The Journal of Social Psychology, 2005, *145*(2), 117–126

Intergroup Relations in Soccer Finals: People's Forecasts of the Duration of Emotional Reactions of In-Group and Out-Group Soccer Fans

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ABSTRACT. The authors examined the hypothesis that people forecast a longer duration of uniquely human secondary emotions for their in-group than for an out-group. The authors conducted a field experiment in the setting of the European soccer championship. They asked Belgian participants to forecast the intensity with which their in-group Belgian fans or the out-group Turkish fans would experience various primary and secondary emotions in response to their team's victory or loss immediately after the Turkey–Belgium match and three days later. The results support the hypothesis. Moreover, and as the authors expected, they found no differences in the participants' forecasts of primary emotions. The authors discussed the implications of these findings for intergroup relations in general and for soccer fans' behavior in particular.

Key Words: affective forecasting, infrahumanization, intergroup bias

IMAGINE YOURSELF watching the TV world news, listening to reports of a recent earthquake in India. Think for a moment about the survivors who lost their homes and families. How long do you think it would take them to recover? Now imagine an earthquake in your own neighborhood. How long do you think it

This research was supported by Grant ARC 96/01.198 of the Communauté française de Belgique.

We thank Nicolas Geeraert and Vincent Frenoy for their assistance in collecting data. We are grateful to Olivier Corneille for his invaluable comments on an earlier draft of this article. We extend special thanks to Dan Gilbert for stimulating discussions of this study.

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would take you and the members of your community who survived the earthquake to recover from losing your homes and families?

In the present research, we sought to explore how people forecast the duration of emotional reactions of in-group members and out-group members. We suggested that when forecasting how members of the in-group and members of the out-group will feel in response to a future event, people assume that the emotional reactions of their in-group members will last longer than will those of the out-group members. Moreover, we argued that these differential forecasts of the duration of emotions are especially likely to occur for emotions that are uniquely human but not for emotions that are not uniquely human.

In making these arguments, we relied on recent research by Leyens and his colleagues (2000), who suggested that people tend to perceive the out-group as less human than their in-group (see also Bar-Tal, 1989; Struch & Schwartz, 1989). According to this view, people tend to attribute characteristics that differentiate humans from other species to the out-group to a lesser degree. This tendency to perceive the in-group members as more human than out-group members is a unique aspect of the well-documented motivation to discriminate between the in-group and out-groups (Brown, 1995). Intergroup bias has been demonstrated in many studies that have used various contexts and measures (for a review, see Brewer & Brown, 1998). Investigators have even shown that a person's mere perception of belonging to different groups triggers in the person in-group favoritism and relative out-group discrimination (e.g., Billig & Tajfel, 1973; Brewer, 1979; Gaertner & Insko, 2000; Tajfel, 1982; Turner, Sachdev, & Hogg, 1983). Intergroup bias sometimes stems from in-group favoritism and the absence of equivalent favoritism toward out-groups (Brewer, 1999). Very often, however, it is directly linked to out-group hate and hostility.

Leyens and his colleagues (Demoulin et al., 2004; Leyens et al., 2001) have documented a unique form of intergroup bias. Their research suggests that people derogate the out-group by attributing to it a lesser degree of humanity than they do to the in-group (Bar-Tal, 1989; Struch & Schwartz, 1989). Focusing on the role of complex human emotions in people's differential attribution of humanity to the in-group and the out-group, Leyens et al. (2000) have demonstrated that some emotions are perceived as unique to human beings, whereas other emotions are perceived as common to humans and animals (Demoulin et al.). For example, emotions such as hope, admiration, and humiliation are perceived as unique to human beings, whereas emotions such as surprise, fear, and anger are common also to animals. Investigators call the complex human emotions *secondary emotions* and the more primitive animal emotions *primary emotions*.[1]

In line with the suggestion that people perceive the in-group as more human than they do the out-group, Leyens et al. (2001) argued that people attribute more secondary emotions to their in-group than they do to an out-group. In contradistinction, participants do not consider primary emotions to be uniquely human, and so Leyens and collegues expected them to be attributed equally to the

in-group and the out-group. In a series of studies, Leyens et al. (2001) provided participants with lists of primary and secondary emotions and asked them to indicate which of the listed emotions best represented their in-group and a specified out-group. As hypothesized, the participants selected more secondary emotions to characterize the in-group than they did for the out-group, whereas no difference was found for primary emotions. In another study, Leyens et al. (2001, Study 3) gave the participants a series of numbers that supposedly represented degrees of primary and secondary emotions for in-group members or out-group members and requested that the participants assess the average level for each group. Again, participants estimated higher levels of secondary emotions for the in-group than they did for the out-group, whereas no equivalent difference was found for primary emotions.

In the present research, we sought to explore the implications of these differential perceptions of the in-group and the out-group in the domain of affective forecasting. Investigators of affective forecasting (e.g., Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000) have shown that people tend to overforecast the duration of their emotional experiences in considering the possibilities of various future events. For example, Gilbert et al. found that people had mistakenly assumed that their intense emotional reaction to being rejected for a desirable job would last longer than it actually did.

Combining the evidence for this durability bias with the evidence for differential perceptions of in-group emotional reactions and out-group emotional reactions, in the present study we reasoned that people would forecast a longer duration of secondary emotions for members of their in-group than for members of an out-group. Thus, if people perceive their in-group as more predisposed to experience secondary emotions than the out-group, they may also forecast that in-group members would react with longer-lasting secondary emotions to a concrete future event than would out-group members. For example, longer-lasting feelings of elation or repentance should be forecast for the in-group members in response to a positive or a negative event, respectively. However, because people attribute primary emotions equally to the in-group and the out-group, people should forecast the same duration of primary emotions in response to an emotional event. For example, people should forecast that the in-group members and the out-group members will experience pleasure or irritation equally in response to a positive or negative event, respectively.

Testing these hypotheses empirically is of major importance, because people's forecasts of the duration of emotional reactions of the in-group and the out-group have never been studied before. Whereas previous investigators of this area (e.g., Paladino et al., 2002) have focused on the association between types of emotions and groups, in the present study we explored people's forecasts of future emotional experiences of the in-group and the out-group. We attempted to test our hypothesis regarding the differential forecast of the duration of emotions for the

in-group and the out-group within the context of an actual soccer game. Such an intergroup context seems highly suitable for our purpose, because it involves a concrete event that typically elicits strong emotional reactions in the fans of the two competing groups. Specifically, we took advantage of the Belgium–Turkey soccer game that took place within the Euro2000 soccer championship. A few days before the game, we asked Belgian participants to forecast the intensity with which Belgian fans and Turkish fans would experience various primary and secondary emotions immediately after the game and three days later in response to their team's victory or loss. Because people perceive soccer games as very emotionally involving experiences, we reasoned that the participants would forecast intense emotional reactions for both groups of fans immediately after the game. However, we also reasoned that the participants would forecast a longer duration of secondary emotions for the fans of their in-group than for the fans of the out-group. Because primary emotions are not unique to humans, we did not expect to find any differences in their forecasts of duration for the two groups.

Method

Participants

The participants were 48 male Belgian students from the University of Louvain-la-Neuve, who volunteered to participate.

Materials

We selected materials on the basis of an earlier study (Demoulin et al., 2004) that measured the degree to which people perceived various emotions as unique to human beings. In the present study, we constructed a list of 12 emotions on the basis of these previous data. This list consisted of 6 primary emotions and 6 secondary emotions. Half of each type of emotions was positive, and the other half was negative. The Cronbach's alphas for these scales were .73 for the positive primary emotions, .71 for the negative primary emotions, .79 for the positive secondary emotions, and .63 for the negative secondary emotions.

We constructed the questionnaire in two parts. In the first part, the participants were requested to imagine how the soccer fans would feel if their team won the game and to forecast the extent to which those fans would experience each of the six positive emotions. In the second part of the questionnaire, we requested them to imagine how the same fans would feel if their team lost the game and to forecast the extent to which they would experience each of the six negative emotions. The participants made the forecasts on 11-point Likert-type scales that ranged from 1 = *not at all* to 11 = *very much*. We used such scales to encourage the participants to give accurate forecasts and to enable more variability between the individual items. Participants rated each emotion twice. The participants forecast first

the extent to which the fans would experience the emotion immediately after the game and then the extent to which the fans would feel it three days later.

Finally, we constructed two versions of the questionnaire. In one version, we requested the participants to forecast the emotional reactions of the in-group fans to a win or a loss of the in-group team. In the other version, we requested the participants to forecast the emotional reactions of the out-group fans to a win or a loss of the out-group team.

Procedure

We approached the participants individually in the campus area 3 or 4 days prior to a soccer game between Belgium and Turkey that took place in Brussels, Belgium, as part of the 2000 European soccer championship. After giving their consent to participate in the present study, participants completed a one-page questionnaire. Half of the participants were randomly assigned to complete a questionnaire about the in-group fans, and the other half were randomly assigned to complete a questionnaire about the out-group fans. We then debriefed and dismissed the participants.

Results

In the present study, our major hypothesis was that the participants would forecast a longer duration of secondary emotions for the fans of their in-group than for the fans of an out-group, because secondary emotions are unique to humans. We also hypothesized that the participants would forecast a similar duration of primary emotions for the fans of their in-group and for the fans of the out-group, because primary emotions are not unique to humans.

To test these hypotheses, we first computed the mean scores of each participant's ratings of how much the soccer fans would experience primary and secondary positive and negative emotions in response to the game. These mean scores were then analyzed with a 2 (group: in-group vs. out-group) × 2 (emotion: primary vs. secondary) × 2 (valence: positive vs. negative) × 2 (time: forecasts for after the game and forecasts for three days later) between–within analysis of variance (ANOVA). The results of this analysis are presented in Table 1.

In line with our hypothesis, the analysis yielded a Group × Time × Emotion interaction, $F(1, 46) = 3.95$, $p = .053$ (see Table 2). As hypothesized, the participants forecast a similar degree of secondary emotions for the in-group ($M = 8.41$, $SD = 1.18$) and the out-group ($M = 8.11$, $SD = 1.20$) immediately after the game, whereas three days later the in-group was forecast to experience more intense secondary emotions ($M = 6.94$, $SD = 1.12$) than the out-group ($M = 5.93$, $SD = 1.52$), $F(1, 46) = 3.23$, $p = .076$. The participants forecast lower emotions after three days for the out-group than for the in-group only for secondary emotions, $t(46) = 2.61$, $p = .012$ (see Table 2).

TABLE 1. Results of Analysis of Variance, With Group, Time, Emotion, and Valence as Determinants of the Predictions of Emotional Reactions

Variable	*F*	*(df)*
Group (in-group vs. out-group)	1.62	(1, 46)
Time (immediate vs. after three days)	149.90**	(1, 94)
Emotion (primary vs. secondary)	2.99	(1, 94)
Valence (positive vs. negative)	60.65**	(1, 94)
Group × Time	1.17	(1, 94)
Group × Emotion	2.15	(1, 94)
Group × Valence	1.01	(1, 94)
Time × Emotion	17.83**	(1, 94)
Time × Valence	1.78	(1, 94)
Emotion × Valence	1.49	(1, 94)
Group × Time × Emotion	3.95	(1, 94)
Group × Time × Valence	0.79	(1, 94)
Group × Emotion × Valence	0.13	(1, 94)
Time × Emotion × Valence	0.55	(1, 94)
Group × Time × Emotion × Valence	0.82	(1, 94)

**$p < .001$.

TABLE 2. Mean Ratings, Standard Deviations, and Results of Mean Comparisons for Predictions of Emotions by Group, Time, and Emotion

	In-group		Out-group			
Variable	*M*	*SD*	*M*	*SD*	*t*	*df*
Primary emotions immediately after the game	8.03	1.30	8.30	1.41	–0.68	47
Primary emotions three days later	5.51	1.25	5.55	1.59	–0.14	47
Secondary emotions immediately after the game	8.41	1.18	8.11	1.20	0.87	47
Secondary emotions three days later	6.94	1.12	5.93	1.52	2.61*	47

Note. Higher values indicate predictions of stronger emotional reactions.
*$p < .05$.

Moreover, and as hypothesized, we found no interaction between time and group in the forecasts that participants made for the primary emotions, $F(1, 44) = 0.31$, *ns*. Thus, the participants forecast an equal decrease in primary emotions after

three days for the in-group (from $M = 8.03$, $SD = 1.30$, to $M = 5.51$, $SD = 1.25$) and the out-group (from $M = 8.30$, $SD = 1.41$, to $M = 5.55$, $SD = 1.59$).

These results indicate that the participants forecast that in-group fans would experience a longer duration of secondary emotions than would the out-group fans. However, the participants in both group conditions made similar forecasts for the duration of the primary emotions in the in-group fans and the out-group fans.

The ANOVA also yielded other results of less importance for our purpose (see Table 1). First, and not surprisingly, there was a strong main effect of time, reflecting the circumstance that the participants forecast that the emotional reactions would be stronger immediately after the game ($M = 8.21$, $SD = 1.69$) and would decrease over three days ($M = 5.99$, $SD = 1.82$), $F(1, 44) = 149.90$, $p < .001$.

Furthermore, the analysis yielded an Emotion × Time interaction, $F(1, 44) = 17.83$, $p < .001$. This interaction reflects the participants' perceptions of secondary emotions as lasting longer than primary emotions. Newman-Keuls' post hoc test showed that the participants forecast that the fans would experience more secondary emotions ($M = 6.38$, $SD = 1.92$) than they would primary emotions ($M = 5.54$, $SD = 2.07$) three days after the game. However, the participants forecast that the fans would experience similar degrees of primary emotions ($M = 8.16$, $SD = 1.96$) and secondary emotions ($M = 8.26$, $SD = 1.73$) immediately after the game. This finding is consistent with that of an earlier study on the perceptions of emotions (Demoulin et al., 2004): participants generally perceived secondary emotions as lasting longer than do primary emotions.

Finally, in the present study, there was a main effect of valence, reflecting the circumstance that people forecast that the fans would experience stronger emotional reactions if their team won ($M = 8.09$, $SD = 1.86$) than if their team lost ($M = 6.11$, $SD = 1.93$), $F(1, 44) = 60.65$, $p < .001$. However, this main effect of valence did not interact with group, indicating that the participants did not forecast more positive emotions for the in-group fans ($M = 8.41$, $SD = 2.57$) than for the out-group fans ($M = 7.77$, $SD = 2.68$), $F(1, 44) = 1.01$, *ns*.

Discussion

As we had hypothesized in the present study, people forecast a longer duration of secondary emotions for the fans of their in-group than for the fans of the out-group. However, we found no difference in people's forecasts of the duration of primary emotions for the two groups. These findings demonstrate people's tendency to differentially forecast secondary emotions for their in-group and secondary emotions for an out-group, which has never been demonstrated before. Presumably, because people perceive their in-group as possessing a stronger tendency to experience secondary emotions than does the out-group (Leyens et al., 2001), people also forecast that their in-group members will react with longer-lasting secondary emotions in response to a concrete future event than will the out-group members. However, these differential forecasts do not stem from a ten-

dency to attribute more emotions in general to the in-group. Instead, the tendency is limited to secondary emotions, whereas people forecast primary emotions, which are not uniquely human, equally for the in-group and the out-group.

We did not measure the actual emotional experiences of the soccer fans after the game because the present study focused on people's perceptions of groups and not on people's ability to forecast emotional experiences accurately. However, Gilbert and his colleagues' research on affective forecasting shows that people tend to overforecast the duration of their emotional experiences in response to future events (Gilbert et al., 1998; Wilson et al., 2000). Thus, taking into account these findings on the durability bias in affective forecasting, investigators can see that bias likely occurred in the present study when people forecast a longer duration of secondary emotions for the in-group soccer fans than the actual duration (although we didn't measure it). In contradistinction, people assumed that the emotional reactions would diminish quickly when forecasting the duration of secondary emotions of the out-group members. Furthermore, the forecasts of the duration of primary emotions were similarly shorter for both groups. This finding is consistent with one of an earlier study of the perceptions of emotions: people generally perceive secondary emotions as lasting longer than primary emotions (Demoulin et al., 2004).

Future investigators could further explore the possibilities of a differential durability bias by adding a postevent measure of the actual emotional experiences of the two groups. In addition, investigators could implement a multigroup design, in which forecasts are given by members of both competing groups. Such an experimental design would provide a broader understanding of the phenomena in question. Ideally, not only would such a design replicate the differential forecasts for the duration of the emotional reactions of the in-group and the out-group, but it would also show a differential duration bias that occurs only for the forecasts of the in-group's experience of secondary emotions.

The implications of the present findings for intergroup relations are straightforward. People often base their actions on their forecasts of how they would feel and how others would feel. Moreover, in the present study we took the data in the natural setting of a soccer championship, and thus the data support the claim that the differential forecasts of emotions are a real-life phenomenon that is not limited to experimentally induced manipulations. Indeed, people gave their emotion forecasts for members of two familiar national groups and concerning an actual well-known event that was about to take place. If people expect the out-group members to experience less secondary emotions than will the in-group members, then the people consider negative or positive outcomes as less meaningful for the out-group than for the in-group. Therefore, people expect the out-group members to suffer less from a negative outcome and to gain less emotional reward from a positive outcome. Leyens and colleagues (2000, 2001) called this process *infrahumanization*. It has important implications (a) for prosocial behavior and (b) for aggressive and violent behavior in the context of soccer in particular and

in the context of intergroup relations in general. Indeed, Vaes, Paladino, and Leyens (2003) showed that people are more willing to help an in-group person in need who expresses secondary emotions than one who expresses primary emotions. If people perceive the out-group members as less likely to experience secondary emotions, the out-group members are also less likely to receive help when they need it. Conversely, they are more likely to become targets for aggressive behavior, because in-group members do not expect them to experience secondary negative emotions. If they do happen to experience such emotions, as would be the case after losing an important soccer match, in-group members do not forecast these emotions to last very long. Thus, people assume that harming an out-group member would not result in the same negative consequences as harming an in-group member. Such an infrahumanizing process may explain the prevailing phenomenon of intergroup violence in general and the frequent incidents of violence by the fans of competing soccer teams in particular. Understanding infrahumanization may thus help prevent such violence. For example, conflict management workshops and programs for stereotype reduction may benefit from including discussions of the nature of emotions that the two groups experienced. People's acknowledgment of the strength and duration of the out-group's secondary emotions may enhance feelings of empathy and reduce hostility between the groups.

NOTE

1. Investigators have borrowed this terminology from the emotions research domain (see e.g., Buck, 1999; Ekman, 1992) where researchers distinguish between a few basic primary emotions and more complex secondary emotions. However, in the present context, these terms refer to lay people's conceptions of emotions and not to the psychological and biological mechanisms underlying types of emotions.

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Received March 26, 2002
Accepted September 15, 2004