The social functions of in-group bias
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Imagine the following situation. Two rival soccer teams had contested many close and exciting matches over the years; in fact they seemed a match for each other. During the latest match, the scoreline is 2-2 and with only a few more minutes to play, team A scores a goal. Then one of the players yells: “Our team is the best, we are born champions, you are nothing but a bunch of losers!” Now consider for a moment whether it is a player from team A (the team ahead) who makes the utterance, or a player from team B (the team one goal down). Which option seems more likely? Both are possible of course but we argue that they stem from different reasons or motives. The team ahead may use this derogating remark as form of identity-expression, as a way of claiming the in-group’s superiority. The player from the team behind may, by contrast, express such in-group bias in order to motivate the group, to pep up the team, restore hope and increase effort in an attempt to change the scoreline. Although the insult might seem more justified if made by the team ahead, in fact it was a member of the team one goal down who made the utterance as witnessed by one of the authors.

The above example illustrates the essential principles of our proposed motivational analysis of (verbal) in-group bias. Specifically, we argue for a distinction between an identity-expressive function and an instrumental function (instigating collective action; Spears, Jetten & Scheepers, 2002). In-group bias can function as a way to express and thereby confirm a social identity on the one hand, and as a motivator facilitating collective action against an out-group on the other.

Based on social identity theory (Tajfel & Turner, 1979) we hypothesize that both functions are stimulated by group identification. People who are highly identified with a group will be most willing to confirm this group-based identity, and they should also be

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1 This chapter is based on Scheepers, Spears, Doosje, & Manstead (2001). We would like to thank Nico Smith, Liesbeth Zijlstra, Arnold Kiezebrink, and Herry Hubert for their help with Study 4.2.
willing to work for the group and promote action when things are going badly (Ellemers, Spears, & Doosje, 1997; Ouwerkerk, De Gilder, & De Vries, 2000; Tajfel & Turner, 1979). Moreover, we predict that identity-expression will be more prevalent in contexts where the group’s value is reinforced, and thus relatively secure, but that the instrumental function will be especially prevalent when the value of one’s group is being threatened (as illustrated in our opening example).

In the current work we focus solely on verbal instances of in-group bias, although we think the distinction between identity and instrumental functions applies to other forms of in-group bias as well (see Spears et al., 2002; see also Chapters 2 and 3). In line with speech act theory (Searle, 1970) we see discriminating utterances as intentional behavior directed towards certain ends (Graumann & Wintermann, 1989). We define verbal in-group bias as, often exaggerated, claims of in-group superiority (i.e. in-group favoritism) and out-group inferiority (out-group derogation) and we aim to link these kinds of behavior to identity-expression, and to the (more instrumental) promotion of collective action against the out-group. We now discuss in turn the two functions examined in the current work in more detail, together with the specific contexts (group-threatening and group-reinforcing) that will trigger them. We start with identity-expression.

The ways in which in-group bias can help to create a sense of group identity is one of the core elements of social identity theory (Tajfel, Flament, Billig, & Bundy, 1971; Tajfel & Turner, 1979, see also Chapter 2). However, the need to confirm and thereby maintain the positive value of one’s social identity has received less attention. We predict that situations that reinforce and thus help to secure the positive value of a given group will lead to in-group bias as a means of identity-expression with the goal of confirming one’s social identity. Although mere knowledge of a high status position (or some form of advantage over a relevant out-group generally) should reinforce the group in itself, we cannot assume that this will automatically confirm the positive identity, at least not to all of its members. Expressing the superior status provides a more public way of celebrating and even glorifying this in-group advantage, especially where this is normatively appropriate (e.g., “gloating”: Leach, Snider, & Iyer, 2001). Under these circumstances in-group bias can be viewed as a kind of self-presentation behavior that forms the bridge between the reinforcing situation on the one hand (e.g., high group status) and the (positive) social identity of the group members on the other. Expressing in-group bias may be a clear way to “cash” the claim of group advantage to the public benefit of the individual and group. We predict that this will be especially the case among people for whom the given group is especially important (i.e., high identifiers).

We see the identity-expressive function of in-group bias as a more specific operationalization of a more general identity function (Spears et al., 2002; Tajfel & Turner,
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1979; see also Chapter 2 and 3). Together with in-group bias as identity creation—which is more relevant for novel groups as in the minimal group paradigm (Tajfel et al., 1971)—in-group bias as identity-expression serves the more general aim of obtaining and maintaining a positive social identity. We now turn to the possibility that in-group bias can also serve a more instrumental function.

Social identity theory, as its name suggests, would seem in one respect to focus on identity rather than more instrumental concerns. However, it would be misleading to suggest that social identity theory neglects instrumental behavior, especially as this relates to the group’s position in the social structure or status hierarchy (Ellemers, 1993; Tajfel & Turner, 1979). In line with social identity theory we propose that in-group bias can serve the instrumental function of challenging a disadvantageous social position. Viewed in these terms in-group bias may function to “pep up” the group, and direct attention and effort towards group-relevant goals. Consider the example with which we started. By openly favoring the in-group (and perhaps even derogating the out-group) such verbal in-group bias can mobilize team members when they are behind, and motivate them to increase their efforts to overcome adversity. Such motivations, we propose, might be especially relevant when the group is under threat.

The concept of group threat has become a core concept within the social identity framework (Branscombe, Ellemers, Spears, & Doosje, 1999). A common response to threat in inter-group contexts is the display of in-group bias (e.g., Branscombe & Wann, 1994). However, the idea that threat can instigate in-group bias for instrumental reasons has not been explicitly tested before in an inter-group context. A clue to such a relation can be found in the interpersonal behavior domain (Blascovich, Mendes, Hunter, & Lickel, 2000). A common characteristic to threat is that it urges one to do something to change the direct situation (e.g., “fight or flight”; Blascovich et al., 2000). We propose that under conditions of group threat, in-group bias will have an instrumental function in guiding collective action against an out-group. In other words, we link current insights on threat and social identity (Branscombe et al., 1999) to the relation between social identity and collective action designed to change the status quo (Tajfel & Turner, 1979). Moreover, we predict that, under threat, high identifiers will display stronger in-group bias for instrumental reasons than do low identifiers, because they are most concerned with the group’s interests (Ouwerkerk et al., 2000).

We also assess three additional variables that relate to in-group bias and may produce further insight into the nature of its underlying functions. First, we addressed the kind of group on basis of which in-group bias is expressed. An often-made distinction is between “social groups” (based on a common goal; e.g., a task group) and “social categories” (based on similarities; e.g., nationality or gender; Rabbie, 1993; see for a similar distinction in terms of “common bond” and “common identity” groups, Prentice, Miller, & Lightdale, 1994). We
propose that identity-expression applies both to social groups and social categories. However, regarding the instrumental function we predict that this function is somewhat more prevalent within social groups than within social categories. We base this prediction on two premises: First, social groups are often defined by instrumental goals (a sports team that has the goal of becoming champion by beating other teams); Second, mobilization and motivation of in-group members—which is an essential aspect of the instrumental function—is often more easily established within groups than within categories because groups are often smaller facilitating communication between its members.

As a second additional variable we measured the relevant emotions accompanying in-group bias. Because emotions have motivational character (e.g., Brehm, 1999), demonstrating the emotional implications of the identity-expressive function (e.g., pride) and the instrumental function (e.g., anger) provides a way to further validate the current analysis. As a self-focused emotion (e.g., Lewis, 2000), we predict that pride will be associated with the identity-expressive function. Anger, on the other hand, is an other-focused emotion, and therefore we predicted a relation between anger and instrumental action against the out-group (Mackie, Devos, & Smith, 2000).

Third, it is important to consider the direction of in-group bias—namely whether it refers to in-group favoritism or actual out-group derogation. Regarding the instrumental function, we predict that both in-group favoritism (designed to motivate in-group performance), and out-group derogation (designed to undermine out-group performance) can serve this function of improving the position of the in-group relative to the out-group. However, we predict that identity-expression (as being primarily concerned with the in-group) will be more strongly associated with in-group favoritism than with out-group derogation. We wish to stress though that we see this as just a matter of degree: In principle, both functions can be served by both forms of in-group bias.

We conducted two studies to test our predictions. In the first we focused on a variety of self-nominated social groups and categories to test the generalizability of our distinction, and to link the two functions to key psychological antecedents (group threat and identification). In this first study we also addressed the influence of group type (social group vs. category) on the functionality of in-group bias. In the second study we focused on just one group associated with a historically competitive and aggressive inter-group context: soccer fans. In this study we assess the functionality of the repertoire of in-group favoring and out-group derogating songs and chants used by “die-hard” supporters in group-reinforcing and group-threatenin situations. We manipulated rather than measured group-reinforcing versus group-threatening contexts, and also took the direction of in-group bias (in-group favoritism versus out-group derogation), as well as emotions (pride and anger) into account. Our central predictions were that
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both functions are predicted by group identification, but that primarily the identity-expressive function is prevalent under group-reinforcing circumstances whereas the instrumental function will be prevalent under group-threatening circumstances.

study 4.1

the goal underlying study 4.1 was to relate feelings of in-group identification and group threat to the two proposed functions of in-group bias in a broad sample of groups. to address this objective, we asked participants to recall an inter-group situation in which they had expressed in-group favoritism and/or out-group derogation. after this we asked them to indicate to what extent they had identity-expressive or instrumental reasons in mind while making the utterance. furthermore, we measured the extent to which participants felt their group was threatened while making the utterance, as well as identification with the in-group.

we did not measure group reinforcement (the extent to which group identity is positive and secure) in this first study. therefore, with regard to identity-expression we predicted only a main effect of identification: highly-identified group members are predicted to use in-group bias more for identity-expressive reasons than low-identified group members. with regard to the instrumental function we predicted a two-way interaction: highly identified group members are predicted to use in-group bias for instrumental reasons, especially when the group is under threat. finally, although we predicted that the instrumental function of in-group bias is more prevalent within social groups than within social categories, we do not expect such an asymmetry for the identity-expressive function.

method

participants. participants were 601 first-year psychology students (461 females, 140 males) at the university of amsterdam. their mean age was 22 (sd = 5). the questionnaire was part of a mass testing session in (partial) fulfillment of course requirement.

materials. the questionnaire was presented as a study on “statements about groups.” in the introduction it was explained that, “as we all know, we are members of all kinds of groups.” it was explained that by groups we meant both relatively small interacting groups but also broad social categories (i.e., “you don’t have to know all the members to belong to a certain group”). then, participants were asked to think of a specific group of which they were a member. although this could have been any kind of group, there were two requirements. first, there also had to be a clearly defined relevant out-group. second, the participant had to have made a public utterance in which she/he had expressed favoritism toward the in-group, and/or derogated the out-group. the participant was asked to write down the utterance as well as some details about the context in which it was made. after participants had written down the utterance
they were asked to answer some further questions. Identification with the in-group was measured by means of the following question: “To what extent did you identify with your group at the time you made the utterance?” Group threat was measured by means of the question: “To what extent did you feel that your group was threatened (in either a physical or psychological way) while you made the utterance?” Identity-expression was measured by means of three items (e.g., “To what extent did you make the utterance to show the meaning of your group?”) We used four items to measure the instrumental function of in-group bias (e.g., “To what extent did you make the utterance to make your group stronger?”) All questions were answered using 7-point scales with not at all and very much as poles. At the end of the testing session all participants were fully debriefed.

Results and Discussion

The data of 54 participants were excluded from further analysis for one of the following reasons: they did not describe a situation; they wrote about a group to which they themselves did not belong; or they described out-group favoritism. People wrote about a variety of different groups (e.g., sports teams, friends, family, groups in a job setting, ethnicity, sexual orientation, people from a certain geographic region, political preference, religion).

We performed a principal components analysis to test whether the two proposed functions of in-group bias could be distinguished empirically. This resulted in a two-factor solution, explaining 72% of the variance. The three “identity-expression” items loaded highly on one factor, and the four “instrumental” items on the other. For the regression analyses described below we calculated factor-scores based on these two factors.

Before testing our main predictions regarding threat and identification, we first assessed the prevalence of the two functions of in-group bias across different types of groups. In order to do so we divided our sample into social group/common bond types of group and social category/common identity types of group. In line with our predictions, it appeared that identity-expression as a function of in-group bias was prevalent to an equal extent in social groups (M = 4.62, SD = 1.50) and social categories (M = 4.48, SD = 1.63), t(540) < 1, ns. However, with regard to the instrumental function it appeared that this function was somewhat more prevalent in social groups (M = 4.15, SD = 1.85) than it was in social categories (M = 3.39, SD = 1.76), t(539) = 4.89, p < 001, in line with predictions.

We then tested our predictions regarding the determinants of identity-expressive and instrumental functions of in-group bias by means of hierarchical multiple regression. Following Aiken and West (1991) we centered the independent variables around zero to ease the interpretation of possible main effects. For each regression equation we first entered identification and group threat as predictors (step 1), followed by the interaction between these two variables (step 2).
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With regard to the identity-expressive function of in-group bias, there was only a main effect for identification ($\beta = .35, p < .001$), indicating that highly identified group members used in-group bias more strongly for identity-expressive reasons than low identifiers. Neither the main effect for group threat nor the interaction between group threat and identification proved to be reliable. This model explained 14% of the variance.

With regard to the instrumental function there were reliable main effects for identification ($\beta = .24, p < .001$), and for group threat, $\beta = .26, p < .001$. More importantly, the interaction between identification and group threat was also reliable, $\beta = .09, p < .05$. This interaction is displayed in Figure 4.1.

![Figure 4.1](image)

Figure 4.1.  
The interaction effect of group identification and group threat on the instrumental function of in-group bias (factor scores) in Study 4.1.

We selected data points for estimating regression lines at $\pm 1$ SD for predictors of the regression equation (Aiken & West, 1991). As can be seen, it was especially those who were highly identified with their group and whose group was threatened who used in-group bias for instrumental reasons. The model involving main effects and interaction explained 16% of the variance.

In sum, this first study provides preliminary support for our predictions. It appeared that the identity-expressive function of in-group bias was equally prevalent in social groups and
social categories whereas the instrumental function was more prevalent in social groups than in social categories. Moreover, both the identity-expressive and the instrumental functions of in-group bias were predicted by in-group identification. Finally, the instrumental function of in-group bias emerged when the group was threatened, especially for those who were highly identified.

The fact that identity-expression occurs especially for those who are highly identified is in line with social identity theory: the more important a given group is for one’s identity, the more one should be inclined to confirm that particular identity. Moreover, although in-group bias is a common reaction to threat in inter-group contexts (Branscombe et al., 1999) this is the first study to our knowledge that shows a relation with explicit instrumental action. This is in line with the notion that threat leads to behavior aimed at changing the immediate (inter-group) situation. Moreover, it fits with the hypothesis derived from social identity theory that those who are highly identified will be most willing to engage in collective action to change the relation between groups.

A strength of the current study is the broad sample of groups used, underlining the generalizability of the model. Moreover, although group threat has become a central concept within the social identity framework (Branscombe et al., 1999) the feeling of threat has not been directly measured before in inter-group contexts. A possible shortcoming of the current research is its correlational nature. Moreover, in the current study we did not examine contexts that reinforce the value a given group (leading to in-group bias for identity-expressive reasons). To address these issues we conducted an experimental study focusing on one group: soccer fans. In this second study we took the direction of in-group bias into account and also assessed the specific emotions that might guide different forms of in-group bias in different contexts.

**Study 4.2**

Songs can be vehicles for group presentation or group motivation. For example, national anthems may function to convey a sense of nation (e.g., “Land of the free and home of the brave”). On the other hand the “work songs” sung by slaves, along with the “shanties” sung by the Dutch sailors in the 17th. century who often transported them, have been analyzed as functional in raising motivation and coordinating and directing group behavior towards certain ends (Oliver, 1969/1997).

In this second test of our hypotheses we turn to another kind of song that might have an identity-related and motivational character: soccer chants. The songs sung on soccer terraces might be the ideal object of our functional model for at least three reasons. First, in terms of functionality, those songs can be divided into those that are *identity-expressive* with the goal of
claiming the superiority of one's team, and those that are instrumentally oriented with the goal of motivating the team on the field (a distinction made by the fans themselves; see www.deajaxster.nl). Secondly, group-reinforcing and group-threatening situations are easily manipulated in sporting contexts by making wins or losses, or goals scored by either team, salient. Finally, soccer songs can be divided into in-group favoring songs and out-group derogating songs, covering the "direction of in-group bias" component in the current work.

We invited highly identified fans of the Amsterdam Football Club Ajax to select a soccer chant to be sung in either a group-reinforcing or group-threatening situation. We manipulated this by making goals scored by an in-group or out-group team salient. After this they completed items measuring functionality, direction of in-group bias, and the emotions experienced in the situation. Because the results of Study 4.1 indicated that both functions are especially prevalent for high identifiers, we felt justified in focusing on high identifiers only.

With regard to the emotional part of the model we predicted that pride, as a self-focused emotion, would be related to in-group favoritism and identity-expression and that anger as an other-focused emotion would be related to instrumental action and out-group derogation (Mackie et al., 2000). With regard to the direction of in-group bias component, we predicted that in-group favoritism would be seen as more suited to serving the identity-expressive function than out-group derogation, because it speaks most directly to this identity, and can be accomplished without showing "negative" behavior that might compromise the in-group image (Reynolds, Turner, & Haslam, 2000). It is less clear however whether the direction of in-group bias should bear a systematic relation to the instrumental function. It is possible to argue that both in-group favoritism (designed to motivate in-group performance), and out-group derogation (designed to undermine out-group performance) may be suited to serving the instrumental function of improving the position of the in-group relative to the out-group. We are therefore open to both of these relations for the instrumental function. However, it is important to stress that these predictions are a matter of degree (out-group derogation may also highlight the positive identity of the in-group in relative terms).

We also tested several multi-sample path-models to relate the emotions to different functions and kinds of in-group bias. We used the emotions, as more general motivational states, as predictors of the two functions as more specific motivational states. In turn, we used emotions and functions as predictors of behavior (the expression of in-group bias). More specifically, we created a model with an identity side (relating pride to identity-expression and in-group favoritism) and an instrumental side (relating anger to the instrumental function, in-group favoritism and out-group derogation). We also tested for between-condition differences in parameter estimates (i.e., whether the identity side of the model is stronger under group reinforcement and the instrumental side under group threat).
Method

Overview. The research was conducted using the official AFC Ajax webpage (www.ajax.nl). The questionnaire was available online from March 27 until April 28 2000 and was part of a more general questionnaire developed by the Ajax Supporters Club (SVA) about general issues concerning supporter policies.

In a vignette we described a situation during a match with the most important rival of Ajax, SC Feyenoord from Rotterdam. In one condition Ajax scores a goal in a crucial phase of the match (the last 15 minutes with the score at 2-2). This formed the group reinforcement condition. In the group threat condition a player from Feyenoord scored a goal in the same situation. After this vignette, participants were asked to describe the song they would choose to sing in this situation. Finally, they completed measures of functionality.

Participants and design. One-thousand five hundred and forty-six people (83% male; mean age 25, \(SD = 11\)) completed the questionnaire. In exchange for their participation, respondents had the chance to win an Ajax shirt signed by the Ajax team. Participants were randomly allocated to a mixed 2 (Condition: Group reinforcement vs. Group threat) \(\times\) 2 (Function: Identity-expressive vs. Instrumental) mixed design with repeated measures on the last factor.

Inter-group situation. One might wonder whether soccer songs can be regarded as a form of in-group bias. In order to support this argument it is useful to explain the relation between the two teams under consideration in somewhat more detail. The relationship between Ajax and Feyenoord has always been highly competitive, indeed aggressively so, and the songs sung by its fans reflect this. The Ajax-Feyenoord match is the only really “classic” duel in the Netherlands, and the relationship between the two supporter groups is highly antagonistic. In March 1997 this antagonism led to the death of one Ajax fan in an “arranged” fight between supporters of both teams on a day on which the two teams did not even play against each other. There is also a lot of hostility between supporters of these teams in the form of their soccer chants. For example, fanatical Feyenoord fans refer in several songs in an offensive way to the historically Jewish background of Ajax in several songs (e.g., “Hamas, Hamas, put the Jews to the gas!”). In their turn, the fanatical supporters of Ajax (the F-side) refer to the devastating bombing of Rotterdam during world war II in several songs (e.g., “What the Luftwaffe did in Rotterdam, the F-side will do even better”). Besides these derogatory songs, another important category of soccer songs can be regarded as forms of in-group favoritism (e.g., to the tune of “God saves the queen”: “God sends his famous team/Opponent’s never seen/god loves his team/(..Come-on-A-ja xx ..)/Sends them victorious/Goalbound and glorious/Best football ever seen/God sends his team). Interestingly, the distinction between in-group favoring and out-group derogating songs is explicitly made by the “die-hard” Ajax fans themselves (see for a
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The repertoire of Ajax songs consists of about equal numbers of Ajax-favoring (39) and Feyenoord-derogating (34) songs, once again illustrating the competitiveness of this inter-group situation.

Scenario.
The questionnaire was introduced as being concerned with the “atmosphere during Ajax home games.” It started with a short scenario: “Imagine that you are a spectator at a home game between Ajax and Feyenoord. It is a very close game, with 15 minutes to play the score is 2-2. Then, an Ajax [a Feyenoord] player scores a goal to make the score 3-2 [2-3].” After this the participant was asked to describe the song he or she “found most suitable in the described situation.” Then participants were asked to fill out some questions about the song they had selected.

Dependent measures.

We measured the identity-expressive function with the item “To what extent did you suggest singing the song in order to show how good Ajax is?” The instrumental function was measured using two items: “To what extent did you suggest singing this song in order to motivate Ajax?” and “To what extent did you suggest singing this song in order to pep up Ajax.” We used fewer items for this study because of space limitations (a problem inherent in performing research using the Internet). We also measured the extent in which the participant would feel pride and anger in the situation described, as well as the extent to which the person considered the suggested song to be in-group favoring or out-group derogating. We also asked about the extent to which the song was directed to one of the following audiences: the Ajax players, other Ajax fans, the Feyenoord players, and the Feyenoord fans. Finally, we measured the mean level of identification with Ajax (“To what extent do you feel committed to Ajax?”), as well as the number of Ajax matches visited regularly in one season. Except for this last question, and the selected song, all answers were given using 7-point scales with not at all and very much as poles.

Results

Data selection.
The data from people who just “flamed”, or cursed (also as a reaction to the situation described in the vignette) were excluded, along with the data of those who did not describe a soccer chant or did not complete the other questions. This left 1046 participants. Their mean identification with Ajax was 5.98 (Mdn = 6; mode = 7). Eighty-one percent visited one or more home matches of Ajax per season.

Content of the songs.

Using the categorizations as presented on the websites “the Ajax Star” (www.deajaxster.nl, specific for Ajax songs) and “the soccer songs and chants homepage” (http://home.wanadoo.nl/maarten.geluk/, general page on soccer songs) we created four classes of songs: 1. Ajax/Amsterdam favoring (76%); 2. Feyenoord/Rotterdam derogating (12%); 3. A combination of favoritism and derogation (2%); and 4. Other soccer songs (10%). This last category mainly consisted of general team motivating songs, and in-group derogatory
songs (e.g., songs calling for the Ajax trainer to be sacked after the Feyenoord goal). For further analysis we selected the songs that were clearly in-group favoring and/or out-group derogating (i.e., characterized by in-group bias). Ninety percent of the songs were of this type.

Perceived functionality of the songs. The two items measuring the instrumental function formed a reliable scale ($\alpha = .90$). We included this measure, as well as the item measuring identity-expression, in a 2 X 2 mixed-model ANOVA with condition and functionality as factors. The interaction between these two factors proved to be reliable, $F(1, 1044) = 240.68, p < .001$. In line with predictions, in the group reinforcement condition in-group bias was attributed more strongly to the identity-expressive function ($M = 5.80$, $SD = 1.39$) than it was in the group threat condition ($M = 4.67$, $SD = 1.85$), $F(1, 1044) = 125.62, p < .001$. Moreover, participants in the group threat condition scored higher on the instrumental function ($M = 6.01$, $SD = 1.36$), than did those in the group reinforcement condition ($M = 5.67$, $SD = 1.24$), $F(1, 1044) = 18.07, p < .001$. Finally, in the group reinforcement condition, in-group bias was attributed more to the identity-expressive function than to the instrumental function, $F(1, 1044) = 4.20, p < .05$, whereas in the group threat condition in-group bias was attributed more strongly to the instrumental function than to identity-expression, $F(1, 1044) = 349.78, p < .001$.

Emotions. In line with predictions, participants experienced more pride ($M = 6.21$, $SD = 1.16$) in the group reinforcement condition than they did in the group threat condition ($M = 5.40$, $SD = 1.77$), $F(1, 1044) = 79.36, p < .001$. Furthermore, participants experienced more anger ($M = 3.27$, $SD = 2.00$) in the group threat condition than they did in the group reinforcement condition ($M = 2.07$, $SD = 1.52$), $F(1, 1044) = 120.54, p < .001$.

Direction of in-group bias. On average, participants indicated that the selected song was more in-group favoring ($M = 5.97$, $SD = 2.12$) than out-group derogating ($M = 3.12$, $SD = 1.33$). Although the song was somewhat more in-group favoring ($M = 6.02$, $SD = 1.22$) in the group reinforcement condition than it was in the group threat condition ($M = 5.83$, $SD = 1.50$), $F(1, 1044) = 5.44, p < .05$, there were no differences with regard to out-group derogation.

Modeling. To relate the different functions to different emotions and different kinds of in-group bias (in-group favoritism/out-group derogation), we performed a multi-sample LISREL analysis (Jöreskog & Sörbom, 1996). By this means, it is possible to assess whether the parameters of a given path-model are equivalent or different across different groups (in this case the group reinforcement and group threat conditions). In other words, it is possible to test whether a path within a model is stronger, weaker or absent in one sample or the other (e.g., Scott-Lennox & Lennox, 1995). We started with a model in which all parameters (paths, errors etc.) were set to be equal across the two conditions. Then we assessed if the model could be improved by allowing different parameter estimates across conditions. To decide whether or not to implement a certain modification we used two criteria: First, the modification had to be
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Theoretically justifiable; second it had to result in a better overall fit, as indicated by the modification indices (Jöreskog & Sörbom, 1996).

To assess model fit we did not rely too heavily on the chi-square index because it tends to indicate significance with larger samples (when \( N > 200 \); Schumacker & Lomax, 1996), and is therefore "... often more a reflection on the size of the sample than on the adequacy of the model" (Brown & Cudeck, 1993, p. 137). Following Browne and Cudeck's suggestion, we used the Root Mean Square Error of Approximation (RMSEA) as our general indicator of fit. This reflects the discrepancy between the postulated model and the population-covariance matrix, corrected for degrees of freedom. Small RMSEA-values (< .05) indicate "close fit", whereas values smaller than .08 are indicators of "reasonable fit" (Browne & Cudeck, 1993). Furthermore, Browne and Cudeck suggest using the "test of close fit" to assess whether a RMSEA-value is equal to, or smaller than .05. A non-reliable \( p \)-value of this test means that the null-hypothesis (RMSEA \( \leq .05 \)) cannot be rejected, indicating close fit. In addition to this index, we used the Comparative Fit Index (CFI) which tests the proposed model against alternative models. The CFI runs from 0 to 1; higher values (> .90) indicate good fit (Schumacker & Lomax, 1996).

The instrumental function was treated as a latent construct with the two items measuring this function as indicators. Starting at the identity-side of our model, we draw paths from pride to identity-expression (\( \beta = .52, p < .001 \)), from pride to in-group favoritism (\( \beta = .17, p < .001 \)) and from identity-expression to in-group favoritism, \( \beta = .11, p < .001 \). There also appeared to be a reliable path from pride to the instrumental function, \( \beta = .51, p < .001 \). The path from identity-expression to out-group derogation was, in line with predictions, not reliable, \( \beta = .05, ns. \) Therefore, we omitted this path from the model.

On the instrumental side of the model, the path from the instrumental function to in-group favoritism (\( \beta = .31, p < .001 \)) as well as the path from anger to out-group derogation (\( \beta = .32, p < .001 \)) were both reliable. However, the path from anger to the instrumental function (\( \beta = -.17, p < .001 \)), as well as the path from the instrumental function to out-group derogation (\( \beta = -.10, p < .01 \)) were both reliable but negative. These two latter findings were unpredicted. In retrospect, however, there seems to be a good reason why in-group favoritism

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2 Throughout, latent constructs based on single items were scaled to 1, with measurement errors set to 0.

3 We explain this path in terms of a possible overlap in the constructs of in-group pride and in-group identification. In fact, in other research conducted in a sports context, in-group pride was used as an operationalization of identification (Branscombe & Wann, 1994). In other words, it is possible that our pride item functioned (unintentionally) as an implicit identification measure and, as we saw in Study 4.1, group-identification predicts both identity-expression and the instrumental function of in-group bias. We therefore propose a distinction between a trait form of in-group pride (related to in-group identification) and a more state form of pride, induced by group-reinforcing situations and related to identity-expression and in-group favoritism.
is functional in serving the instrumental function, whereas out-group derogation is perceived as dysfunctional for achieving group goals (e.g., collective action) in the current context. Moreover, this post-hoc explanation could be tested in our model.

The only way in which social change in this sporting-context can occur is by means of competition between the two teams on the field (i.e., in-group bias by the supporters cannot change the relations between the groups in a direct sense). Therefore, collective action always has to proceed through this part of the in-group. It may be more functional to motivate the team by focusing on its own positive aspects, rather than highlighting the negative features of the out-group. Indeed, out-group derogation would be counterproductive if it provokes the out-group and motivates them to do better (see Chapter 3). We tested this line of reasoning by adding an audience component to the model. If our reasoning is right one would expect in-group favoring songs to be primarily directed to an in-group audience (in-group players and other supporters).\(^4\) Out-group derogating songs on the other hand are presumably intended to hurt the out-group, but may actually be perceived to motivate them. In either case these should be primarily directed to the out-group players and fans. The negative path from anger to the instrumental function fits with this explanation. As an other-focused emotion, anger was related to out-group derogation which we predict to be directed to an out-group audience.

We created latent constructs from the four audience items: One construct can be labeled as “in-group audience” (comprising the in-group fans and players), the other as “out-group audience” (comprising the out-group fans and players). In line with our post-hoc explanation, there were reliable paths from in-group favoritism to the in-group audience (\(\beta = .09, p < .01\)) and from out-group derogation to the out-group audience (\(\beta = .93, p < .001\)), while there were no reliable positive paths from in-group favoritism to the out-group audience nor from out-group derogation to the in-group audience. In addition, there was a reliable path from anger to the out-group audience (\(\beta = .37, p < .001\)), stressing the other-focused nature of anger. After adding this audience component to the model the fit can be called “reasonable” (Browne & Cudeck, 1993), \(\chi^2(101, N = 1046) = 310.08, p < .001; \text{RMSEA} = .063; p\)-value for test of close fit: .86.

We then tested whether the model could be further improved by allowing between-condition differences in parameter estimates. Condition-specific estimations for the paths from identity-expression to in-group favoritism, from the instrumental function to in-group favoritism and from the instrumental function to out-group derogation resulted in a better fit of the model, \(\Delta \chi^2(3, N = 1046) = 22.20, p < .001\). The path from identity-expression to in-group favoritism

\(^4\) Although ultimately the songs are directed to the in-group players (as they are the agents through which social change occurs), in-group favoring songs for instrumental reasons may also be directed to other in-group fans, in an attempt to get them behind the team as well.
Figure 4.2.
Relationships between emotions, functions of in-group bias, forms of in-group bias and audience in Study 4.2.

Note: When two betas are printed, the 1st refers to the group-reinforcement condition; the 2nd to the group-threat condition. Betas printed in bold are significant at $p < .05$. 


appeared to be stronger under group reinforcement ($\beta = .21, p < .001$) than under group threat, $\beta = .01$, ns. The path from the instrumental function to in-group favoritism was stronger under group threat ($\beta = .40, p < .001$) than it was under group reinforcement, $\beta = .23, p < .001$. Moreover, the (negative) path from the instrumental function to out-group derogation was stronger under group threat ($\beta = -.14, p < .001$) than it was under group reinforcement, $\beta = -.07$, ns. We also allowed condition-specific estimations for the path from anger to out-group audience $\Delta\chi^2(1, N = 1046) = 8.04, p < .01$. It appeared that this path was stronger under group threat ($\beta = .49, p < .001$) than it was under group reinforcement, $\beta = .28, p < .001$. Finally, we allowed condition-specific estimations for the measurement-error of the “pep up” item, as well as the error variance of the latent construct identity-expression, $\Delta\chi^2(2, N = 1046) = 41.57, p < .001$.5 No other (theoretically interesting) modifications improved the model fit. The final model is displayed in Figure 4.2. For the sake of clarity, (correlations among) error variances are not displayed in the figure. After omitting non-reliable paths, the fit of this model can be regarded as satisfactory, $\chi^2(98, N = 1046) = 238.21, p < .001$; RMSEA = .052; $p$-value for test of close fit: .99; CFI = .97.

**Discussion**

The predictions made for this second study were largely supported. Conditions of group reinforcement led to higher scores on identity-expression, pride and in-group favoritism. Moreover, as the path model shows, pride, as a self-focused emotion (Lewis, 2000), predicted identity-expression and in-group favoritism. More importantly, the path from identity-expression to in-group favoritism was stronger under group reinforcement than under group threat.

In line with predictions, group threat led to more instrumental motives and to more anger than did group reinforcement. However, the relations among these constructs appeared to be somewhat more complex than predicted beforehand. As predicted, there was a reliable path from the instrumental function to in-group favoritism and this path was stronger under group threat than under group reinforcement. The fact that anger (as an other-focused emotion) also predicted out-group derogation and was directed towards an out-group audience is also consistent with predictions and previous work (see also Mackie et al., 2000). However, we found no evidence that the instrumental function of in-group bias mediated this relation. Instead, the

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5 It appeared that the measurement error of the “pep up” item was greater in the condition where less instrumental motives were predicted and observed (the group-reinforcement condition, .25) as compared to the condition where instrumental motives played a bigger role (the group-threat condition, .11). In other words, when peppering up the team was a more relevant option, the measurement error was lower. Along similar lines, the error variance of identity-expression (i.e., the unexplained variance) was greater in the condition where identity-expression played less of a role (the group-threat condition, .99) as compared to the group-reinforcement condition (.80).
Two functions of in-group bias

paths from anger to the instrumental function and from the instrumental function to out-group derogation were reliable but negative. Nevertheless we found evidence for our post-hoc explanation that the instrumental function of in-group bias in this context is more directly served by in-group favoritism (directed towards the in-group audience) rather than out-group derogation (directed towards the out-group audience).

In sum, under group-threatening conditions there appeared to be two distinct routes towards in-group bias: a more functional one (instigating collective action by means of in-group favoritism, directed to the in-group) and a more autonomous emotional one (anger regulation by means of out-group derogation directed to the out-group). This can be related to the distinction made by Lazarus and Folkman (1984) between problem-focused and emotion-focused coping strategies for dealing with threats. Applied to the current context, instigating instrumental behavior, by means of in-group favoritism, can be regarded as a problem-focused way of dealing with the threat (pepping up the in-group). On the other hand, regulating anger by means of out-group derogation can be seen as a more emotion-focused way of coping (i.e., a more cathartic route; “letting off steam”). The two paths leading to in-group bias under threat are also reminiscent of the distinction between instrumental and hostile aggression (Berkowitz, 1993). Whereas instrumental aggression is to some extent “planned” and instigated to obtain certain benefits (e.g., robbing a bank), hostile (or emotional) aggression is the result of negative arousal.

The fact that the two routes leading to in-group bias under threat appear to be negatively related suggests that anger-expression by means of out-group derogation could be viewed as a dysfunctional way of responding to threat, if only in the sense that it seems to be incompatible with achieving instrumental ends. This is further supported by the fact that whereas threat strengthens the path from anger to the out-group audience, it also renders the path from the instrumental function to out-group derogation reliably negative (it is not reliable under reinforcing conditions). In short, the same conditions that produce anger towards the out-group evoke out-group derogation (an expression of anger) regarded as deleterious to in-group goals. This is consistent with our post hoc explanation that out-group derogation and anger might backfire and actually provoke the opposition more than hindering them (or helping the in-group; see also Chapter 3). Although we do not wish to question a functional approach to emotions in general (this was in fact the reason why we included them in the current work), emotions should not be regarded as functional by definition. For example, as Parrott (1999) has noted “Anger sometimes leads to spluttering inarticulateness or ineffective name-calling rather than to effective assertion or attack” (p. 38). Applied to the current context we propose that fans were stuck between responding in a functional way (to the in-group needs) or responding in a more impulsive emotional way to the out-group, and that these divergent coping strategies are to some extent incompatible.
This second study, using an experimental approach, supported and extended our functional model of in-group bias. Group-reinforcing situations led to in-group bias as identity-expression, whereas group-threatening situations led to in-group bias for instrumental reasons. Moreover, this study stresses the importance of emotional processes (Mackie et al., 2000) as well as the influence of audience factors (see also Reicher, Spears, & Postmes 1995) in explaining this inter-group phenomenon.

An interesting aspect of the current study was the relatively low prevalence of out-group derogation. This appears to be in conflict with the popular view of soccer supporters as intrinsically aggressive and hostile (Zillmann, Bryant, & Sapolsky, 1989), especially those who are “die-hard” fans. This then raises the question of why there was not more derogation in the current sample. We suggest that the relation between strength of support and out-group derogation might actually be the reverse of this popular image. That is, those who care most about the in-group will focus most strongly on what needs to be done to help the in-group (Spears et al., 2002). “Die-hard” supporters might by and large recognize that derogation could work dysfunctionally, along the lines proposed in our post hoc explanation of the effects of anger and out-group derogation. Indeed, several participants in the group threat condition explicitly mentioned this. For example: “It is more effective to support your team than to abuse the opponent” (participant number 179), or “[I would suggest] . . . a positive stimulating song . . . [to] support the team instead of singing negative songs” (participant number 2832), or “I would rather sing a song against Feyenoord out of frustration, but that wouldn’t help Ajax. So I would sing a song to support Ajax” (participant number 2469), and: “Something positive, uplifting is needed . . . No one is helped by negative songs, neither the players, nor the supporters nor the club” (participant number 2719). Participants probably responded to the questionnaire while they were alone at home or work. There is no guarantee that they would behave as rationally and functionally in the stadium as their questionnaire responses suggest. However, Choy (1997) coded songs sung during five Ajax matches and found that 69% were in-group favoring and only 23% derogatory of the out-group (despite the fact that the available repertoire consists of about equal percentages of in-group favoring and out-group derogating songs). This illustrates that the behavior of “die-hard” soccer fans might be rather more positive and functional than is often thought to be the case.

**General Discussion**

In the current work we have attempted to elaborate the functional aspects of in-group bias. We tested the distinction between an identity-expressive function, and an instrumental function (instigating collective action). In line with predictions, the instrumental function was
more prevalent in social groups than in social categories whereas there were no differences between these types of groups regarding the identity-expressive function. Both functions were predicted by group identification (Study 4.1); the identity-expressive function was more prevalent under conditions of group reinforcement (Study 4.2) whereas the instrumental function was more prevalent under conditions of group threat (Study 4.1 & 4.2). This was in line with the predictions that group-reinforcing circumstances underlie behavior designed to claim the positive value of one's social identity, whereas group threat leads to behavior directed at changing the (inter-group) situation.

An interesting additional finding was a "third route" towards in-group bias: Under group threat, anger was regulated by means of out-group derogation. We explain this in terms of a cathartic reaction towards the out-group which seemed to be in conflict with instrumental concerns. In the light of increasing evidence that anger-expression can be deleterious to personal health (e.g., Geen, 2001), it is interesting that our participants seem to recognize its dysfunctional effects for the health of the group.

At a theoretical level the current research shows that in-group bias is not always the same thing but rather can take different forms and serve different needs in different contexts. Moreover, in-group bias might not be as irrational or dysfunctional as is sometimes suggested, but instead can be a useful tool for confirming or challenging the status quo when this suits the in-group (even for groups that are sometimes thought of as acting irrationally). So, although in-group bias can be dysfunctional (as our data also suggest), perhaps more interesting is the ways in which it seems to serve rational functions from the in-group perspective. Furthermore, this research has shown the importance of emotional processes (Mackie et al., 2000), as well as audience factors (Reicher et al., 1995, see also Chapter 3) in explaining in-group bias.

The current work forms part of our more general "contextual-functional" model of in-group bias (Spears, et al., 2002, see also Chapter 1, 2, 3, and 5). In this model we have linked socio-structural variables (e.g., status differentials) to different functions and directions of in-group bias (i.e., in-group favoritism vs. out-group derogation). We have focused here on the psychological conditions (group threat and identification) that instigate behavior (the expression if in-group bias) designed to address two key functions. These processes can also be seen as mediators between socio-structural variables and the expression of in-group bias. For example, low status may be threatening, leading to in-group bias out of instrumental motives. In other work we have also applied the distinction between identity and instrumental functions to other forms of in-group bias (e.g., on the allocation of resources). An important feature of the verbal forms of in-group bias studied here, however, is that it is by definition expressive, making it sensitive to audience factors examined in the current analysis.
There is some overlap between this instrumental function studied here, and realistic conflict (Sherif & Sherif, 1969) and interdependence approaches to inter-group relations (e.g., Gaertner & Insko, 2000; Rabbie, 1993). Although some commentators (Rabbie, 1993; Tajfel & Turner, 1979) have argued that these latter perspectives can be integrated with social identity theory, empirical tests of the circumstances under which one or the other offers the best explanation for in-group bias have been scarce. We hope that our "contextual-functional" model not only helps to specify the circumstances under which in-group bias might have an identity or an instrumental function, but also provides a way of bringing instrumental and identity approaches to inter-group relations under one theoretical umbrella. We adopted social identity theory as the starting-point for our analysis because it explicitly tries to explain the relation between features of the social context and psychological processes that may provide a functional basis for in-group bias. Future research should help to specify those links and reaffirm social identity theory as the truly "integrative theory of inter-group conflict" that Tajfel and Turner (1979) once proposed.