

Prosocial behavior, inclusion and exclusion: Why and when do we behave prosocially?

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ABSTRACT

Two experiments analyzed the influence of inclusion versus exclusion on prosocial behavior. In Study 1, evidence for the social reconnection hypothesis was found. In Study 2 a cross-over interactive effect is demonstrated: excluded individuals tended to be more prosocial when their competence was affected than when their popularity was affected. However, included people were more prosocial than excluded people when their popularity was affected, but they were less prosocial when their competence was highlighted. Besides, Study 2 has shown that affiliation motivation mediates the effect of exclusion on prosocial behavior, and thus (1) excluded individuals endorse lower levels of affiliation motivation with their rejecters than included individuals do with individuals who have included them; and (2) individuals with higher levels of affiliation motivation engage in higher prosocial behavior levels when the behavior is oriented to people with whom the chance to reconnect exists, but not when it is oriented to people with whom there is no possibility for future affiliation.

KEYWORDS: affiliation motivation; cross-over interaction; exclusion; mediation; prosocial behavior

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Several studies (Maner, DeWall, Baumeister, & Schaller, 2007; Mead, Stillman, Vohs, Rawn, & Baumeister, 2010; Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007) have pointed out that social exclusion impacts on prosocial behavior (PSB). Nevertheless, whereas several authors find that exclusion increases PSB (Maner et al., 2007; Mead et al., 2010), others find that exclusion decreases PSB (e.g. Twenge et al., 2007).

Fundamentally two different explanations for that controversy may be posited. One comes from the social reconnection hypothesis (DeWall & Richman, 2011; Maner et al., 2007); and another comes from the theory posits by Williams (2007) in which the author conjectures that the different types of exclusion to which individuals are exposed may have opposite consequences in their behavior displayed, being more or less prosocial—and even antisocial—depending on which exclusion type they are experiencing.

The social reconnection hypothesis

Several authors (Cuadrado, Taberero, & Steinel, 2015; DeWall & Richman, 2011; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009) explain that the chance that excluded people has or not to be included again in the future influences whether excluded people behave prosocially or not. Excluded individuals who see some reconnection chance—hopeful excluded individuals (Cuadrado et al., 2015)—tend to behave prosocially in order to achieve their belongingness need (Baumeister & Leary, 1995; Cuadrado et al., 2015; DeWall & Richman, 2011; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009). By contrast, for rejected individuals who do not see any possibility of reconnection—hopeless excluded individuals (Cuadrado et al., 2015)—and for included individuals, it will be pointless to behave prosocially in order

to achieve inclusion. The desire—and chance—to reconnect is crucial in rejected individuals' decision to behave prosocially (DeWall & Richman, 2011).

In the first study of this research paper we were interested in providing further evidence for the social reconnection hypothesis (DeWall & Richman, 2011; Maner et al., 2007)—which posits that exclusion promotes behaviors oriented to affiliate with others.

H1: Hopeful excluded individuals will endorse higher levels of PSB than included individuals only when the group target may fulfill their belongingness need.

The exclusion type

A second explanation for the controversy found regarding the relation between exclusion and PSB might come from the different types of exclusion to which individuals are exposed; certain types of exclusion may produce prosocial responses and others may produce self-focused and attention-grabbing responses (Williams, 2007). Williams (2007) theorized that when exclusion affects the need for efficacy—for example when individuals feel excluded because of their low abilities levels in some task—individuals may tend to be more competitive, in order to meet this need; in contrast, when exclusion affects the need for belongingness—for example when individuals feel excluded because others do not like them and do not want them in their network—individuals may tend to meet this need by being more prosocial, in order to be accepted by the group.

And when individuals feel included, with a great sense of belonging and self-identification with a group, their behavior with the group tends to be more prosocial (Kirkpatrick, Waugh, Valencia, & Webster, 2002). Thus, when the target of inclusion or

exclusion is belongingness, both excluded and included individuals would tend to behave prosocially.

And in order to regulate their behavior toward others and agree with a hierarchy, individuals included because of their efficacy must monitor their relative status to the others in competitive relationships (Leary & Downs, 1995). ‘Self-perceived superiority’ is related to behavioral aggression (Kirkpatrick et al., 2002; Webster & Kirkpatrick, 2006). Moreover, both high self-perceived mate value (Kirkpatrick et al., 2002) and dominance superiority (Johnson, Burk, & Kirkpatrick, 2007) emerge as predictors of aggression. We expected that when individuals feel that others have included them because of their value, they would tend to adopt competitive behaviors in order to maintain this status.

In Study 2, we were interested in providing evidence for the theory exposed by Williams (2007) by performing a 2 (inclusion/exclusion) x 2 (need for efficacy/need for belongingness) experimental design. As in Study 1, we used two types of PSB: one allowing re-inclusion (sharing resources PSB with a specific group) and another that does not allow reconnection (anonymous donating PSB to a NGO). This procedure may facilitate pitting the two theories against each other. We expected that when excluded individuals see their need for belongingness threatened, they will tend to behave in a more prosocial way in order to reconnect (Williams, 2007) only when the possibility for future reconnection exist but not when this possibility does not exist as suggested by the social reconnection hypothesis (DeWall & Richamn, 2011; Maner et al., 2007).

Moreover, because affiliation motivation—i.e. the desire for social contact, acceptance, and positive interaction with others (Hill, 1987)—(a) may be relevant in exclusion experience (DeWall & Richman, 2011), and (b) is a determinant of PSB

(Cuadrado, Tabernero & Steinel, 2016; DeWall & Richman, 2011; Maner et al., 2007; Mlcak & Zaskodna, 2008), we were also interested in analyzing the role of this variable in the exclusion-PSB link. Individuals with high desire to maintain social contact are expected to behave in a prosocial way in order to fulfill their affiliation desire (Cuadrado et al., 2016; Mlcak & Zaskodna, 2008). And regarding the exclusion-affiliation motivation link, we expected to corroborate the results found by other authors referring to the effect that exclusion exerts on affiliation motivation (DeWall & Richman, 2011; Maner et al., 2007; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009); excluded individuals with reconnection chance tend to increment their desire to affiliate (DeWall & Richman, 2011; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009) only when the behavior is not oriented to the rejecters (Maner et al., 2007). When individuals feel excluded they tend to be motivated to affiliate with individuals other than the rejecters, but to avoid rejecters. Then, we suggest that affiliation motivation mediates the link between exclusion and PSB in such a way that exclusion influences PSB through the effect it has on affiliation motivation. However, in the same way in which we propose that the decision to behave prosocially might be influenced by whether the PSB displayed may allow reconnection or not, also the mediating role of affiliation motivation on the exclusion-PSB link might be influenced by whether the PSB displayed may allow reconnection or not. As previous research (DeWall & Richman, 2011; Maner et al., 2007; Mlcak & Zaskodna, 2008) has explain, individuals highly motivated for affiliation tend to behave prosocially in order to fulfill their need for affiliation. Nevertheless, once more it will be pointless for those individuals to behave prosocially when the behavior displayed does not provide any possibility for reconnection. Then, we proposed that affiliation motivation mediate the

exclusion-PSB link only when the PSB displayed may provide affiliation with a group, but no when it may not provide affiliation with any group.

H2: When belongingness need is affected, both excluded and included individuals engage in higher PSB when this behavior may allow future reconnection; nevertheless, when efficacy need is affected both included and excluded individuals engage in lower PSB.

H3: Affiliation motivation acts as mediator of the effect of exclusion on PSB in such a way that (a) excluded individuals endorse lower levels of affiliation motivation with their rejecters than included individuals do; and (b) individuals with higher levels of affiliation motivation will engage in higher PSB levels when the PSB displayed might provide future affiliation with other, but no when it does not provide future affiliation.

In brief, in this research paper we were interested in replicating the social reconnection hypothesis (Study 1) exposed by DeWall and Richamn (2011) and Maner et al. (2007), and in testing the theory proposed by Williams (2007) which suggest that different types of exclusion —by need for efficacy and by need for belongingness—can produce different behavioral prosocial outcomes in individuals (Study 2). Then, we will explore (1) whether the reconnection chance affect PSB (Study 1); (2) whether different types of exclusion affect PSB (Study 2); and (3) whether affiliation motivation mediates the exclusion-PSB link (Study 2).

STUDY 1

As explain above, in this study, we were interested in providing further evidence for the social reconnection theory (DeWall & Richamn, 2011; Maner et al., 2007) by

performing a conceptual replication of the previous researches results. We will explore this theory with two types of PSB: one allowing future reconnection (a sharing resources task with online partners), and another that does not allow reconnection (an anonymous donation to a NGO). We expected that (H1) hopeful excluded individuals (a) will share more than included individuals with their group partner in order to gain acceptance, but (b) they will display the same pattern of anonymous donation than included individuals because to donate to a NGO does not allow reconnection and thus it will be pointless to donate in order to gain acceptance. The use of prosocial behaviors aimed at both the desirable group and anonymous others may be relevant, as it allows for the teasing apart of whether excluded individuals engage in prosocial behavior generally or in prosocial behavior aimed specifically at the desirable group.

Method

Participants

Participants were 41 students (78% women, 22% men; age range [19-49], $M = 22.10$, $SD = 6.39$) randomly selected from the University of Cordoba (Spain).

Measures

Manipulation check ($\alpha = .92$)

Perception of exclusion was measured with four items ('My group members have excluded me', 'My group members have included me', 'I feel excluded by my group members', and 'I feel included by my group members').

Prosocial behavior

Two different types of PSB were used—sharing resources PSB and donating PSB. *Sharing resources PSB*. It was measured by using the public good dilemma game. A number of points were given to the participants, and every player decided how many

coins to keep or donate to their group members. Points donated to the group were doubled and distributed among all group members. The mean number of points donated in the two rounds of the game was used as a PSB measure; thus the more points participants gave to the group, the more prosocial they were (High correlation between the two rounds was found ($r = .90, p < .001$)).

Donating behavior. It was assessed throughout feedback provided by the computer program, in which participants were informed (a) that the investigative team was collaborating with the prestigious non-governmental organization (NGO) UNICEF, and (b) that they had the opportunity—only if they desired to do so and with no obligation or expectation—to donate a part or all of the money they had earned in the sharing resources tasks. In this scenario, the computer would supposedly subtract the amount they chose to donate from the amount they had supposedly accumulated in completing the resources tasks, with the remainder delivered to them at the end of the study.

Procedure and experimental design

Students were informed in an online platform that they would have to do some online group tasks, which would give them the chance to earn points exchangeable for cash. To ensure the reliability of the online group tasks, the program asked the participants to introduce themselves to the rest of the online contestants. Then, in order to form an online group they had (1) to remove two of the six participants whose description was presented to them (all the participants read the same descriptions of non-existent online participants); and (2) to select two of those six participants to form part of their group.

After selecting and eliminating participants, contestants were informed that they each formed part of a group constituted by three players: themselves and the two

participants whom they had chosen. Once the groups were formed, and in order to create the two different experimental conditions, participants played a round of the fourth version of the Cyberball game (Williams, Yeager, Cheung, & Choi, 2012), a program created for use in research on exclusion. Participants randomly played in an exclusion condition—receiving the ball only twice—or in an inclusion condition—receiving the ball ten times (the game comprised 30 passes between the three players).

After the experimental manipulation, a manipulation check was performed. Then, we assessed the two different types of PSB. In order to assess sharing resources PSB, participants played two rounds of the public good dilemma game, being informed that the members of their group would see how many points they gave to the group. This was done to address the question of whether the PSB we expected to occur was related to an attempt to reconnect with those others. To ensure they believed that they might reconnect, each participant also was informed that, after the first trial games, their partners would decide if they wanted to retain them for another trial or if they wanted to change their group membership. This was done in order to elicit their beliefs and thoughts about the reconnection chance because, as we have argued, we expected that hopeful excluded individuals would tend to behave in a prosocial way. After the two rounds, participants were informed that we had reached a large enough sample and that no further rounds were required. Then, to measure donating PSB, the program told them they could, if they so desired, donate part or all of the money they had earned in the group tasks. Finally, all participants were fully debriefed.

Results

Manipulation check

The t-test results showed significant differences between the experimental conditions in relation to perception of exclusion ($t(1, 39) = -7.88, p < .001$). Participants in the exclusion condition reported feeling more rejected ($M = 4.77, SD = 1.48$) than participants in the included condition ($M = 1.79, SD = 0.71$). The manipulation has had the expected effect.

Impact of exclusion on PSB (H1)

The t-test results showed that there were significant differences between the two groups in the sharing resources PSB ($M_{inclusion} = 6.28, SD = 1.72; M_{exclusion} = 7.30, SD = 1.56; t(1,39) = -2.00, p < .05, d = .65, r = .31$), but not in the donating PSB ($M_{inclusion} = 14.53, SD = 7.32; M_{exclusion} = 13.67, SD = 7.14; t(1,39) = 0.38, ns, d = .12, r = .06$). H1 was supported.

Discussion

Study 1 results support the social reconnection hypothesis (DeWall & Richman, 2011; Romero-Canyas et al., 2010; Smart Richman & Leary, 2009); in comparison with included people, excluded people who believe that they can reconnect share more resources with the partners that have previously rejected them. Given the importance of belongingness, hopeful excluded individuals behave in ways that can allow them to regain acceptance. Nonetheless, when the PSB is displayed for a group with whom no reconnection and future social acceptance is allowed (as it was the case in the donation task, in which participants had to donate part of the money earned to anonymous people in need) then excluded individuals do not behave in a more prosocial way than included individuals, which give more support to the social reconnection theory. Thus, to gain reconnection is fundamental for excluded individuals in order to behave in a prosocial way.

Nevertheless, other theories have tried to explain why excluded individuals behave in a prosocial way or contrarily in an antisocial way. In Study 2, we analyzed the effect of two types of inclusion or exclusion—based on the need for efficacy or on the need for belongingness—on PSB.

STUDY 2

Williams (2007) claimed that when their need for belongingness is affected, excluded individuals tend to behave in a more prosocial way in order to fulfill this need; however, when the need for efficacy is threatened, they tend to behave more competitively in order to be well-valued. In Study 2, we are interested in providing evidence for this theory and for pitting the Williams (2007) and the social reconnection (DeWall & Richamn, 2011; Maner et al., 2007) theories (H2). Moreover, we are interested in testing for the mediating role of affiliation motivation in the exclusion-PSB link (H3).

Method

Participants

Participants were 118 students (71.2% women, 28.8% men; age range [17-51], $M = 19.91$, $SD = 5.20$) randomly selected from the University of Cordoba (Spain).

Measures

Manipulation check ($\alpha = .91$)

Perception of exclusion was measured as Study 1.

Affiliation motivation ($\alpha = .87$)

In order to assess the desire of the participants to continue the interaction with their group we used the Cuadrado et al. (2016) affiliation motivation six items scale.

Prosocial behavior

As in Study 1, we used the public good dilemma game (the data for the two rounds were significantly correlated: $r = .77, p < .001$) in order to measure the *sharing resources PSB*. Moreover, we measured *donating PSB* in the same way as in Study 1.

Procedure and experimental design

As in Study 1, students were informed in an online platform that they would have to do some online group tasks, which would give them the chance to earn points exchangeable for cash. Then, to ensure the reliability of the online group tasks, the program asked the participants to introduce themselves to the rest of the online contestants, and to complete some matrices of an intelligence test. At that point, in order to form an online group to do the following group task, they had (1) to remove one of the six participants whose description was presented to them (all the participants read the same descriptions of non-existent online participants) by deciding which one they did not want purely on the basis of his or her description; and (2) to select one of those six participants to form part of their group. Then, the score of each one of the remaining four non-existent participants in the intelligence test task was shown, and participants had to (1) remove one of those four participants whom they did not want in their group because, on the basis of his or her score, they saw her or him as very incompetent, and (b) select one of those four participants to form part of their group because they thought he or she was very competent.

In order to create the four experimental conditions, after playing the fourth version of the Cyberball game (Williams et al., 2012) participants received simulated feedback on whether the other online participants had chosen them or eliminated them when forming their group. Here are the four different conditions randomly created in the factorial 2x2 design: in the inclusion by need for belongingness condition ($N = 29$,

24.6%), participants read, ‘Everybody has chosen you to form part of their group. They have chosen you because—on the basis of your personal description—they like you. Moreover, both group partners said that they passed you the ball many times because they like you’. In the inclusion by need for efficacy condition ($N = 32$, 27.1%) participants were told the same, but this time the reason why the other participants had chosen them and why their group partners had passed them the ball many times was because—on the basis of their result in the intelligence test—they thought they were very competent. In contrast, in the excluded by need for belongingness experimental condition ($N = 28$, 23.7%), participants read that, ‘Nobody has chosen you to form part of their group. They have eliminated you because—on the basis of your personal description—they do not like you. Moreover, both group partners said that they passed you the ball only a very few times because they do not like you’. In the exclusion by need for efficacy condition ($N = 29$, 24.6%), participants were told the same, but this time the reason why the other participants had eliminated them and why their group partners had passed them the ball only a very few times was because—on the basis of their result in the intelligence test—they thought the participants were not competent at all.

Subsequently, a manipulation check was performed and affiliation motivation was assessed. Then, we assessed the two different types of PSB—sharing resources (the same reconnection instruction as study one were given) and donating behavior as in Study 1. Finally, they were fully debriefed.

Results

Manipulation check

The t-tests results showed that participants in the condition of inclusion ($M = 1.84$, $SD = .91$) reported feeling less rejected ($t(1,116) = 12.83$, $p < .001$) than participants in the condition of exclusion ($M = 4.86$, $SD = 1.57$). The manipulation has had the expected effect.

Preliminary analyses

Correlational analyses were performed in order to analyze the relations between all the variables of Study 2. Results are shown in Tables 1 to 3.

Table 1. Correlation, means and standard deviations for all study variables for the general sample

	1	2	3	4
1. Perception of exclusion	-			
2. Affiliation motivation	-.55***	-		
3. Sharing resources PSB	-.09 ns	.27**	-	
4. Donating PSB	.01 ns	.03 ns	.20*	-
Mean	3.30	5.50	2.58	11.69
SD	1.97	1.25	0.78	7.65

*** $p < .001$; ** $p < .01$; * $p < .05$

Table 3. Correlation, means and standard deviations for all study variables for participants in the exclusion condition

	1	2	3	4
1. Perception of exclusion	-	-.20 ns	-.02 ns	.22 ns
2. Affiliation motivation	-.19 ns	-	.48**	-.05 ns
3. Sharing resources PSB	-.19 ns	.43 *	-	.38*
4. Donating PSB	-.21 ns	.01 ns	.17 ns	-
Mean for belongingness condition	4.72	5.07	2.34	10.78
SD for belongingness condition	1.74	1.33	0.84	7.98
Mean for efficacy condition	4.98	4.55	2.71	12.10
SD for efficacy condition	1.41	1.24	0.66	7.84

*** $p < .001$; ** $p < .01$; * $p < .05$; # $p < .09$. Upper triangle shows data for

participants in the belongingness condition; lower triangle shows data for participants in the efficacy condition

Table 2. Correlation, means and standard deviations for all study variables for participants in the inclusion condition

	1	2	3	4
1. Perception of exclusion	-	-.30 ns	.11 ns	.16 ns
2. Affiliation motivation	-.34 [#]	-	-.02 ns	-.03 ns
3. Sharing resources PSB	-.16 ns	.23 ns	-	.32 [#]
4. Donating PSB	.14 ns	.13 ns	-.08 ns	-
Mean for belongingness condition	1.67	6.27	2.74	14.21
SD for belongingness condition	0.93	0.74	0.66	6.50
Mean for efficacy condition	2.00	6.06	2.53	9.84
SD for efficacy condition	0.88	0.74	0.88	7.83

*** $p < .001$; ** $p < .01$; * $p < .05$; # $p < .09$. Upper triangle shows data for participants in the belongingness condition; lower triangle shows data for participants in the efficacy condition

Impact of exclusion on PSB (H2)

The univariate analyses results showed a cross-over interaction (see Figure 1) with both sharing resources PSB and donating PSB ($F(1,114) = 4.11, p < .05, \eta^2 = .03$ and $F(1,114) = 4.17, p < .05, \eta^2 = .03$, respectively). The pairwise comparison using Bonferroni analysis have shown that (a) given exclusion, individuals tended to share more with their partners when their need for efficacy was affected than when their need for belongingness was ($\Delta M_{\text{sharingPSB}} = -0.37, p < .05$) but not to donate more ($\Delta M_{\text{donatingPSB}} = -1.33, ns$); (b) given inclusion, no differences were found in the sharing behavior ($\Delta M_{\text{sharingPSB}} = 0.21, ns$) but regarding donation individuals tended to exhibit

lower donating PSB when their need for efficacy was affected than when their need for belongingness was ($\Delta M_{\text{donatingPSB}} = 4.37, p < .05$); besides, (c) when the need for belongingness was affected, the included individuals tended to be more prosocial than the excluded ones ($\Delta M_{\text{sharingPSB}} = -0.40, p < .05$; $\Delta M_{\text{donatingPSB}} = -3.43, p < .09$); and (d) when the need for efficacy was affected, no significant differences were found between included and excluded individuals ($\Delta M_{\text{sharingPSB}} = 0.18, ns$; $\Delta M_{\text{donatingPSB}} = 2.27, ns$). Thus, H2 was not corroborated.

Affiliation motivation as mediator (H3)

In order to check the mediating role of affiliation motivation in the effect of exclusion on PSB mediation analyses using PROCESS procedure for SPSS (Hayes, 2013) were performed, with exclusion as independent variables, affiliation motivation as mediator, and PSB (first sharing PSB and second donating PSB) as dependent variables. We used 10000 bootstrap samples for bias corrected bootstrap confidence intervals. Level of confidence for all confidence intervals in output was 95.00. The results (see table 4) supported the prediction of exclusion on affiliation motivation (H3a): individuals in the exclusion condition were less motivated to affiliate with their rejecters than individuals in the inclusion condition. The positive effect of affiliation motivation on PSB was supported for sharing PSB but not for donating PSB (H3b). Thus, the results supported H3: an indirect effect of exclusion on sharing PSB through its influence on motivation affiliation was found; however, for donating PSB no mediation was found.

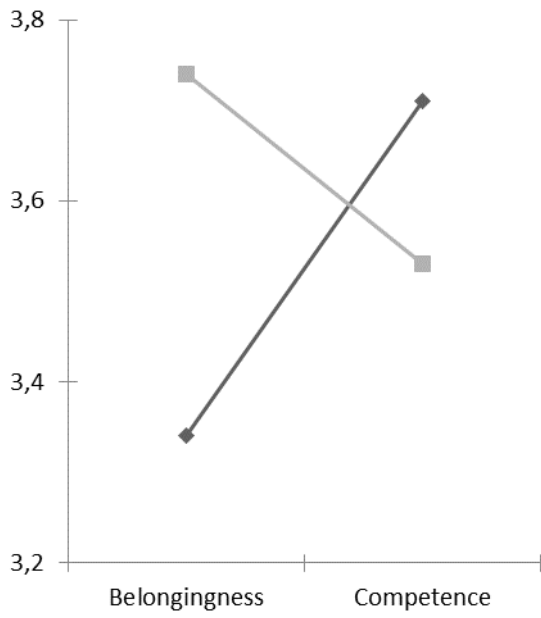


Figure 1a. Interaction effect on sharing resources prosocial behavior.

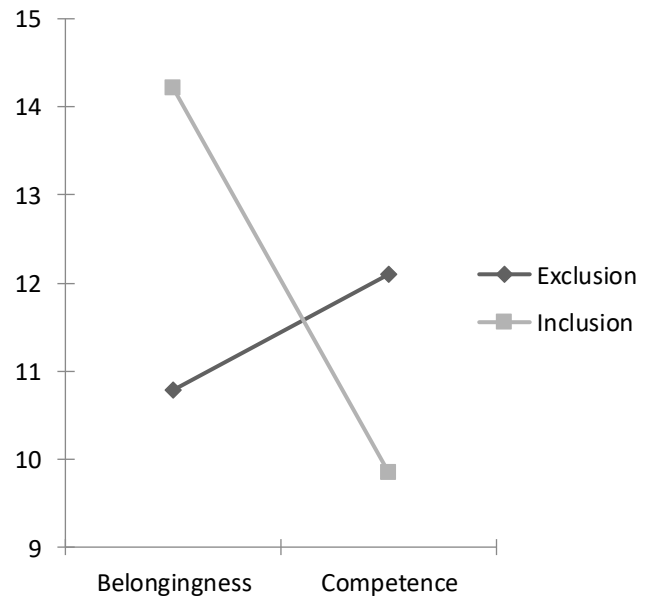


Figure 1b. Interaction effect on donating prosocial behavior

Figure 1. Interaction effect on prosocial behavior

Table 4. Model coefficient for the presumed affiliation motivation mediation in both the exclusion-sharing PSB and exclusion donating PSB links

Antecedent		Consequent										
		Affiliation motivation			Sharing PSB			Donating PSB				
		Coeff.	<i>SE</i>	<i>p</i>	Coeff.	<i>SE</i>	<i>p</i>	Coeff.	<i>SE</i>	<i>p</i>		
X (Exclusion)	a	-0.14	0.12	<.001	c'	0.02	0.02	ns	c'	-0.03	0.17	ns
M (Affiliation motivation)	-	-	-	b	0.21	0.07	<.01	b	0.11	0.68	ns	
Constant	i ₁	4.80	0.10	<.001	i ₂	1.43	0.37	<.001	i ₂	11.08	3.81	<.01
		$R^2 = 0.30$			$R^2 = 0.08$			$R^2 = 0.01$				
		$F(1,116) = 49.41, p < .001$			$F(2,115) = 5.19, p < .01$			$F(2,115) = 0.07, ns$				
Sobel test					Statistic	<i>SE</i>	<i>p</i>	Statistic	<i>SE</i>	<i>p</i>		
					-0.03	.01	<.01	-0.02	.09	ns		
Causal paths found		X as predictor of M			No direct effect of X on Y; Indirect effect of X on Y			No direct nor indirect effects of X on Y (no mediation)				

Note. X = independent variable (exclusion); M = Mediator (affiliation motivation); Y = dependent variable (PSB)

Discussion

Only part of our expectation about the effect of exclusion versus inclusion on PSB was corroborated. When belongingness was affected, excluded individuals shared less with their team members than the included ones. Thus, bearing in mind that our belongingness manipulation affected the feelings of popularity of participants, it seems that—as previous studies have found (e.g. Brendgen, Vitaro, Bukowski, Doyle, & Markiewicz, 2001)—unpopular individuals indulge in lower PSB than popular ones, becoming more competitive. Moreover, our manipulation—in which participants were rejected by all the rest of the online participants, being informed that nobody liked them on the basis of their personal description—might have affected not only the need to belong, but also threatened their meaningful existence. It is not the same to feel excluded by a few people as to feel excluded by a big group as a whole. Besides, when individuals describe themselves, they tend to describe the individuals they would like to be, presenting the best image they can (Gonzales & Hancock, 2011). Thus, whether individuals are rejected on the basis of this perfect image of themselves, it seems that this exclusion might affect their meaningful existence; the rejecters are telling them that they do not like what they want to be, so rejecting the most important aspect of their identity and telling them that their existence is not important. Williams (2007) explains that when exclusion affects the meaningful existence of individuals, it probably leads to antisocial behavior. Our manipulation has possibly threatened the meaningful existence of rejected participants, inducing them to give less prosocial and provocative responses in order to attract attention and to be recognized (Williams, 2007).

Moreover, the results have shown that this effect appears only for sharing PSB with the team partners, but not for donating PSB to anonymous others. In this case, the

results did not show significant differences between excluded and included individuals: individuals rejected in relation to their likability were as prosocial as individuals included in relation of their likability. This is consistent with the idea that the lower PSB displayed by excluded dislikable individuals represents some retaliatory response to exclusion (Williams, 2007). Thus, when the PSB is oriented to other individuals different to those whom have rejected them, no retaliatory response is needed, and then they behave in the same prosocial way as included individuals. Moreover, if we accept the idea that the less prosocial and more provocative responses displayed by rejected individuals that potentially perceived their meaningful existence threatened has the aim to attract attention and to be recognize, then this kind of behavior with anonymous individuals (as it is the case in an anonymous donation as in our experiment) make no sense.

In the exclusion condition, individuals shared more with their team members when the need for efficacy was threatened than when the need for belongingness was. In this case, the feedback of the experimental manipulation informed the participants that the rest of the online participants did not like them (belongingness need) or did not value them (efficacy need). In the first case, as we have said before, the manipulation was stronger and might have affected the meaningful existence of individuals, and exclusion seems more stable, unchangeable. When people are not liked because of their personality, this is not easy to change and might affect the perception of how meaningful their existence is to others, which in turn leads to antisocial behavior (Williams, 2007). Conversely, when the reason for exclusion is the lack of effectiveness in a determined task, this may be changeable, and moreover they may have some chance of being accepted for another reason—e.g. they can be liked by the others

because of their personality—and this could lead individuals to behave in a more prosocial way in order to achieve inclusion. Moreover, another form of showing that they are valuable and effective in another field may be showing their friendliness and prosocial way of action, by incurring higher PSB levels. Once more, this pattern of behavior appears only with the sharing PSB but not for the donating PSB: excluded individuals donated anonymously the same amount of money to unknown individuals in need when their need for efficacy was threatened than when their need for belongingness was. This seems logical: When an anonymous donation is made, this kind of behavior does not allow future reconnection; thus, it will be pointless to behave in a prosocial way in order to regain acceptance. Then, individuals excluded because of their value (whom may perceive some reconnection chance, as we have argued before) engage in more PSB with their team members (in an attempt to reconnect) than individuals rejected because of their likability (whom may perceive that reconnection is almost impossible, as we have argued before); however, they do not engage anonymously in more PSB with unknown individuals because this pattern of behavior will not allow them to reconnect.

In contrast, in the inclusion condition, individuals donated more when the need for belongingness was affected: individuals who are popular because of their personality (loved people) are more prosocial than individuals who are popular because of their efficacy (well-valued people). This corroborates studies that find that inclusion and popularity with the in-group led individuals to more PSB (Kirkpatrick et al., 2002, but that individuals regulate their relative status to others in competitive relationships, trying to conserve their status in the hierarchy and behaving less prosocially when they perceive self-superiority (Webster & Kirkpatrick, 2006). Nevertheless, regarding the

sharing resources PSB, no differences were found between both included conditions. This may be due to the fact that, as we designed our study, in the sharing resources task individuals were informed that the group partners can see the amount of money individually donated to the group, and that at the final of the first rounds each individuals will be asked to respond if they want or not to keep in the group, in order to do the second round. Thus, a sort of menace or fear of rejection was created, even for individuals that have been included. Then, in order to avoid future rejection individuals who have been included before because of their personality and those who have been included before because of their efficacy may have tended to behave both in a prosocial way when the PSB displayed create an opportunity for future reconnection (the sharing resources task). However, when no future reconnection is allowed by the PSB task (as the anonymous donation to a NGO), then individuals who perceive self-superiority engage in more competitive behavior (Webster & Kirkpatrick, 2006) than included popular individuals, who tend to behave in a more prosocial way (Kirkpatrick et al., 2002) in order to maintain their popularity.

Moreover, results suggested that affiliation motivation mediate the exclusion-sharing resources PSB link (but not the exclusion-donating PSB link). This is consistent with the assumption that PSB is often realized in order to reconnect. When PSB is oriented to people with whom those ‘needed for affiliation motivation’ rejected individuals cannot reconnect—as is the case in the donating behavior of our experiment—affiliation motivation is not a good predictor of PSB: the fact that individuals need to reconnect makes them behave prosocially in order to reconnect with the group with which they want to reconnect, but not with other people with which they have no possibility for affiliation.

The meditational analyses results support the idea that exclusion affects individuals by leading them to have lower desire to affiliate with the perpetrators of exclusion than included individuals wish to do with the perpetrators of inclusion (Maner et al., 2007). This is especially relevant when bearing in mind that affiliation motivation—as mediator of the effect of exclusion on PSB—is a predictor of PSB with regard to the group target of the affiliation motivation; excluded individuals who have a great desire for affiliation with a particular group tend to behave more prosocially with this group in order to achieve re-inclusion. Thus, if exclusion decreases their desire to re-affiliate, it also decreases their PSB behavior.

Interestingly, whereas—as results have demonstrated—exclusion decreases affiliation motivation (Maner et al., 2007), and higher levels of affiliation motivation increase PSB (DeWall & Richman, 2011; Maner et al., 2007; Mlcak & Zaskodna, 2008), when excluded individuals see some possibility for reconnection—and whenever the meaningful existence is not affected—exclusion still enhances PSB. Thus with the possibility of reconnection, the effect of exclusion on the need to belong and on the adaptive processes seems to be stronger than the effect it has on the non-adaptive processes.

GENERAL DISCUSSION AND CONCLUDING REMARKS

Regarding the effect of exclusion on PSB, Study 1 has corroborated that rejected individuals who feel that they may reconnect adopt PSB only in order to regain acceptance, but not when the potential PSB does not allow reconnection (as in the donation task). However, Study 2 suggested that this pattern of behavior does not occur when the exclusion is very harsh and might have affected the meaningful existence of individuals. It seems that when individuals feel that the image they want to project—

their self and all they want to be—is rejected, individuals tend to behave less prosocially than included individuals. This is in accordance with the theory of Williams (2007) about the effect of threats to the meaningful existence of people that leads rejected individuals to behave more antisocially in order to attract attention and be recognized by others.

Interestingly, this pattern is not the same when individuals orient their PSB to their own team (sharing resources tasks) than when they orient it to anonymous individuals through a donation to an NGO. Thus—and bearing in mind that acting prosocially in an anonymous way with an NGO does not facilitate the retaliation towards the rejecters nor the reconnection with others—we argue that the perception of reconnection has a higher impact on the PSB displayed by individuals when the type of need threatened is not very harsh (as the need for efficacy in a specific task); but that when the type of need threatened is harsher (as the need for likability of the own personality), then the perception of reconnection does not matter and individuals will tend to behave in order to retaliate towards the others and to be recognized. It means, when feelings of efficacy are threatened, it seems that excluded individuals change their pattern of PSB depending on whether they perceive that the possibility for reconnect exist or not, reaching then more importance the reconnection possibility. However, when the needs threatened are the meaningful existence or popularity regarding whether individuals are loved or not, it seems that excluded individuals may change their pattern of PSB depending on whether they perceive that the possibility for retaliation exist or not, reaching then more importance the type of exclusion.

The mediation of affiliation motivation has been supported in Study 2. Thus, in line with other research, exclusion produces a drop in motivation for affiliation with the

rejecters (Maner et al., 2007). This is particularly relevant because this variable is a predictor of PSB, at least when the PSB is directed to the group members with which the rejected individual wants to reconnect. Exclusion reduces affiliation motivation making in turn the occurrence of PSB less probable. Nevertheless, when individuals see some possibility of reconnection—and whenever the meaningful existence or popularity affecting how individuals are loved is not affected, as suggested in Study 2—the negative impact that exclusion has on those variables seems to be not high enough to affect PSB, being offset by the adaptive pattern that leads individuals to be prosocial in order to regain acceptance.

LIMITATIONS AND FUTURE DIRECTIONS

Data from the two studies were collected among a student sample comprised of a majority of women. Therefore, although the findings must be carefully interpreted, there is no reason to believe, that they would differ by sex or exhibit differences in the student population compared with the general population.

Although the current study presented several experimental tasks with online (non-real) partners, the interaction was limited and group members were strangers. Future research should investigate how the results are generalizable to a real exclusion situation when an individual is incorporated with a group of people he or she knows.

Another potential limitation is that our manipulation check of Study 2 does not contemplate the differences between the need for efficacy and need for belongingness factors. Thus, we are not able to say that our manipulation has effectively threatened those needs, or others. As we have pointed out, it is currently possible that our manipulation of exclusion by need for belongingness was very harsh, affecting the meaningful existence of participants. In future research, it would be interesting to

control which need is threatened and to explore whether other potential explanations may influence the differences found. For example, as proposed by Smart Richman and Leary (2009), it may be pertinent to explore how the perception of unfairness may affect the results found here and may contribute as a covariate or as an alternative explanation.

It is noteworthy that our manipulation implies that participants initially select and reject people before they were included or excluded themselves. Although there is no reason to think that this procedure may have affect the perception of exclusion or inclusion and the prosocial behavior, people generally do not first have the experience of rejecting others before they experience rejection themselves. In future research, it will be interesting to explore whether the results are maintain by using another manipulation that does not imply the experience of rejecting others before being excluded (or included) oneself.

Finally, future research should explore if those results remain in other kinds of prosocial behavior, not related with money distribution games or with donation to NGO, as for example some more altruistic behaviors as helping.

IMPLICATIONS AND CONCLUSION

This research seems to give evidence for the social reconnection hypothesis (DeWall & Richamn, 2011; Maner et al., 2007). We have shown that excluded individuals tend to behave prosocially when they see some possibility of future acceptance and when their affiliation motivation is high, but not when the PSB is oriented to people who do not have the possibility to include them in their group. In this sense, in order to promote in excluded individuals their PSB it seems relevant to enhance their perception of future reconnection chances. Moreover, as affiliation motivation has shown to be a mediator of the effect of exclusion on PSB, socio-

educative programs oriented to the promotion of PSB with excluded individuals might take into account this variable by fostering it.

Besides, according with Williams' (2007) theory, the results seems to indicate that socio-educative programs with excluded individuals may work on the perception of exclusion, by enabling individuals to re-establish their meaningful existence, promoting bonds with their peers that allow them to perceive their value, importance, and acceptance of their identity by the group.

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