than under dissimilar norms. This is the pattern generally obtained. Simple main effect analysis revealed that low identifiers employed maximising versus favouritism strategies significantly less ($M = -0.33$) than did high identifiers ($M = 1.63$) when group norms were dissimilar, $F(1, 87) = 4.05$, $p < 0.05$. Furthermore, there was a tendency for high identifiers to make less use of maximising compared to favouritism strategies when group norms were similar ($M = -0.09$) than when they were dissimilar ($M = 1.63$), $F(1, 87) = 3.12$, $p < 0.08$.
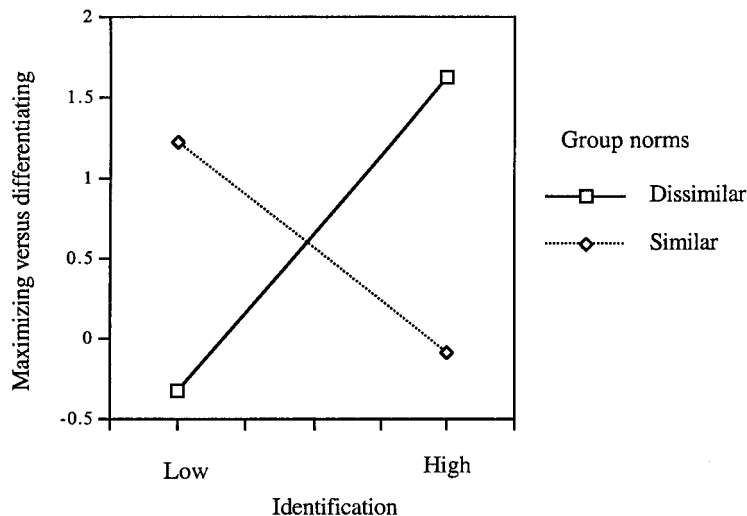


Figure 4.    *Study 2*: Maximisation versus differentiation as a function of group norms and identification. The more positive the score, the greater the profit maximisation relative to the favouritism pull
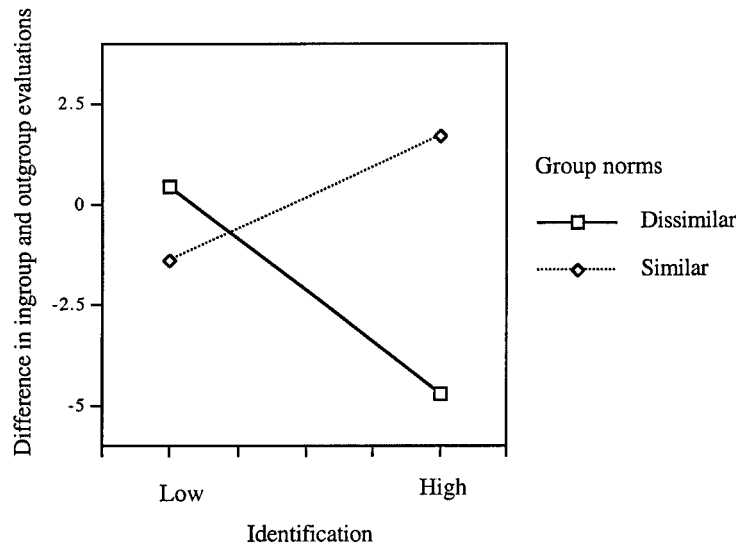
Figure 5. *Study 2*: Mean differences between ingroup and outgroup evaluations as a function of group norms and identification

*Evaluative Differentiation*

Analysis of average ingroup and outgroup evaluations, with the between-subjects factors identification and group norms and the within-subjects factor target group, revealed only a marginally significant interaction between group identification, group norms and target group, $F(1, 87) = 3.13$, $p < 0.07$ (see Figure 5). In line with predictions, there was a trend for similar group norms to lead to more positive evaluations of the ingroup than of the outgroup when identification was high ($M = 1.68$), whereas dissimilarity of group norms led to a more positive evaluation of the ingroup than of the outgroup for low identifiers ($M = 0.47$). Simple effects analysis on the difference scores revealed that the ingroup was rated more positively compared to the outgroup in the similar group norm/high identification condition ($M = 1.68$) compared to the similar group norm/low identification condition ($M = -4.68$), $F(1, 87) = 3.67$, $p < 0.05$. This effect on the difference between ingroup and outgroup evaluations was caused by an interaction between group identification and group norms for outgroup evaluations, $F(1, 87) = 4.92$, $p < 0.05$. No differences were observed for ingroup evaluations, $F < 1$.[5]

## Discussion

The results of the present study show that for high identifiers, *similarity* of intergroup norms led to less use of maximising relative to favouritism allocation strategies and more positive evaluations of the

[5]In addition, in this second study group cohesion was measured with four items. Participants had to indicate on a 9-point scale ranging from 'not at all' (1) to 'very much' (9) the extent to which to they agreed with statements as: 'There is a sense of unity among detailed perceivers' ($\alpha = 0.89$). A two-way ANOVA revealed a significant interaction between group identification and group norms, $F(1, 87) = 4.49$, $p < 0.05$. High identifiers perceived greater group cohesion when group norms were similar ($M = 5.06$), than when they were dissimilar ($M = 4.03$), $F(1, 87) = 5.36$, $p < 0.05$. High identifiers in the similar group norm condition also perceived more cohesion compared to low identifiers in the similar group norms condition ($M = 3.88$), $F(1, 87) = 6.98$, $p < 0.01$. Group cohesion was also higher in the low identification and dissimilar group norms condition ($M = 4.19$), but simple main effects analyses revealed no significant differences. This finding is generally in line with our hypotheses in demonstrating that high identifiers are most likely to stress cohesion within the group when threatened by low intergroup distinctiveness.

ingroup relative to the outgroup, whereas there was a tendency on the part of low identifiers for *dissimilarity* of group norms to lead to less use of maximising versus favouritism strategies and more positive evaluations. Greater differentiation was also found for high identifiers in the similar condition on overall ingroup bias measures and pulls measuring ingroup favouritism. The pattern of results on these measures was less clear for low identifiers, and no evidence was found that dissimilarity led to more differentiation. These results are generally consistent with those of previous research (Jetten *et al.*, 1996).

Perhaps even clearer than the predicted interaction was the finding that similarity rather than dissimilarity of intergroup norms led to more ingroup bias and more ingroup favouritism in general (i.e. in the form of main effects). This accords with the classical social identity theory prediction that intergroup similarity will enhance comparability, leading to greater ingroup bias (Tajfel, 1982; Tajfel & Turner, 1986). However, it should be remembered that the content of the outgroup norms was confounded with the intergroup distinctiveness manipulation. Ingroup members anticipated fairness from the outgroup in the dissimilarity condition, whereas they expected discrimination in the similarity condition. An alternative explanation for this result is that it reflects the tendency to show more ingroup bias when one anticipates bias on the part of the outgroup (Diehl, 1989; Vivian & Berkowitz, 1992, 1993).

We regard this latter explanation as less plausible for several reasons. First, previous research in which ingroup and outgroup norms were manipulated orthogonally (Jetten *et al*., 1996) already effectively ruled out this alternative explanation. No evidence was found in either of two studies that positive differentiation was determined by the content of the outgroup norm. Ingroup norms of fairness or discrimination, and the similarity or dissimilarity of intergroup norms, were stronger determinants of intergroup discrimination than were outgroup norms of fairness or discrimination. Second, it should be noted that the pattern of results of Study 1 (where the similarity manipulation was unconfounded with outgroup allocation behaviour), and Study 2 were remarkably consistent, weakening the support for an alternative explanation in terms of expectancies of outgroup behaviour. Finally, it is unclear how such an explanation in terms of expectations about outgroup behaviour can account for the observed interaction with identification (and the related evidence of reliable differences between conditions for high identifiers but not for low identifiers in the simple effects analyses). Nevertheless, although the pattern of results is generally quite consistent with our distinctiveness-positive differentiation analysis (at least for high identifiers), it is not possible to entirely rule out the possibility that the content and/or combination of group norms might have had an effect on positive differentiation. Only future research involving the orthogonal manipulation of fairness and discriminatory norms for both the ingroup and the outgroup can disentangle the impact of the content of norms and intergroup distinctiveness on positive differentiation.

## GENERAL DISCUSSION

The examination of group identification as a moderator of the group distinctiveness—positive differentiation relation should be seen in part as an attempt to resolve the contrasting findings in the literature. In line with previous research (Branscombe *et al*., 1993; Roccas & Schwartz, 1993; Spears *et al*., 1997), the present studies demonstrate that high identifiers are more willing than low identifiers to adopt a group-level strategy in an attempt to defend threatened group distinctiveness. Support was found for the motivational prediction derived from social identity theory, that high identifiers would display positive differentiation in order to defend or restore group distinctiveness. Less reliable support was found for the prediction, grounded in self-categorisation principles, that low

identifiers would display more differentiation as distinctiveness increased (and less differentiation as distinctiveness decreased).

A possible explanation for this lack of support is that we did not sample degrees of intergroup distinctiveness that were high enough to evoke differences between low and high identifiers. The levels of distinctiveness sampled in these two studies may have either been too low to make the intergroup distinction sufficiently clear for the low identifiers, or (as seems more likely) may have remained high enough to continue eliciting positive differentiation among high identifiers. As proposed earlier, it is also possible that the dimension of comparison used in previous research ('belief in supernatural phenomena'; Jetten *et al.*, 1998) was less personally relevant than the dimension 'extroversion' used in Study 1. It might be the case that social identity concerns are more active under such conditions than self-categorisation concerns, and that involvement is increased when distinctiveness of the group is threatened on an important dimension of comparison (see also Moghaddam & Stringer, 1988; Mummendey & Schreiber, 1984). Alternatively, it simply may be that, although there is evidence that dissimilarity can sometimes lead to positive differentiation, this effect is not moderated by group identification, or at least not to the same degree that the effect of intergroup *similarity* on differentiation is thereby moderated. Further research is required to examine in more detail to what extent high intergroup distinctiveness affects low and high identifiers differently.

Combining the results of the present studies with the Jetten *et al.* (1996, 1998) findings, we propose a model in which we extend the proposed curvilinear relation between group distinctiveness and positive differentiation by integrating group identification as a moderating factor in the model. This model should be seen as an attempt to reconcile the research in which multiple levels of similarity were defined (Jetten *et al.*, 1998), with the present research in which the moderating role of identification was examined. More specifically, in line with the Jetten *et al.* (1998) findings, it is predicted that the relation between group distinctiveness and positive differentiation is basically curvilinear (inverted-U shaped) for low identifiers, whereas it is predicted to be more linear (increasing with increasing intergroup similarity) for high identifiers. Predictions for low and high identifiers are essentially identical when group distinctiveness is high or at a moderate level (see Jetten *et al.*, 1999, for details). It is argued that social identity theory and self-categorisation theory should be seen not as contradictory but rather as complementary in the distinctiveness–differentiation debate. Social identity concerns are dominant when the identification with a group is higher and similarity is perceived as threatening. Self-categorisation theory principles seem more applicable when distinctiveness plays an important role in establishing the groups in the first place. Both theories predict that high group distinctiveness decreases the comparability of groups, leading to lower levels of positive differentia-tion independent of level of identification. When group distinctiveness is moderate, groups are clearly distinctive and at the same time comparable enough to allow for a relevant intergroup comparison, leading to increased positive differentiation. The results of the present research provide more evidence for the prediction that greatest differences between low and high identifiers will be observed when group distinctiveness is low. Low identifiers are less motivated to display positive differentiation in order to protect group identity, whereas high identifiers are more likely to defend group membership when identity is threatened by low group distinctiveness.

To summarise, two studies provided evidence that levels of group identification influence the domain of applicability of social identity theory and self-categorisation theory. More specifically, different processes concerning the relation between group distinctiveness and positive differentiation are entailed and the manipulation of threats to group distinctiveness makes these contrasting processes particularly salient. Manipulating factors in a minimal group setting allowed us to understand more clearly the role of identification in relation to group distinctiveness and to our knowledge provide the first empirical evidence for this relation. The social identity theory prediction that similarity between groups results in increased motivation to establish intergroup differences applies when group

membership provides a meaningful identity. For instance, it is likely that similarity between work-groups in a company will only be perceived as threatening when employees are strongly committed to their group. In contrast, those who do not particularly value their work-group, or for whom the work-group has only recently been established, will probably feel less threatened when another work-group is similar. In line with self-categorisation theory principles, group distinctiveness might help to define the identity more clearly under such conditions.

## ACKNOWLEDGEMENTS

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