# Beyond Egoism and Group Identity: Empathy toward the Other and Awareness of Others in a Social Dilemma

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In three experiments, participants were faced with a social dilemma in which they could benefit themselves, the group, or other group members as individuals. The results showed that participants who felt high empathy toward a certain individual allocated more resources to the target of empathy, but without reducing the collective good. Then, we adapted the measure of empathy developed by Batson and colleagues (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995) to the Spanish context. The results of Experiment 3 supported the existence of a new process: awareness of other individuals present in the social dilemma. It is proposed that this process is independent of those typically studied in research of this field: self-interest, group identification, and the empathy for a specific individual.

Keywords: empathy, awareness of others, social dilemma

En tres experimentos se presentó a los participantes un dilema social en el que podían beneficiarse a sí mismos, al grupo, o a individuos concretos del grupo. En primer lugar, los resultados mostraron que las participantes que sintieron una alta empatía por un individuo concreto le adjudicaron más recursos, pero sin perjudicar al bien colectivo. En segundo lugar, se adaptó al castellano la medida de empatía elaborada por Batson y sus colegas (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995). En tercer lugar, los resultados del Experimento 3 apoyaron la existencia de un nuevo proceso: la conciencia de la existencia de otros individuos presentes en el dilema social. Se propone que este proceso es independiente de los tradicionalmente estudiados por la investigación en este campo: el auto-interés, la identificación con el grupo, y la empatía sentida hacia un individuo en concreto.

Palabras clave: empatía, conciencia de otros, dilema social

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Living in society means that individuals are continually faced with situations involving the dilemma of following collective or individual logic. How can such dilemmas be resolved? The social sciences have generally responded to this question in pessimistic terms, maintaining that individuals will basically look after their own interests and, unless measures are taken to avoid it, when a group is faced with this dilemma, the situation is doomed to a tragic end: Individuals will eventually extinguish the common good. In the words of biologist Garrett Hardin (1968, p. 1244), in his illustrative essay *The Tragedy of the Commons*, "Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons."

#### The Three Elements of the Social Dilemma

The classical game theory is one of the approaches that has paid most attention to the social dilemma. The cornerstone of this theory is the assumption that human beings basically follow self-interest, so that the processes explaining an individual's interaction with another or other individuals revolve around such self-interest. But this theory acknowledges that the individual often acts for the collective good. Two explanations are proposed for resolving the apparent contradiction between the supremacy of one's own interests and action in favor of the public good. The first is based on the existence of enlightened self-interest (Dawes, van de Kragt, & Orbell, 1990), through which people realize that following self-interest exclusively may have disastrous long-term consequences (such as the exhaustion of common resources), and that acting for the common good can bring secondary benefits (such as social recognition). This first explanation emphasizes the first element in all social dilemmas: the individual.

The classical game theory offers a second explanation of action in favor of the common good, based on acknowledging that people can define themselves at both the individual and the group level. Within social psychology, the theories of social identity (Tajfel, 1981) and self-categorization (Turner, 1987) are the maximum exponents of this explanation. These theories coincide in proposing that if a person identifies with a group, this increases the likelihood of this person taking decisions in favor of the group (for a review, see, e.g., Tajfel & Turner, 1985). This

second explanation is not incompatible with the emphasis placed on self-interest, as benefiting one's own group can be understood as a form of benefiting oneself, but it highlights a new element in the social dilemma: the group.

Finally, taking into account the above-mentioned elements, Batson and colleagues (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995) point out a third element. Starting out from a research line on altruism, which he defines as a motivation whose ultimate goal is to increase another person's well-being (Batson, 1987, 1991), Batson raises the possibility that empathy towards another person induces an altruistic motive that can have paradoxical consequences. If, in a social dilemma, an individual feels empathy toward another individual of the group, his/her desire to increase the well-being of the object of empathy may lead him/her to benefit that individual and, consequently, to reduce the resources available for the group as a whole. Thus, the inclusion of this third element would add a new threat to the collective good.

In sum, the different theoretical approaches have identified three elements: the individual, the group, and another individual toward whom one can feel empathy. In the present work our aim is to consider the existence of a fourth element.

# The Fourth Element of the Social Dilemma

Hoffman defines empathy as "an affective response more appropriate to the situation of another than to that of oneself" (Hoffman, 1989, p. 285), and argues that this affective response may be at the basis of our moral judgments (Hoffman, 2000). Specifically, this author describes the cognitive-affective development of empathic feeling: global empathy, egocentric empathy, empathy with a person's feelings, and empathy with the general troubles or misfortune of others.<sup>2</sup> In accordance with this continuum, one of the objectives of the present work is to highlight the subtle but important difference between "empathizing with a specific person" and "being aware of the existence of several people with similar needs."

As regards decisions when faced with a social dilemma, the person who makes a decision on how to distribute resources, in addition to empathizing with a specific individual in the group, may be aware of the existence of other individuals who may have comparable needs. For

<sup>&</sup>lt;sup>1</sup> Batson is the author who has proposed that the relationship between the emotion of empathy and the altruism motive may have paradoxical consequences; however, and as rightly pointed out to us by one of the reviewers of the present work, the relationship between empathy and altruism has been explored by numerous authors. Although an exhaustive review of such research would go well beyond the brief of the present study, at least in Social Psychology we should draw the reader's attention to the work of Cialdini, Brown, Lewis, Luce, and Neuberg, (1997), Davis (1994), Dovidio and Penner (2001), Eisenberg (2000), Piliavin and Charng (1990), and Manner et al. (2002), among many others (for a recent review, see Penner et al., 2005).

<sup>&</sup>lt;sup>2</sup> We should like to thank one of the reviewers of the present work for their contributions in this regard.

example, Kogut and Ritov (2005) have shown that the disposition to help a child depends on the extent to which he or she is individualized in relation to other children who may also need help. However, such awareness of the existence of different individuals is not the same as the perception of the group as a whole. Recent research has shown that the processes of formation of impressions on (a) separate individuals, and (b) groups are two different and independent processes (Hamilton & Sherman, 1996).

In the present study, we examine the potential role of this element that has traditionally been ignored by research in the field of social dilemmas: awareness of the existence of other individuals. The chief interest of this process resides in the possibility of its having motivational effects different from those of empathy and the feeling of identification with the group. Specifically, "awareness of others" would be associated with the desire to increase the well-being of the individuals making up a group, which is distinct from the well-being of a specific person (empathy) and the group as a whole (identification with the group).

In order to explore whether empathy can represent a threat to the collective good, Batson and colleagues (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995) carried out a series of experiments in which they presented participants with the dilemma of following their own interests or acting for the group, provoking, in some cases, empathy toward one of the individuals who made up that group. Following a similar procedure, we carried out three independent experiments with the aim of achieving three objectives. First, to check within the Spanish context the paradoxical effect of empathy found by Batson's group. Second, to develop an instrument for measuring empathy that was appropriate for the Spanish language. And third, to analyze the possible presence of the fourth element of the social dilemma (i.e., awareness of the existence of others), which, together with self-interest, identification with the group and empathy, can influence how resources are distributed in a social dilemma situation.

#### Experiment 1

#### Method

# **Participants**

Participants in this experiment were 36 women<sup>3</sup> from the Universidad Autónoma in Madrid (Spain). Two of them were excluded from the analyses of the results because in the experimental interview they revealed doubts about the authenticity of the note supposedly written by another participant. The remaining 34 were randomly assigned to three experimental conditions: 10 to "no communication," 12 to "communication-objective," and 12 to "communication-empathy."

#### Procedure

The principal task consisted of sharing out a series of resources among a group of four people. All participants did the task individually. On their arrival in the laboratory, each participant was given a brief introduction about the study and a sheet on which they gave written confirmation of their agreement to participate in the study. After reading the introduction and signing the agreement, they were given some instructions and left alone. In these instructions, the participant read that she would have to distribute two blocks of raffle tickets among herself and the other three participants. Each block contained 8 tickets and each ticket represented a chance of winning a 30-euro prize. The participant read that all the other members of the group would also do the task alone, and that they would never get together, so that their decisions would be completely anonymous and confidential.

Social dilemma. In the next part of the instructions, it was explained that the participant could assign these two blocks to one of the group members—including herself—or to the group as a whole. When a block was assigned to oneself or to another member of the group, it was equivalent to 8 raffle tickets. On the other hand, when a block was assigned to the group, the number of tickets rose from 8 to 12, and these were distributed equally, with 3 tickets going to each of the four group members.

The main purpose of this task was to present a situation containing the basic characteristics of all social dilemmas—that is, a situation involving a conflict between following one's own interest exclusively or acting for the good of the group as a whole. In this case, the distribution rules made it clear that all the members of the group would gain if all participants decided to assign the 2 blocks to the group, but that one participant could benefit herself substantially if she decided to keep her 2 blocks, because in this case, she would receive, in addition to her own tickets, those received from the participants who had decided to assign blocks to the group. It was also clear that the worst possible result would occur if all the participants opted to assign their 2 blocks to themselves, as in that case, there would be no increase in the initial number of tickets.

<sup>&</sup>lt;sup>3</sup> In all three experiments presented here we used samples made up exclusively of women. While there is evidence that women may show greater empathic disposition than men (e.g., Eisenberg & Lennon, 1983), the studies using this experimental paradigm by Batson and associates (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995) did not find significant differences according to gender.

Communication between group members. In the next part of the instructions, it was explained that one of the aspects that could influence the decisions taken in this type of situation was the possibility of communicating with one of the group members. Participants were told that, for this reason, one of the members of the group would be asked to write a note about some personal experience, and another would be asked to read it. In all cases, it was made clear that both the writer of the note and its receiver would be selected at random, and that the participant would write the note before being given the explanation of the situation in which she was to be involved. This clarification was designed to avoid the reader of the note interpreting its content as an attempt to influence her decisions.

From this point on, the instructions varied slightly between the three experimental conditions. In the two "with-communication" conditions, the participant read that she had arrived in fourth place, so that her role would be that of receiver; she would shortly receive the note written by the person with the role of sender. In the "no communication" condition, instead of the above-mentioned paragraph, the participant read that all the members of the group would make the decision without communicating with each other. The instructions concluded by thanking the participant for taking part in the experiment.

Once she had read the instructions, the participant notified the experimenter, who came in with an exercise on how the 2 blocks of tickets could be distributed and the consequences of those distributions. The participant and the experimenter completed the exercise together. The experiment did not continue until the distribution rules had been understood correctly. After explaining and clarifying these rules, the experimenter left the room for a moment and returned with a folder.

Manipulation of empathy. In the "no communication" condition, the folder contained only a sheet on which to indicate the distribution decision and an envelope in which to put it. In the with-communication conditions, the folder contained instructions on the perspective to adopt on reading the note, an envelope containing a note ostensibly written by the participant randomly assigned the role of "sender," a questionnaire on emotions, and the distribution decision sheet.

Before reading the note in the envelope, participants in the "communication-objective" condition read some instructions asking them to try and adopt an objective point of view about what the note said, while those in the "communication-empathy" condition read instructions asking them to try and imagine how this student felt with respect to what she had written about in the note. This induction of empathy technique has been widely used in the experimental research on this emotion (for a review, see Penner, Dovidio, Piliavin, & Schroeder, 2005).

Content of the communication. The note was handwritten, and the participant wrote that she had recently had a sad experience: she and her high-school boyfriend were to begin studying in the same university department, and were really looking forward to it, but just before the start of the course he decided to end the relationship; she was now struggling to get over the blow. Unbeknown to the participants, this note had been written by the experimenters, and was the same in all cases.

The measure of empathy. Straight after they had read the note, participants responded to a questionnaire that was basically a translation of that used by Batson and associates (Batson, Batson, et al., 1995). This instrument contains a series of terms for assessing the emotional reaction to the note, six of which are specifically related to the emotion of empathy: afectuoso (warm), lástima (sympathy), commovido (moved), compasión (compassion), ternura (tender), and bondadoso (softhearted).

In sum, the experimenter explained to the participant what was in the folder and asked her to: (a) read the instructions about the perspective to adopt, (b) open the envelope and read the note, (c) fill out the questionnaire on her reactions to what was in the note, and (d) indicate her distribution decision on the corresponding sheet and put it in the envelope. The experimenter then left the room and asked the participant to let her know when she had finished.

When the participant was ready, the experimenter came back into the room and presented her with a final questionnaire containing a series of questions. In this experiment, we concentrated on the analysis of two aspects: (a) the type of perspective participants had tried to adopt while reading the note (objective vs. empathic), and (b) the extent to which they had felt like members of the same group. When the participant had finished filling out this questionnaire, the experimenter returned and carried out a brief interview aimed at analyzing how the situation had been interpreted and checking whether the participant had had any suspicions that might affect the results; finally, the purpose of the research was revealed to the participant.

Hypothesis. The main hypothesis is that the empathy felt toward a person will provoke greater interest in helping that person, and that this will translate into assigning her more

<sup>&</sup>lt;sup>4</sup> In this questionnaire, participants also indicated on a 9-point scale  $(1 = not \ at \ all, 9 = totally)$  the extent to which (a) they wanted to win the prize, (b) they had understood the instructions, and (c) they had had fun making the decision. The results showed that, in general terms, the participants wanted to win the prize (M = 7.08, SD = 1.64), had understood the instructions (M = 7.81, SD = 1.26), and had fun to a moderate extent (M = 4.70, SD = 1.63). This pattern of results was closely similar in the other two experiments, so that it is not presented again.

of the resources (raffle tickets). Specifically, we expect the sender of the note to receive more resources in the "communication-empathy" condition than in the other two conditions, whereas there will be no significant differences between the "no communication" and "communication-objective" conditions.

#### Results

Effectiveness of the manipulation. Participants indicated in the final questionnaire the extent to which they remained objective and the extent to which they imagined the feelings of the person who had written the note  $(1 = not \ at \ all, 9 =$ totally). These two scores were subtracted from one another to create an index on the perspective adopted (empathicobjective). The results showed that those in the "communicationempathy" condition adopted a more empathic perspective (M = 2.08) than those in the "communication-objective" condition (M = 0.18), t(21) = 2.19, p < .05. With regard to the emotional response of empathy, we created an index combining the scores for the six adjectives related to this response. The index presented adequate consistency ( $\alpha = .82$ ). Participants in the "communication-empathy" condition reported greater empathy (M = 5.02, SD = .91) than those in the "communicationobjective" condition (M = 4.39, SD = 1.41), though the difference was not significant, t(22) = 1.32, p = .10 one-tailed.

Assignment of resources. We carried out three one-factor ANOVAs (no communication vs. communication-objective vs. communication-empathy) to analyze the effect of empathy on the three distribution decisions: tickets for oneself, for the other participant, and for the group as a whole. These ANOVAs revealed significant effects of the experimental condition in the number of tickets assigned to oneself and the other participant (the sender in the with-communication conditions), F(2, 31) = 4.47 and 4.56, ps < .03,  $\eta^2 = .22$  and .23, respectively; the observed power was

greater than .71. In the case of the tickets assigned to the group as a whole, there was a marginal effect, F(2, 31) = 2.98, p < .07,  $\eta^2 = .16$ , with observed power of .54.

To analyze the differences between the three conditions, we carried out post-hoc comparisons following the Bonferroni method, which controls the global error rate resulting from multiple comparisons. Table 1 shows the means of tickets assigned to oneself, to the group as a whole, and to the other participant in each of the three experimental conditions. The comparisons showed that, compared to the "no communication" condition, those in the "communicationempathy" condition assigned fewer tickets to themselves (p < .03), more tickets to the other participant (p < .03) and more tickets to the group as a whole (p < .04, one-tailed). Furthermore, in comparison with the "communicationobjective" condition, those in the "communication-empathy" condition assigned fewer tickets to themselves and more to the other participant (ps < .05, one-tailed). Finally, there were no significant differences between the "no communication" and "communication-objective" conditions.<sup>5</sup>

*Group feeling.* In the final questionnaire, participants were asked to what extent  $(1 = not \ at \ all, 9 = totally)$  they felt part of the same group as the other participants. The correlation between this measure and the number of tickets assigned to the group was significant, r = .51, p < .005; however, the one-factor ANOVA did not show a significant effect of the experimental manipulation on this feeling of belonging to a group  $(M_{global} = 5.84)$ , F(2, 30) = 1.39, p > .25,  $\eta^2 = .08$ , with an observed power of .27.

# Discussion

The results showed that participants in the "communication-empathy" condition basically decided to renounce maximizing their tickets with the aim of increasing the benefit for the group as a whole and, at the same time,

Table 1
Means (and Standard Deviations) of Tickets Assigned in Experiment 1

	Experimental Condition							
	No Communication	Communication-Objective	Communication-Empathy	Total				
Oneself	11.00 (3.33)	10.17 (2.88)	7.42 (2.78)	9.44 (3.29)				
Group	20.00 (2.67)	20.67 (2.31)	22.33 (2.06)	21.06 (2.47)				
Participant A*	3.00 (2.00)	3.50 (1.73)	5.42 (2.27)	4.03 (2.22)				

*Note*. The tickets assigned to oneself or to another participant could number a minimum of 0 and a maximum of 16. Tickets assigned to the group as a whole could number a minimum of 16 and a maximum of 24.

<sup>\*</sup>Participant A was the group member who ostensibly sent the note in the communication conditions.

<sup>&</sup>lt;sup>5</sup> Given that the number of participants is small within each experimental condition, in Experiments 1 and 3, we also carried out nonparametric tests equivalent to the one-factor ANOVA (i.e., Kruskal-Wallis and Jonckheere-Terpstra tests). The results did not vary either in the direction of the differences or in their significance level.

helping the sender of the note. As for the group feeling, this was moderate in all three conditions and was positively associated with the amount of resources assigned to the group. In sum, in the terms involved in this study, the results support in general that the "group" and "the other" were the elements that most influenced participants' decisions.

The present experiment has two limitations. First of all, although the results indicated that the participants maintained the perspective they were asked to adopt before reading the note (objective vs. empathic), the subsequent report on empathy reflected no significant differences. Therefore, it cannot be stated with any confidence that the differences in behavior were due to the direct influence of empathy. Secondly, these instructions could have a "demand effect" on participants, leading them first to report greater empathy and second to act accordingly (Orne, 1962). In the subsequent experiments we attempted to remedy these two limitations.

# Experiment 2

#### Method

The main objectives of Experiment 2 were: (a) to check the consistency of the results obtained in Experiment 1 and (b) to overcome the limitation related to the manipulation of empathy.

# **Participants**

Thirty-three students from the Universidad Autónoma in Madrid (Spain) participated in this experiment. Three of them were excluded after expressing doubts about the authenticity of the note.

# Procedure

Following the procedure of Batson (Batson, Batson, et al., 1995, Study 2), the participants in this study carried out a task identical to that of Experiment 1, except in two aspects. First, on this occasion there was no "no communication" condition, so that all participants, before sharing out the raffle tickets, read a note supposedly written by another participant (it being made clear once again that the note was written before being given the explanation of the situation in which she was to be involved). And second, participants were not asked to adopt a particular perspective on reading the note. Thus, to summarize, in this second experiment, participants were given the note, they read it, they filled out the questionnaire about the feelings produced by the sender's note, they distributed their tickets, they completed the final questionnaire, and they received the post-experimental interview. The sequence of presentation of the materials was the same as that described in Experiment 1.

Hypothesis. With the results obtained in Experiment 1 in mind, on this occasion, we aimed to observe whether the participants who felt greater empathy toward a particular person in the group favored that person, but without prejudicing the group.

#### Results

Measure of empathy. The combination of the six adjectives related to empathy gave rise to an index with low internal consistency ( $\alpha$  = .65). This result was due chiefly to the Spanish terms *lástima* and *compasión*. The correlations matrix showed that these two terms correlated strongly with one another (r = .75) but presented low or even negative correlations with three of the other five terms (-.24 < rs < .12). For this reason, it was decided to create an index excluding these two terms. This four-term index presented adequate consistency ( $\alpha$  = .82).

Empathy, assignment of resources and group feeling. In line with our hypothesis, the empathy reported by the participants (M=4.78, SD=1.01) correlated positively and significantly with the number of tickets subsequently assigned to the sender of the note (M=4.77, SD=2.47), r=.39, p<.05; negatively and marginally with the tickets assigned to oneself (M=8.23, SD=3.75), r=-.33, p<.09; and nonsignificantly with the tickets assigned to the group as a whole (M=22.00, SD=2.92), r=.17, p>.35. As regards the group feeling (M=5.60, SD=1.92), empathy did not correlate significantly with this feeling, r=.18, p>.30. Nor did group feeling show a significant correlation with tickets assigned to the sender of the note, oneself, or the group as a whole, rs<.26, ps>.15.

#### Discussion

In line with those obtained in Experiment 1, the results of Experiment 2 showed that the participants who felt greatest empathy toward the sender of the note subsequently assigned her more tickets, but once again without reducing the quantity of resources received by the group. Therefore, once more, the results showed that the "group" and "other" elements influenced the decisions.

In this second experiment, the results showed that "group feeling" was moderate and not related to the number of tickets assigned to the group. This finding leads us to posit the existence of a new element which could be considered to represent the transition between "other" and "group." We refer to what we have called the fourth element of the social dilemma: awareness of the existence of "others." Specifically, we propose that the greater presence of the "other" in a social dilemma, enhanced by the feeling of empathy elicited toward her, may sometimes lead to greater awareness of the existence of "others" who might have similar needs. On the basis of this possibility, we would carry out a third experiment with the aim of analyzing the role of this fourth element of the social dilemma.

Finally, in this second experiment the measure of empathy did not attain adequate consistency, so that it was decided to work with a simplified index that included just four terms. This inadequate consistency was caused basically by the Spanish term *lástima*, which was our translation of the English "sympathy." Following this result, we considered the possible meanings of *lástima* in Spanish, finding two. One is more pejorative ("anything that displeases or upsets one"), while the other is closer to the emotion of empathy ("being moved or feeling compassion because of another's ills or misfortune"). It would seem that in this experimental context, some participants interpreted the term *lástima* in the first, pejorative sense, dragging with it the term *compasión*. In view of this result, in Experiment 3, we drew up an empathy index using more appropriate Spanish terms.

# Experiment 3

#### Method

Experiment 3 consisted basically of a combination of the two previous experiments; it included a "no communication" condition and a "with communication" condition in which empathy was not manipulated through the request to adopt a perspective. Furthermore, we included a new measure of empathy adapted more appropriately to Spanish, as well as new measures related to what we have called the fourth element of the social dilemma: the others as separate individuals.

# **Participants**

Participants in this experiment were 34 psychology students from the Universidad Autónoma in Madrid (Spain), 3 of whom were excluded from the analyses after showing suspicion about some aspects of the experiment. Using a randomized block procedure, 10 participants were assigned to the "no communication" condition and 21 to the "with communication" condition.

### Procedure

This experiment consisted basically of a combination of the two previous ones. Two experimental conditions were designed. First, the "no communication" condition, which was a replica of that of the same name described in Experiment 1: Participants were told they would have to distribute two blocks of 8 raffle tickets among four participants (themselves and three others), and that they would make their decision without receiving any kind of communication from the others. And second, the "with communication" condition, which was a replica of that described in Experiment 2: All the participants read the note before making their decision about how to distribute the

blocks of tickets, and we subsequently measured the empathy felt toward the sender of the note. The rest of the characteristics were identical to those described in the previous experiments.

New measure of empathy. After discussing with Batson and his group the meaning of the term "sympathy," we came to the conclusion that there was no exact equivalent of the Spanish term. Therefore, we decided to express the meaning of "sympathy" by means of three phrases: "I'm really sorry about how she must be feeling," "I feel pity for her over what has happened," and "I feel sympathy for this person." Thus, we constructed a new index that included: (a) the five terms related to empathy used in Experiments 1 and 2, (b) the three phrases related to the meaning of "sympathy", and (c) another two phrases and four terms related to other emotions (see Appendix).

Awareness of the existence of others. Once again, all participants responded to a questionnaire after having shared out the tickets. On this occasion, we added a series of questions about the other members of the group. First of all, we added three questions about the extent to which they had wanted to maximize the number of tickets received by participants C and D (i.e., the other two participants ostensibly involved, but who had not written a note) and by the group as a whole. Secondly, the questionnaire included four questions on how far the participant considered (a) that the other group members might also have some type of need, (b) that she had some kind of responsibility towards the other group members, (c) that she and the other participants were part of the same group, and (d) that they were independent members. All of the questions in this instrument were answered on a 9-point scale  $(1 = not \ at \ all,$ 9 = totally). Once again, after completion of the questionnaire, participants were given a brief interview to check whether they had any doubts or suspicions about the experiment and to explain the purpose of the research.

Guided by the previous results, the first objective of this third experiment was to check the following hypothesis: People who feel empathy for one of the group members will give up part of their resources in favor of that member, but without prejudicing the group in general. The second objective was to check for the existence of two different processes: on the one hand, awareness of the existence of others, which would be associated with greater desire to maximize the resources given to the other group members; and on the other hand, the group feeling, which would be associated with maximizing the resources given to the group as a whole.

# Results

*Measure of empathy*. Substitution of the term *lástima* by the three above-mentioned phrases was highly effective; now, the consistency of the empathy scale was adequate ( $\alpha = .85$ ). All the correlations of each term separately with the total

scale were adequate, rs > .39; moreover, the 28-correlation matrix for the 8 terms (5 terms and 3 phrases) had a mean correlation of .43, p < .05. Thus, the new measure of empathy adapted to Spanish was found to be adequate.

Assignment of resources. With the aim of analyzing the influence of empathy on decisions about the assignment of resources, we considered three levels, made up of: the 10 participants who did not receive the note; the 10 who received the note and spontaneously reported low empathy (i.e., scored on the new empathy index below the median of 5.00); and the 11 who received the note and spontaneously reported high empathy (i.e., scored above this median). Subsequently, we carried out three one-factor ANOVAs ("no communication" vs. "low empathy" vs. "high empathy"), corresponding to the three distribution decisions: tickets for oneself, tickets for the other participant, and tickets for the group as a whole. In general terms, the three ANOVAs indicated a significant influence of the "empathy" factor on the three distribution decisions. As can be seen in Table 2, the greater the empathy in the participants, the fewer the tickets assigned to themselves, F(2, 28) = 3.20, p = .05, and the more assigned to the other participant, F(2, 28) = 3.23, p = .05, and to the group as a whole, F(2, 28) = 3.20, p = .05. In all three cases,  $\eta^2 = .19$ , and the observed power was .54.

In line with our hypothesis, the post-hoc (Bonferroni) comparisons showed that, in comparison with the "no communication" condition, only the "high empathy" participants assigned fewer tickets to themselves, more tickets to the other participant, and more tickets to the group in general (ps=.05). The rest of the differences were not significant.

Awareness of the existence of others and group feeling. The final questionnaire contained four questions related to the extent to which participants considered that (a) the other group members might also have some type of need, (b) she had some kind of responsibility towards the other group members, (c) she and the other participants were part of the same group, and (d) that they were independent members. Using these four questions, we created two indices: "awareness of the existence of others," made up of the sum of questions (a) and (b) described in the procedure section, r = .41, p < .41

.03, and "group feeling," made up of the sum of questions (c) and (d) (the latter inverted), r = .82, p < .001.

The basic objective of these measures consisted of observing the extent to which these two processes are different, and therefore associated with different motives. Specifically, we expected "awareness of the existence of others" to be associated with a greater desire to maximize the resources obtained by the individual members of the group, whereas "group feeling" would be associated with a greater desire to maximize the resources assigned to the group as a whole.

In line with our expectations, the "awareness of others" index presented a significant correlation with interest in maximizing the tickets for the two members of the group who had not written the note (Participants C and D), rs = .42 and .41, ps < .05. On the other hand, the relationship with interest in maximizing the tickets for the group as a whole was negative and nonsignificant, r = -.25. As for the "group feeling" index, this was significantly associated with interest in maximizing the tickets for the group as a whole, r = .39, p < .05, but not with interest in maximizing the tickets received by each individual separately, r = -.17, ns. Finally, the correlation between "awareness of others" and "group feeling" was nonsignificant, r = -.09.

In sum, the pattern of correlations suggests that "awareness of others" and "group feeling" are two independent processes that influence in different ways, motivating participants in the former case to increase the resources assigned to the other group members as separate individuals, and in the latter to increase the resources assigned to the group as a whole.

#### Discussion

In line with the results of Experiments 1 and 2, those of Experiment 3 reveal once more that participants who felt greater empathy toward one of the group members gave up part of their resources for the benefit of that person and of the group as a whole. Moreover, Experiment 3 complements the two previous ones in two aspects. First, on this occasion, the adaptation of the empathy measure originally developed

Table 2
Means (and Standard Deviations) of Tickets Assigned in Experiment 3

	Experimental Condition							
	No Communication	Communication-Objective	Communication-Empathy	Total				
Oneself	11.00 (2.36)	9.50 (2.41)	8.27 (2.61)	9.55(2.64)				
Group	20.00 (1.88)	21.20 (1.93)	22.18 (2.09)	21.16 (2.11)				
Participant A*	3.00 (1.41)	4.20 (1.55)	4.63 (1.57)	3.97 (1.62)				

*Note*. The tickets assigned to oneself or to another participant could number a minimum of 0 and a maximum of 16. Tickets assigned to the group could number a minimum of 16 and a maximum of 24.

<sup>\*</sup>Participant A was the group member who ostensibly sent the note in the low and high empathy conditions.

by Batson (Batson, Batson, et al., 1995) was effective—the decision to convey the sense of the English term "sympathy" by means of three phrases solved the problem of internal consistency found in the second experiment. And second, in this third experiment, we introduced new measures related to what we have called the fourth element of the social dilemma: the others. In line with our initial proposal, the results obtained with these measures suggest the presence of two independent processes: awareness of the existence of others and feeling of identification with the group.

#### Conclusions

# Presence of "The Other" in a Social Dilemma

In the type of social dilemma involved in the present study, the results of the three experiments showed a consistent pattern: those who felt high empathy toward a specific individual of a group assigned more resources to that person, at least in comparison to those who felt less empathy or who were not given the opportunity to feel it. These results are in line with those obtained by Batson (Batson, Ahmad, et al., 1999; Batson, Batson, et al., 1995) in particular, and with research on empathy and altruism in general (Batson, 1991, 1998). Therefore, we agree with Batson and associates on the need to take into consideration a third element of the social dilemma: the individual within the group who for diverse reasons may arouse our empathy.

# Presence of "The Group" in a Social Dilemma

As regards the role played by the group, the social identity (Tajfel, 1981) and self-categorization (Turner, 1987) models would explain part of our results in accordance with feelings of group identification and categorization. That is, Spanish participants may have identified more with the group or defined themselves as members of that group and, consequently, not wanted to prejudice the collective good in any of the cases. However, in general, this feeling was moderate and equivalent among the different conditions of the three experiments, so that it would not explain the differences in distribution found between the different experimental conditions in our study. In sum, while not denying the possible influence of identification with the group, we do not believe this factor is sufficient to explain the pattern of results obtained in the three experiments.

### Presence of "Others" in a Social Dilemma

In this work, we have explored the possible influence of what we call the fourth element of the social dilemma: the others. Specifically, we propose that, in certain circumstances, the empathy felt for a specific individual may also lead to awareness of the existence of other individuals involved in the same situation. This "awareness of others" is not empathy, an emotion directed toward a specific individual; nor is it identification, related to the group as a whole. This process is oriented toward *others as specific individuals* who are in some way linked to the person who has aroused our empathy (e.g., in the same situation). As regards the decisions made in a social dilemma, this process would lead to greater disposition to consider the well-being of each one of the individuals separately. In this sense, the results of Experiment 3 support the existence of this process which is (a) different from group feeling, and (b) associated with the desire to maximize the resources received by each one of the individuals in the group.

In the present study, we worked with an exclusively female sample, and though we do not consider this fact to affect the internal validity of the results obtained, it should be taken into account with regard to generalization of the results. In future research, it would be appropriate to study these processes in different contexts and with larger and more diverse samples.

To conclude, we consider that the results obtained support the relevance and importance of continuing to study the possibility of identifying a valuable combination of eliciting empathy toward a specific individual and another process not considered up to now: encouraging awareness of the existence of other individuals involved in our decisions. Beyond "enlightened egoism" and "group egoism," this combination may open up new avenues for the solution of social dilemmas whose end might not necessarily be so tragic.

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# Appendix

# Empathy measure (in boldface the terms related to empathy)

Receiver's feelings										
Sender										
To what extent can your feelings about this person be described as follows:										
	Not at all						Totally			
Afectuoso (Warm)	1	2	3	4	5	6	7			
Siento mucho cómo lo puede estar pasando (I'm really sorry about how she must be feeling)	1	2	3	4	5	6	7			
Enfadado (Upset)	1	2	3	4	5	6	7			
Conmovido (Moved)	1	2	3	4	5	6	7			
Estoy molesta con esta persona (I'm annoyed with that person)	1	2	3	4	5	6	7			
No entiendo lo que le ha pasado (I don't understand what happened)	1	2	3	4	5	6	7			
Ternura (Tender)	1	2	3	4	5	6	7			
Irritado (Irritated)	1	2	3	4	5	6	7			
Me da pena lo que le ha ocurrido (I feel pity for him over what has happened)	1	2	3	4	5	6	7			
Triste (Sad)	1	2	3	4	5	6	7			
Compasión (Compassion)	1	2	3	4	5	6	7			
Tengo simpatía por esta persona (I feel sympathy for that person)	1	2	3	4	5	6	7			
Bondadoso (Softhearted)	1	2	3	4	5	6	7			
Recelo (Distrust)	1	2	3	4	5	6	7			

*Note.* The words shown in brackets are intended to give an idea of the meaning of the Spanish term, and cannot be considered exact equivalents.