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BEING EUROPEAN IN A SOCIAL DILEMMA: THE EFFECT OF EUROPEAN IDENTITY ON COOPERATION

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One hundred and sixteen students from an Italian university took part in a two-person social dilemma game with a European bogus partner. The main aim of the research was to test the effect that an individual's level of European social identification has on his/her cooperative behavior with a partner from another European nation. An additional aim was to explore the different effects of the cognitive and affective dimensions of European social identity. Our research also meant to test the role of trust, which for our purposes is defined here as participants' positive expectation about the cooperative behavior of their European partner. Our results showed that the cognitive dimension of European social identity has a significant direct effect on cooperation, while the affective dimension has an indirect effect mediated by trust. We concluded by discussing the results in relation to different theoretical models, and explored several practical implications.

Key words: Europe; Social identity; Cooperation; Social dilemma; Trust.

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INTRODUCTION

Cooperation has been an important topic in social psychology since the publication of Sherif's seminal studies (Sherif, 1967), being highly relevant to interpersonal and intergroup relationships. It is a social and dynamic phenomenon which cannot be understood without bringing together individual and collective aspects. Social psychology therefore offers an ideal perspective from which to explore the issue.

Many scholars have used the framework of social dilemma to study cooperation (see the review by Dawes, 1980; also Komorita & Parks, 1994). Although this research tool originated among economists and game theorists, in more recent years a number of studies employing social dilemmas to investigate cooperative behavior have also appeared in the social-psychological literature. The most relevant and original contribution of social psychologists in this area concerns the effect that social identity has on cooperation in social dilemmas (see Brewer & Schneider, 1990, for a review). However, as far as we know to the best of our knowledge, no study has explored this effect in relation to European identity *tout court*, or its different dimensions, and this is the aim of the current research.

We began by providing a brief overview of the research into social dilemmas that is relevant to the aim of our study; we then introduced the issue of European social identity and the reasons why it is important to study its effect on cooperative behavioral choices in social dilemmas.

Social Dilemmas and European Identity

Social dilemmas are defined as situations in which there is a conflict between individual and collective interests (Dawes, 1980). In such situations, choices that represent the best option from an individual point of view have negative collective consequences (Dawes & Messick, 2000). Situations both in everyday life interpersonal relationships and in the most important social issues are at their core social dilemmas (Sanna, Lundberg, Parks, & Chang, 2010). For example, the use of a non-renewable resource can be considered a social dilemma, because the individuals' self-interest implies that they should exercise no restraint in using the resource, but at the collective level, this causes resource depletion, which is, in turn, a collective disaster (Kramer & Brewer, 1984).

Scholars have used several scenarios for modeling social dilemmas; these games are classified differently depending on their payoff structure. One of the most common is the Prisoner's Dilemma, in which the best outcome for an individual is defection, if the other participant cooperates; the second best is reciprocal cooperation, while the worst is reciprocal defection (Kollock, 1998). In our research, participants played a game with a similar payoff structure.

Social psychologists have highlighted the relevance of social identity in this research area. In the seminal study by Kramer and Brewer (1984), for example, participants were told they would share a resource pool initially containing 300 points. In a series of trials, each of them could collect from 0 to 10 points. Participants were also told that, once each trial was completed, the common pool would have a replenishment rate of about 1.1, and they were informed that they could continue to withdraw points from the pool as long as the resource was sustained. Results showed that participants were more likely to exercise personal restraint in their use of an endangered common resource when a common group identity was salient.

A number of studies have confirmed the positive effect that common social identity has on cooperative behavior in a situation of social dilemma (Brewer & Kramer, 1986; De Cremer & van Dijk, 2002; De Cremer & van Vugt, 1999; Kramer, Pommerenke, & Newton, 1993; Tanis & Postmes, 2005; Wit & Wilke, 1992), that is, people are most willing to cooperate if they share a salient membership with the other player/s (Brewer, 2000).

Although a considerable amount of research has been carried out on this topic in recent years, none has used the social dilemma paradigm to consider relationships between members of the European Union (EU). This could instead be an important and illuminating research area. Indeed, cooperation was the fundamental basis of the EU project: the integration process began after the Second World War and was intended to prevent conflicts between the European nations and to promote cooperation among them. Cooperation had a central role in the unification process since the institution of the European Coal and Steal Community (see Laffan, 2004). We suggest that an investigation of cooperation in relation to the EU will benefit not only from taking a political or economic perspective, but also through the use of the conceptual framework of social psychology.

How should we explore the EU in a social dilemma perspective? The EU itself, at its core, can be defined as a social dilemma — more precisely, as an intergroup common good dilemma (Kollock, 1998). From the point of view of *individual* national groups (e.g., Italian, German, Greek), the best outcome is reached if other nations cooperate (e.g., in giving resources, or welcoming immigrants) and the home nation does not: each nation is individually better off, if it "free rides." But, if *all* nations defect, then the EU project will fail and all will be worse off. Drawing on previous research findings proving the positive effect of common identity on cooperation in social dilemmas, we suggested that people of different nationalities could be more cooperative to each other when sharing a strong identification with the EU. This is also in line with the common ingroup identity model (Gaertner & Dovidio, 2000), which posits that superordinate group membership (e.g., a common European identity) reduces ingroup bias and fosters better intergroup relationships, even if the identities of the subgroups (e.g., the national identities) remain salient.

Therefore, the first aim of our study was to investigate the role of European social identity on cooperation in a social dilemma. We hypothesized that the level of European identification has a significant positive effect on a cooperative outcome.

The second aim of our research was to explore the effects of different dimensions of European identity on cooperative behavior. A number of authors, especially in more recent years, defined social identity (Tajfel, 1981) as a multidimensional construct (Deaux, 2000; Ellemers, Kortekaas, & Ouwerkerk, 1999). Although many definitions of social identity and its dimensions exist, and even some theoretical confusion about them (Ashmore, Deaux, & McLaughlin-Volpe, 2004), there is a large consensus on at least two components: the cognitive component, which refers to an individual's knowledge of his/her own membership, and the affective component, which refers to the value and emotional significance attributed by the individual to that membership (Cameron, 2004; Ellemers et al., 1999; Hinkle, Taylor, Fox-Cardamone, & Crook, 1989). Previous research investigated the impact of social identity on cooperation in social dilemmas, but no study has shown how these different dimensions of social identity affect this behavior. We addressed this issue here, exploring the effect that cognitive and affective dimensions of European social identity could have on cooperation. Because this topic has never been explored before, we cannot formulate any specific hypotheses.

Finally, we explored the role of trust, which has been suggested to be the mediator of the effect that social identification has on cooperative behavior (Brewer, 1979, 1981). Several scholars proposed that common membership fosters trust, which promotes provision of reciprocity in relation to a partner's cooperative behavior (Brann & Foddy, 1987; De Cremer, Snyder, & Dewitte, 2001; Kerr, 1996; van Leeuwen & van Knippenberg, 2002). Foddy and Dawes (2008) defined trust as the expectation of reciprocity about the co-player/s, that is formulated during a social dilemma game. Kramer and Brewer (1984) argued that, facing a social dilemma, participants make provisions about other players' behavior on the basis of sharing (or not) a common membership (*group-based trust*). This feeling of trust reduces the fear of exploitation, which is one of the main obstacles to cooperation (Pruitt & Kimmel, 1977; Yamagishi, 1986). Therefore, a common social identity that fosters trust (the mediator), could promote cooperative behavior. In this study we will explore whether the effect of European social identity on cooperation, and/or its two different dimensions could be mediated by group-based trust. Again, in absence of previ-

ous empirical evidence about this point, we prefered to explore these mediation processes without making any specific hypotheses.

METHOD

Participants

The sample considered consisted of 116 university students (32 males, 84 females; M_{age} = 21.90 years, SD_{age} = 2.20) from a large Italian university, all of whom participated voluntarily.

Procedure

The research was presented as a study of cooperation involving several European countries. Participants individually completed a questionnaire in which they were asked to play a two-person dilemma — similar to the one used by Mulder (2008) — with a bogus partner. Each participant was informed that s/he had been matched with another European college student, and the game was explained. Participants learned that they possessed a personal endowment of 10 "virtual" coins (each one worth one Euro), which, if they wished, they could invest in a "common pool," that is, each of them had to individually decide how many coins to assign to the common pool and how many coins to keep for him/herself. The European partner would do the same. All coins allotted to the pool would be multiplied by 1.5, divided equally, and redistributed to the two students, irrespective of the number of coins each had contributed. In addition, to make the game more realistic, they were told that one of the couple of students would be drawn to win the money they had earned in the game (that is, for each student, the coins s/he kept for her/himself plus the coins multiplied and returned from the common pool). Participants were also told that the number of coins each individual would contribute would be kept secret.

To facilitate the understanding of the task, they were given, by way of example, three hypothetical scenarios, showing high cooperation (both students contributing 10 coins), low cooperation (both students contributing zero coins), and "free riding" (one student contributing 10 coins, the other zero). On the next page of the questionnaire, each participant was told that s/he had been matched with a Spanish student,[1] and was then asked how many coins s/he would contribute to the pool.

Then, they were administered the scales described below. Finally, they were thanked and debriefed.

Measures

Cooperation. The level of cooperation was measured by how many coins each participant contributed to the common pool (range: 1-10).

Trust. The level of participants' trust, (i.e., their positive expectations about their co-player's cooperative behavior) was measured by a single item: "I think that my Spanish partner will be very cooperative with me." The range of possible values was 1-7, with a higher score indicating a more positive expectation.

European social identity scale (ESIS). We created a six-item scale to measure the strength of the participants' European social identity. Three items were intended to measure the cognitive component of European social identity, the other three the affective component. Some of these items resemble those of other well-known scales (e.g., Bruter, 2004; Hinkle et al., 1989; Jackson, 2002). However, none of them had ever been used to measure the level of identification with the EU and to distinguish the cognitive and emotive components of European social identity. Therefore, we performed a series of statistical analyses to investigate the structure and validity of the instrument.

One of the items was removed after the item analysis ("Being European is a source of optimism for me"). Exploratory factor analysis (method: maximum likelihood; rotation: oblimin with Kaiser normalisation) extracted two factors with eigenvalues greater than 1 (explaining 51% of the total variance), which reflect the cognitive and affective dimensions of European social identity (see Table 1).

TABLE 1
The two components of the European Social Identity Scale (ESIS)

	ESIS	
	ESIS-Cognitive	ESIS-Affective
I think of myself as a European citizen	.694	.119
I think that the EU is not founded upon common values (reverse scored)	.627	–.110
I do not feel European at all (reverse scored)	.598	.348
I am proud to be European	–.043	.711
It means a lot to me to be European	.069	.675

Note. This table shows the items and the loadings of the two components of the European Social Identity Scale resulting from exploratory factor analysis.

We created average scores for the whole scale (European Social Identity Scale, ESIS; α = .72) and the subscales (European Social Identity Scale-Cognitive, ESIS-C; α = .71; European Social Identity Scale-Affective, ESIS-A, α = .65). The higher the score, the higher the level of identification (range: 1-7).

The bi-factorial structure of the ESIS was also tested using confirmatory factor analysis. Two models were compared: the first with all five items loading on one factor, the second with two correlated factors which reflect those resulting from the exploratory factor analysis. As shown in Table 2, the values of the main fit indices were satisfactory only in the case of the latter model (Hu & Bentler, 1999). These results supported the validity of the distinction between cognitive and affective dimensions of European social identity.

TABLE 2
Confirmatory factor analyses

	χ^2	*P*	NFI	NNFI	CFI	RMSEA
Model 1 (one factor)	13.76	.02	.858	.798	.899	.150
Model 2 (two correlated factors)	4.55	.34	.953	.984	.994	.042

Note. Confirmatory factor analyses were carried out using Bentler's EQS 6 software (Bentler, 2006), by testing a one-factor model and a two-correlated factor model (factor 1: cognitive; factor 2: affective). The maximum likelihood method was used. In both cases, Bonett-Woodward-Randall test showed no significant excess kurtosis indicative of non-normality.

RESULTS

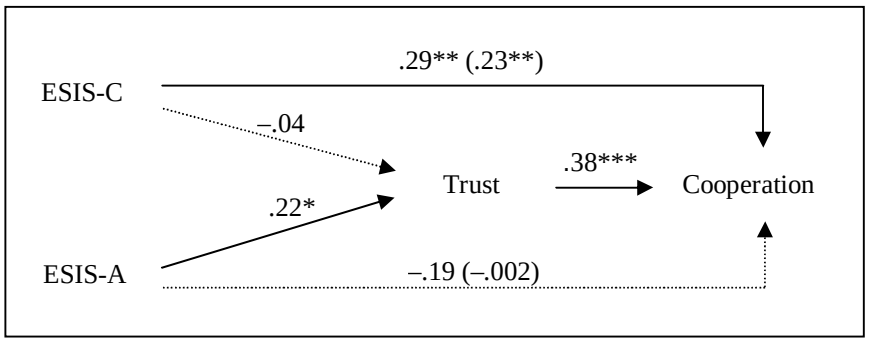
Table 3 shows means, standard deviations, and correlations between variables. The cognitive and emotive dimensions of European social identity were moderately and significantly correlated.

TABLE 3
Descriptive statistics

	ESIS-C	ESIS-A	Trust	Cooperation
ESIS-C	4.64 (1.24)			
ESIS-A	.385**	4.76 (1.24)		
Trust	.041	.206	4.76 (1.08)	
Cooperation	.233*	–.002	.348**	6.32 (2.39)

Note. The table shows the correlation coefficients (Pearson's *r*) between ESIS-C, ESIS-A, Trust, and Cooperation. Diagonal cells report means and standard deviations (in parentheses).
* $p < .05$. ** $p < .01$.

Direct and indirect effects of ESIS-C and ESIS-A on cooperation were studied by a series of multiple linear regression models, taking into account the recent approaches and guidelines proposed in the literature about mediation analysis (Little, Card, Bovaird, Preacher, & Crandall, 2007; MacKinnon, Fairchild, & Fritz, 2007; Preacher & Hayes, 2004, 2008; Shrout & Bolger, 2002). Results are provided in Figure 1. The scores of ESIS-C had a significant direct effect on cooperation, which seemed not to be mediated by trust, because ESIS-C is not a significant predictor of trust. On the contrary, ESIS-A did not have a significant direct effect on cooperation. However, ESIS-A had a marginally significant effect on trust, which in turn significantly affects cooperation. Hence, it seems that ESIS-A could have an indirect effect on cooperation mediated by trust.



Note. The table shows the standardized coefficients (β) resulting from the multiple regression analyses used for studying the relation between ESIS-C, ESIS-A, trust, and cooperation.The direct effects of variables are reported on the arrows (total effect in parentheses). Statistically not significant paths are represented by dashed lines.
* p = .07. ** p < .05. *** p < .01.

FIGURE 1
Mediation analysis.

A formal test of the indirect effects was performed by two bootstrapping analyses based on 5000 resamplings (Preacher & Hayes, 2004, 2008), which confirmed that trust is not a mediator of the effect of ESIS-C on cooperation, bias corrected 95% CI [–.204, .085], and that the indirect effect of ESIS-A on cooperation mediated by trust is significant, bias corrected 95% CI [.004, .387].

DISCUSSION

This study aimed to test the effect that European social identity had on cooperative behavior in a social dilemma, and to explore how different dimensions of European social identity impacted on it. Of the two components of European social identity, the cognitive and affective, our findings suggest that the former has a significant direct effect on participants' cooperative behavior, while the latter has a significant indirect effect through group-based trust.

We decided not to report the mediation analysis performed with the scores of the whole European Social Identity Scale as a predictor, because of the results of the confirmatory factor analysis. However, the whole ESIS scores have no significant direct or indirect effect on Cooperation, and no significant effect on Trust (all ps > .10). Hence, taken together, our results seem to confirm both the effect of European identification on cooperation and the importance of distinguishing between different dimensions of European social identity.

These findings seem valuable for the development of the theory on cooperative behavior, because the opportunity to explain and forecast cooperation could probably be increased by including common identity as a variable in scholars' predictive models. Many studies still do not consider this factor, even in the psychological literature (see Mosler & Brucks, 2003).

Moreover, as already mentioned, our findings suggest the existence of different patterns of influence for the two components of European social identity. As in the traditional interpretation of social identity-to-cooperation effect, ESIS-A shows a significant indirect effect on coop-

eration that is mediated by group-based trust. The cognitive dimension of European social identity, instead, has a significant direct effect on cooperation, which is not mediated by trust. This result could be consistent with a more recent interpretation of the effect of social identity on cooperation. According to De Cremer and van Vugt (1999), the motive of collective interest, not trust, mediates the effect. This is the so-called goal transformation hypothesis (De Cremer, van Knippenberg, van Dijk, & van Leeuwen, 2008), according to which, if the individual categorises him/herself to be a member of a group, personal and collective goals become interchangeable (see also Brewer, 1979).

Therefore, our results suggest a new hypothesis: European social identity could foster cooperation through two different paths, related to its two different components. The influence of the cognitive dimension could be mediated by collective interest, while the effect of the affective dimension could be mediated by trust. This hypothesis may be investigated in relation to European social identity, but also to other types of social identities. In other words, we suggest that the social identity-to-cooperation effect may not be a single process, but a double-path one. If confirmed, this new hypothesis could conciliate the two alternative interpretations of social identity effect on cooperation: the traditional one proposing trust as the mediator, and the goal transformation hypothesis, assigning the role of mediator to collective interest.

As we have already highlighted, our results show the importance of distinguishing between different components of European social identity: at present an understudied topic in social psychology. We created a brief instrument to measure the cognitive and affective components of European social identity which seems to have a good construct and predictive validity. This instrument could serve as a basis for a more complex investigation, which should be validated on cross-national, larger, and more heterogeneous samples.

From a more practical point of view, considering European social identity could also have important benefits, including increasing the fostering of cooperation among European people and countries. The dominant political approach to the EU integration process (which is essentially functionalist) has been shown to regard questions related to common European identity as secondary to those related to the economy and political institutions (Eatwell, 1997). By contrast, studies in social psychology highlight the role of social identity in affecting intergroup conflict or cooperation (Brewer, 1979, 2000; Tajfel, 1981). Our results support these findings within the context of cooperative behavior in the EU.

Finally, this study has several limitations that require further investigation. First, the correlational nature of our results does not allow the affirmation of the direction of causal effects. However, previous experimental studies have shown that causality flows from social identification to cooperative behavior (e.g., Kramer & Brewer, 1984). Although we have not explicitly tested this issue, it would be surprising to discover that the direction of causality is reversed in the case of European social identification. Nevertheless, it would be fruitful to conduct further experimental research to obtain final empirical evidence on this point.

Furthermore, as already stated, the EU could be considered an intergroup common good dilemma which involves national groups. In this research we have used a game involving two people, without two or more groups being *actually* present. One could argue that we are not studying intergroup behavior, but interpersonal behavior. On the contrary, our study is based on the assumption that participants' cooperative behavior in the social dilemma game could be affected by individuals' group identification. Results seem to support our idea. Hence, we do be-

lieve we are studying intergroup behaviour, because it is not necessary to have two or more groups *actually* present to define an interaction as an intergroup behavior, if people's behavior is affected by their group identification (see Sherif, 1966; Tajfel, 1982; Tajfel & Turner, 1979). However, it would be very interesting to study the European social identity-to-cooperation effect also with a social dilemma game that involves two or more real or minimal groups (e.g., Kramer & Brewer, 1984). It would be also intriguing to experimentally contrast intragroup (intra-national) and intergroup (inter-national) cooperation and conflict (see Bornstein & Ben-Yossef, 1994) in relation to European identification. Future research could fruitfully address these issues.

In addition, in the current research, the measure of trust consists of a single item. Therefore, the results concerning trust should be interpreted with particular caution. Another direction for future research could be to investigate the issues we addressed here with a more complex and robust measure of trust.

Finally, participants were young university students. We suggest that it is important to explore how self-identification as a European citizen impacts on the willingness of young European people to behave cooperatively, and our results give cause for optimism. Nonetheless, these issues should also be considered in the political *élite*, exploring how European identity affects cooperation in the case of politicians and others who must work cooperatively on a daily basis to enhance function, quality, and efficacy of the EU. We believe this is a promising area for future research — including action-research programs — and one that will yield insightful new findings.

NOTE

1. All participants were allocated a Spanish bogus partner to avoid any confusion between the effect that European identity has on cooperation with the possible effect that a perceived difference in the two participants' national status might have. Therefore, the nationality chosen for the bogus partner was one whose status within the EU was likely to be perceived as similar to that of the participants' own nation. Two items were used to measure the perception of status within the EU of the participant's and their co-player's nation. The *t* test confirmed that there was no significant difference in the perceived status of Italy ($M = 4.59$) and Spain ($M = 4.62$), $t < 1$, p = ns.

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