



Get out or stay out: How the social exclusion process affects actors, but not targets[☆]

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ABSTRACT

It is well documented that when people (targets) are socially excluded by others (actors) they feel hurt. To understand social exclusion, however, we argue it is crucial to look not only at the end state of exclusion (do targets end up excluded or included?) but also at the process (how are targets excluded?). In four studies we differentiated between two processes of exclusion: being removed from a group and being denied access into a group. Results indicate that actors' exclusion behavior was influenced by the process: Actors were more likely to deny others access into the group than to remove members from the group. The data suggest that actors may do so because they consider inclusion of group members to be the norm, while group norms do not prescribe the inclusion of prospective members. For targets being denied access and being removed from a group was equally distressing. We conclude that the process of exclusion is critical to understand when actors exclude others, but does not affect excluded targets' feelings.

People are social animals with a strong need to belong (Baumeister & Leary, 1995) which drives them to form groups of all sorts. Whether it concerns a group of friends, a sports team, or a bunch of colleagues grouped around the coffee machine – all to a degree satisfy people's essential need to belong and feel connected. Correspondingly, it has been well established that when people (*targets*) are excluded (i.e., rejected or ostracized) by others (*actors*), they feel hurt (for an overview, see Ren, Hales, & Williams, 2017).

Still, De Waal-Andrews and Van Beest (2012) have argued that to understand exclusion more fully, it is important to consider not only the *end state* of exclusion for targets (do targets end up included or excluded?) but also the *process* by which actors exclude them (how are targets included or excluded?). In the current article we follow up on this call, and distinguish between two processes: when targets are denied access into a group vs. when targets are removed from a group. The differences between these processes are studied from the perspectives of both the actor and the target. Our central proposition is that whether actors choose to exclude a target can be influenced by the process of exclusion (i.e., whether it requires them to deny targets access or remove them from the group). By contrast, targets are not affected differently by both processes. Instead, their feelings are hurt when they end up excluded, regardless of whether they were denied access or removed from a group.

1.1. Actors' exclusion behavior

The question of when actors are likely to exclude others, has only recently started to draw attention in social exclusion research (Zadro & Gonsalkorale, 2014). This line of research has documented that people are relatively likely to exclude slow, immoral, or disagreeable individuals from the group (Hales, Kassner, Williams, & Graziano, 2016; Van der Lee, Ellemers, Scheepers, & Rutjens, 2017; Wesselmann, Wirth, Pryor, Reeder, & Williams, 2013, 2015). In this way, exclusion rids the group of unwanted members and can be used to punish group members (Nezlek, Wesselmann, Wheeler, & Williams, 2015); but it can also be used by group leaders to remove members who threaten their superior position (Maner & Mead, 2010). Exclusion then can be a means to solve a conflict or protect the group, by removing or sanctioning individuals that negatively affect the actor or the group (Gruter & Masters, 1986; Kurzban & Leary, 2001; Scott, Restubog, & Zagenczyk, 2013; Sommer, Williams, Ciarocco, & Baumeister, 2001; Wesselmann, Williams, & Wirth, 2014). Although actors and groups thus may benefit when certain group members are excluded, other research has shown that the act of excluding others nevertheless is very distressing for actors (Legate, DeHaan, Weinstein, & Ryan, 2013; Poulsen & Kashy, 2011, cf. Sommer & Yoon, 2013).

So far, this line of research has not investigated whether the way in

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which actors can exclude targets (i.e., the process of exclusion) could influence how likely actors are to exclude them. The current article does exactly this, and distinguishes between two processes of exclusion: removing current members from the group they are part of vs. denying prospective members access into the group.

Typically, exclusion is presented as a process in which actors expel targets from the group they are part of. The often used exclusion paradigm “Cyberball” (Williams, Cheung, & Choi, 2000) also models that process of exclusion. In this paradigm, participants are made to feel part of a group by receiving a number of throws in a game of catch, but then are excluded by no longer receiving the ball. The alternative process, in which actors deny prospective members access to the group to begin with, is mentioned and manipulated less often in the literature (but see Asher, Rose, & Gabriel, 2001, and Van der Lee et al., 2017). However, we argue that both these processes are important to consider, because both lead to the end state of exclusion for the target, while they can inspire different exclusion behavior among actors. Specifically, there are various arguments that suggest that actors may be more likely to exclude targets by denying them access to the group than by removing them from the group.

First of all, Wesselmann et al. (2013) argue that within groups there is a strong norm to include members that are part of the group. Inclusion is the norm in most situations (Kerr & Levine, 2008), and explicit instructions to ostracize others induce emotional distress (Zadro & Gonsalkorale, 2014). This inclusion norm, however, can be less strong in certain contexts (Rudert & Greifeneder, 2016). For example, it may be less normative for groups to include prospective members: Groups have been documented to be selective and averse to including new members (Arrow & Crosson, 2003; Delton & Cimino, 2010; Levine & Moreland, 1985; Stiff & Van Vugt, 2008; Ziller, Behringer, & Jansen, 1961). While removing members from the group then goes against common group norms, denying prospective members access does not.

A second argument why people may exclude others more through denial of access than through removal from the group, is that people may treat others that are not part of the group yet as outgroup members, and current group members as ingroup. People are likely to identify more with ingroup members, feel more similar to them, like them more, and treat them better than outgroup members (coined the ‘ingroup positivity bias’, see Brewer, 1979; Hodson, Dovidio, & Esses, 2003). Not removing group members may be part of this positive treatment towards ingroup members, while denying less-liked outgroup members is regarded as less problematic.

A third argument why different processes of exclusion may influence actors' likelihood to exclude targets, is that people have a tendency not to change the status quo (Kahneman, Knetsch, & Thaler, 1991). This tendency to stick to the status quo may make people reluctant to change their group's composition. As both excluding current group members and including prospective members changes the group composition, people may be hesitant to do either. They may thus be less likely to remove current members from the group, and more likely to deny prospective members access, to maintain the status quo.

The current research aims to test if actors indeed are more likely to exclude targets by denying them access than by removing them from the group, and which of the proposed mechanisms is most likely to explain this effect. This would be especially impactful if being denied access is also as harmful for targets as it is to be removed from the group. Therefore, the current research also tests how hurt targets feel after both processes of exclusion.

1.2. Targets' feelings

While for actors the decision to exclude another may depend on the process, targets experience the end state of exclusion in both situations. They may feel hurt when they are removed from the group, but also when they are denied access into a group. When targets are excluded, they generally experience distress, negative mood, and threats to their

fundamental needs (Baumeister & Leary, 1995; Leary, 2001; Wesselmann & Williams, 2017; Williams, 2007). Not being allowed entrance when aspiring to join a group is likely to impact their feelings and sense of belonging just the same as removal from the group. It is argued that people are so sensitive to exclusion, that even small and insignificant signs of exclusion can elicit the hurtful response typical for experiencing exclusion (Kerr & Levine, 2008; Wesselmann, Bagg, & Williams, 2009; Williams, 2009). Indeed, targets feel equally distressed when they are excluded by humans or computers (Zadro, Williams, & Richardson, 2004), an ingroup or a despised outgroup (Gonsalkorale & Williams, 2007), and whether others or they themselves are responsible for the exclusion (De Waal-Andrews & Van Beest, 2012). It then seems plausible that the process leading up to the exclusion too does not impact targets' negative feelings when experiencing the end state of exclusion. In both cases targets end up excluded, and this hurts their feelings.

1.3. Current research

Across four studies, the current research tested whether the process by which actors could exclude targets (i.e., denial of entrance vs. removal from the group) influenced the likelihood that actors would exclude them, but not how targets would experience exclusion. Previous research established that negative qualities of the targets, such as being slow and burdensome, needed to be present for actors to remove targets from the group (Wesselmann et al., 2013, 2015). Following this research, a similar setting with burdensome targets was adopted as a starting point for Studies 1 and 2. This provided the opportunity to test our hypotheses in a setting in which exclusion has been documented to be relatively likely to occur.

Study 1 tested if actors would be more likely to exclude burdensome targets through the process of denying them access than through the process of removing them from the group. Also, actors' expectations about how targets would feel after both processes of exclusion were assessed. It was tested whether actors expected targets to be more impacted by being removed from the group than by being denied entrance into the group, or that actors expected targets to be equally impacted by both processes.

Study 2 tested if the findings from Study 1 replicated, and additionally assessed the perspective of the burdensome target. We predicted that targets would feel as bad when they were denied access into the group as when they were removed from the group.

Study 3 tested if the findings from Studies 1 and 2 would replicate in a more conservative test: when targets were not burdensome to the group. In Studies 1 and 2 targets were burdensome, and this provided a possible reason why the targets should be excluded from the group. As targets were not burdensome in Study 3, this minimized the reason for actors to exclude any member. Study 3 then is a stronger test of the impact that the process has on actors' exclusion decisions. It tests if actors are relatively likely to deny individuals access (over removing them) even when this does not improve their group performance. Then, it shows whether the difference between denying others access and removing them from the group alone is enough to bring about differences in how likely actors are to exclude targets.

Finally, Study 4 tested which of the proposed underlying mechanisms (different inclusion norms, ingroup-outgroup perceptions, or aversion to change the status quo) best explained actors' tendency to more often deny others access than to remove them from the group.

2. Study 1

In Study 1 we tested whether the process of exclusion influenced actors' decision to exclude others. To test if actors were more likely to deny others access into the group than they were to remove current team members from the group, we designed a new paradigm (cf. “Atimia” paradigm, Wirth, Bernstein, & Leroy, 2015). In our paradigm

actors completed two rounds of a group task in a competitive setting in which the goal was to reach a higher team score than a competing team. In the first round, actors had two team members, one of which was a low-scoring member who was either a group member from the start of the game (current member condition), or not yet part of the group (prospective member condition). Before the second round, actors could choose to include or exclude this low-performing player from the team; in one condition by removing the player from the group, in the other by denying the player access.

2.1. Method

2.1.1. Participants and design

Data of 81 participants were collected at the Leiden University lab (of which 74 female, 6 male, 1 other; mean age 21.07 years old, $SD = 5.16$). Participants were assigned randomly to the current ($n = 41$) or prospective member condition ($n = 40$). The sample size was in line with prior studies measuring exclusion by actors (between 25 and 55 per condition, see Wesselmann et al., 2013, 2014, Van der Lee et al., 2017) and corresponded with a power of $\beta = .80$ to detect a significant difference ($\alpha = .05$) between the two conditions with an effect size of $\phi = 0.31$. The procedures of this and following studies were approved by the ethics committee of the Leiden University Institute of Psychology. In all studies, all exclusion criteria, all conditions, and all measures were reported (see also the supplemental material). For each study, the analyses were commenced only after data collection was finished.

2.1.2. Procedure and materials

Participants were seated in a private cubicle with a computer, and read and agreed with the informed consent before starting the experiment. The experiment consisted of a computerized group task, in which participants allegedly formed a team with one or two other participants. In reality the participants completed the task alone, and the responses of their team members were programmed beforehand. Before starting the task participants stated their name, age, gender, and which university they attended. They also indicated their preference to be assigned to the “red” team with an icon of a dog, or the “blue” team with an icon of a cat. To strengthen this group identification, all participants were assigned to the team of their choice. Participants in the current member condition were assigned to a team of three, with two other team members (named Laura and Barry). Participants in the prospective member condition were in a team with only one other team member (Laura). To further strengthen group formation, participants saw their own information along with the name, gender, age, and university of their fellow team member(s), and could get acquainted with them by leaving a short message. In response, they received a preprogrammed message, wishing them good luck with the upcoming task in a friendly but otherwise neutral manner.

Participants were informed that the task consisted of two rounds: first a test round, then the second round in which their team would play against another team. The team with the highest average team score in the second round would win. This competition element was added to increase motivation to be part of a well-performing team. Each round consisted of 10 separate trials in which each participant had to indicate as fast and accurately as possible which of two pictures (see Fig. 1) contained most dots (a procedure similar to the “dot estimation task”, see Gerard & Hoyt, 1974). After the test round, participants received predetermined feedback on their performance, consisting of an individual score (between 1 and 100) and a team score (the average of the individual scores). As the dot estimation task was so designed that differences in numbers of dots between pictures were minimal or absent, and it was unclear to participants how fast exactly they were expected to respond, we reasoned that both high or low feedback scores would be believable for participants. In the current member condition participants played with three players in the team from the start. The

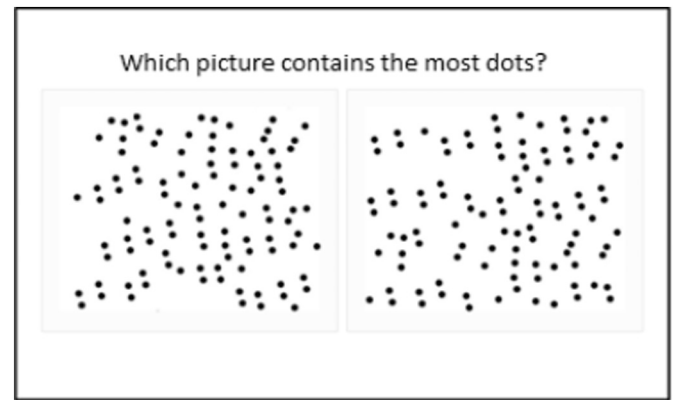


Fig. 1. Screenshot of the dot estimation task. Participants select the picture with most dots.

participant and team member Laura scored relatively high (73 and 69 points respectively), while the third player Barry scored relatively low (32 points). In the prospective member condition, the team in the test round consisted of only two team members: the participant and Laura, both scoring relatively high (also 73 and 69 points respectively).

In both conditions, participants were then told that the team member with the highest number of points (always the participant) had to decide with whom they wanted to be in the team in the next round. They could choose to be in the team with two or three players. Participants were reminded that not the absolute, but the average team score achieved in the following round would determine whether they would win, and so there was no a priori advantage of choosing to play with 3 over 2 team members. In the current member condition, participants saw a picture with three icons depicting themselves and their two team members including their scores within a box. In the prospective member condition participants saw a picture with the icons of themselves and their team member and scores within the box, and a newly introduced player next to it (Fig. 2). This newly introduced player was the burdensome Barry, with only 32 points. It was stressed that this player fitted well in the team on the basis of the selection-procedure (in which they provided their name, age, gender, university, and preference for the red or blue team). The only difference between conditions then was that in the prospective member condition the burdensome player was presented to the team after the first round, while in the current member condition he was part of the team from the start. Participants in both conditions were instructed to click once on the icon of a player if they wanted to have him/her in the team for the second round, and twice on the icon of a player if they wanted him/her out of the team. They were told that an excluded player would receive the message that he/she had not been chosen to be part of the team, and would continue to complete a different task (we added this instruction so participants would not perceive an advantage of “being done early” for those they excluded). After making the decision, participants answered the questions (described under Dependent variables) and completed a second round of the dot estimation task. Then, they were fully debriefed, thanked, and compensated for their participation.

2.1.2.1. Dependent variables. The main dependent variable in this study was the actor's choice to either exclude or include the burdensome target. We also asked participants to indicate how they thought the target would feel if he would be excluded (“Barry then feels...”, items: “excluded”, “accepted”, “valued”, and “rejected”, $\alpha = .82$, modified from Buckley, Winkel, & Leary, 2004), and how hurt he would feel (“To what extent do you think Barry feels hurt if he cannot play along in the second round?”). These responses were recorded on 7-point scales (1 = *Not at all*, 7 = *Completely*).¹

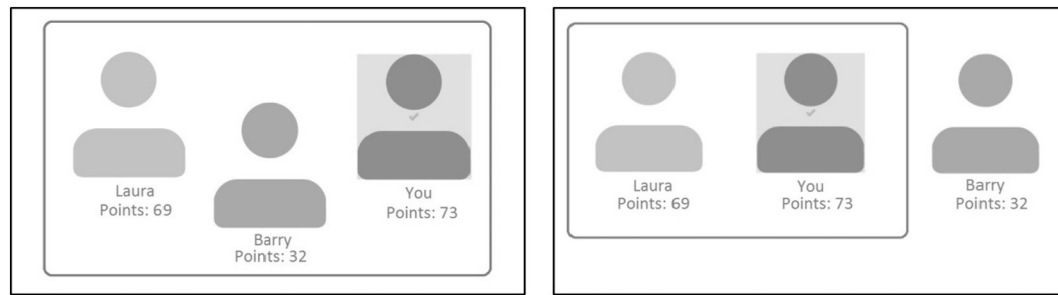


Fig. 2. Screenshot of participants' exclusion choice. Participants click once to include or twice to exclude members for the second round, in the current member condition (left) and prospective member condition (right).

2.2. Results

2.2.1. Actors' exclusion behavior

Participants had the choice to exclude either the burdensome member or the non-burdensome member, or to include them both. A negligible percentage of participants chose to exclude the non-burdensome member (who in both conditions was part of the team from the start), and this happened as often in the prospective member condition (3% of the cases) as in the current member condition (2% of the cases), $\chi^2 = (1, N = 81) = 0.00, p = .986, \phi = 0.00, 95\% \text{ CI } [-0.10-0.11]$. The frequency with which the burdensome member was excluded was compared between the prospective member and the current member condition. Consistent with our prediction, participants denied the burdensome prospective member access into the group more often (85% of the cases) than they removed the burdensome current member from the group (46% of the cases), $\chi^2(1, N = 81) = 13.38, p < .001, \phi = -0.41, 95\% \text{ CI } [0.18-0.55]$.

2.2.2. Actors' expectations of Targets' feelings

Participants expected members who were denied access to feel just as excluded ($M = 5.41, SD = 0.98$) as members who were removed from the team ($M = 5.56, SD = 1.23$), $t(79) = -0.60, p = .549, d = -0.13, 95\% \text{ CI } [-0.64-0.34]$. Participants thought prospective members who were denied access would feel marginally less hurt ($M = 4.33, SD = 1.35$) than removed current members ($M = 4.90, SD = 1.34$), $t(79) = -1.94, p = .057, d = -0.43, 95\% \text{ CI } [-1.17-0.02]$.

2.3. Discussion

Study 1 showed that actors were more likely to deny others entrance into the group than they were to remove others from the group they were already part of. Their decision whether to exclude others thus was influenced by the process – i.e., whether exclusion consisted of denial of access or removal from the group. Interestingly, actors did expect targets to feel equally excluded after both processes. Actors thus were more likely to deny targets access although they acknowledged targets would feel equally excluded by this as by being removed from the group. Results indicated a marginal difference in how hurt actors thought targets would feel after being denied access vs. after being removed from the group. As this difference was only marginally significant and did not replicate in subsequent studies, it is not interpreted here.

3. Study 2

Study 2 tested if the effects found for actors in Study 1 replicated. In addition, targets' reactions to exclusion were assessed to test whether

being denied access would yield similar or different feelings than being removed from the group. As discussed in the Introduction, previous research has shown that targets experience the negative impact of exclusion regardless of the context in which the exclusion occurs (De Waal-Andrews & Van Beest, 2012; Williams, 2009). Targets may then also be equally affected by the end state of exclusion, regardless of whether they were removed from the group, or denied access into it. Taken together, we predict that for the actors' exclusion decision the process is important, while when the targets experience the end state of exclusion the process has little influence on their feelings. Additionally, an exploratory analysis is included that compares actors' expectations of targets' feelings after exclusion with targets' actual feelings.

3.1. Method

3.1.1. Participants and design

As in Study 1, we aimed to collect data of 40 participants per cell, but continued data collection for the time available in the lab. In total 162 participants took part in the research at Leiden University. Nine of the participants in the sample already participated in an exclusion study in the weeks prior, and hence their responses were not analyzed, leaving a total sample of 153 for analysis (of which 121 female, 31 male, 1 other; mean age 20.46 years old, $SD = 2.36$). Participants were randomly assigned to be actors or targets of exclusion and as in Study 1 either in the prospective member (actors $n = 37$, targets $n = 38$) or current member condition (actors $n = 38$, targets $n = 40$). The sample size of $N = 75$ among actors resulted in a power of $\beta = .80$ to detect a significant difference with effect size $\phi = 0.32$ in a chi-square test between conditions. Among targets, $N = 78$ corresponds with a power of $\beta = .80$ to detect a significant difference with effect size $d = 0.64$ in a t -test between conditions.

3.1.2. Actors

3.1.2.1. Procedure and materials. Procedure and materials for the actors were identical to those described for Study 1 except for two changes to the dependent variables.

3.1.2.1.1. Dependent variables. The main dependent variable for actors again was their choice to either exclude or include the burdensome target. Actors then indicated how excluded ($\alpha = .74$) and hurt they expected targets to feel. The same questions as in Study 1 were used, except that the phrase "To what extent" was removed from the hurt feelings question to make it more direct. Moreover, a measure of actors' expectations of targets' negative feelings was added ("How do you think Barry feels if he cannot play along in the second round?", 1 = Negative, 7 = Positive; for ease of interpretation the item is presented reverse coded in the results).

3.1.3. Targets

3.1.3.1. Procedure and materials. For targets, the procedure and materials were similar to those described for actors in Study 1, but participants had the role of the burdensome target. Like the actors,

¹ For exploratory purposes we also assessed justification and understanding of the exclusion in all studies. Results are reported in the supplemental material.

targets in the current member condition completed a test round of the dot estimation task, as part of a team of three. Different from the actor condition, however, targets obtained a low score (32 out of 100 points), while their team members performed much better (scores of 69 and 73). In the prospective member condition, participants completed the first test round by themselves and also received the relatively low score (32). Then, they were introduced to a team of two high-scoring others (69 and 73) who finished the test round of the task together. In both conditions participants then were told that the player with the highest score could choose whom to continue with in the second round. The team with the highest average team score in that round would win. After waiting for a short while participants were informed that they were not chosen by the other player to be in the team, and that they could not play along in the second round. Then the dependent variables below were measured, and participants were fully debriefed, thanked, and compensated for participation.

3.1.3.1.1. Dependent variables. We measured targets' feelings of exclusion ("I feel...", 4 items: "excluded", "accepted", "valued", and "rejected", $\alpha = .80$) and hurt ("I feel hurt because I cannot play along in the second round") on 7-point scales (1 = *Not at all*, 7 = *Completely*), and also negative feelings ("Now that I cannot play along in the second round I feel...", 1 = *Negative*, 7 = *Positive*, the reverse coded item is presented in the results).

3.2. Results

3.2.1. Actors

3.2.1.1. Exclusion behavior. Replicating the main finding of the first study, we found that actors more often excluded targets by denying them access (76%) than by removing them from the group (45%), $\chi^2(1, N = 75) = 7.48, p = .006, \phi = -0.32, 95\% \text{ CI } [0.09-0.49]$. In both conditions, none of the actors excluded the non-burdensome member who was part of the team from the start.

3.2.1.2. Expectations of targets' feelings. Independent *t*-tests indicate that actors expected prospective members to feel as much exclusion after being denied access ($M = 5.51, SD = 0.91$) as current members would feel after being removed from the group ($M = 5.23, SD = 1.32$), $t(73) = 1.08, p = .284, d = 0.25, 95\% \text{ CI } [-0.24-0.81]$. Also, actors did not expect prospective members to feel more hurt ($M = 4.51, SD = 1.33$) than current members ($M = 4.55, SD = 1.52$), $t(73) = -0.12, p = .906, d = -0.03, 95\% \text{ CI } [-0.70-0.62]$, nor that prospective members would feel more negative ($M = 5.27, SD = 1.02$) than current members ($M = 5.26, SD = 1.11$), $t(73) = 0.03, p = .977, d = 0.01, 95\% \text{ CI } [-0.48-0.50]$.

3.2.2. Targets

3.2.2.1. Feelings. When prospective members were denied access they felt equally excluded ($M = 4.55, SD = 1.27$) as current members that were removed from the group ($M = 4.17, SD = 1.46$), $t(76) = 1.23, p = .221, d = 0.28, 95\% \text{ CI } [-0.24-1.00]$. Also, prospective members felt as hurt ($M = 2.66, SD = 1.53$) as current members ($M = 2.40, SD = 1.43$), $t(76) = 0.77, p = .444, d = 0.17, 95\% \text{ CI } [-0.41-0.92]$, and prospective members felt as negative ($M = 4.42, SD = 0.86$) as current members ($M = 4.25, SD = 1.10$) after exclusion, $t(76) = 0.76, p = .449, d = 0.17, 95\% \text{ CI } [-0.28-0.62]$.

3.2.3. Actors and targets

To explore whether actors' expectations of targets' feelings differed from targets' actual feelings, we conducted three 2 (role: actor vs. target) \times 2 (membership: prospective vs. current) ANOVAs. All means, *SD*s, and ANOVA statistics of the main and interaction effects were reported in Table 1. The results indicated that for all dependent variables only the main effects of role were significant (all *ps* < .001). Regardless of whether it concerned prospective or current group members, actors overestimated the impact that exclusion had on them:

Actors expected targets to feel more excluded ($M = 5.37, SD = 1.14$), hurt ($M = 4.53, SD = 1.42$), and negative ($M = 5.27, SD = 1.06$) than what targets reported ($M = 4.36, SD = 1.38$; $M = 2.53, SD = 1.47$; $M = 4.33, SD = 0.99$; respectively).

3.3. Discussion

Study 2 showed that actors more readily denied prospective members access into the group than they removed current members from the group. This replicates the findings of Study 1. Actors showed this behavior even though they did not expect targets to feel less excluded, negative, or hurt when they were denied access than when they were removed from the group. Moreover, in Study 2 the perspective of the target was assessed. As predicted, targets' feelings were equally impacted by exclusion, regardless of whether they were denied access into a group or removed from a group they were already part of. Moreover, exploratory analyses suggest that actors overestimated how negatively targets were affected by exclusion, regardless of the process through which exclusion occurred. To conclude, the process of exclusion (i.e., does exclusion entail denial of entrance or removal from a group?) impacted whether actors decided to exclude others, even though actors expected targets to be equally hurt by both processes of exclusion. Targets experienced the end state of exclusion, and experienced negative consequences accordingly, regardless of the process leading up to it.

4. Study 3

Studies 1 and 2 showed that when actors could exclude burdensome group members they did so more often by denying them access than by removing them from the group. This setting with a burdensome target was chosen as previous research indicated that exclusion of targets that disturbed group performance was relatively likely to occur (Wesselmann et al., 2013). Study 3 tested the impact of the process in a setting in which targets performed similarly to the rest of the group. In this setting there was no apparent benefit for participants to exclude any group member, as this would not improve their chance of winning the subsequent group task. We tested if in this setting, actors would still be more likely to exclude group members by denying them access than by removing them from the group. Study 3 can then be regarded as a more conservative test of our hypotheses. It tests whether the difference between denying others access and removing them from the group alone changes actors' likelihood of excluding others. From the target's point of view this would mean that even when they are well-performing they may face exclusion as actors can be unwilling to let them join. Similar to Study 2, we expected that for targets being denied access would be equally hurtful as being removed from the group.

We conducted two additional exploratory analyses. The first analysis tests if, as in Study 2, actors overestimated the impact of exclusion on targets, compared to targets' actual feelings. In the second analysis, data of Studies 2 and 3 were combined (see Curran & Hussong, 2009, on Integrative Data Analyses). Combining these data sets provided the possibility to test, with even more power, the idea that targets felt equally negative after being removed from a group compared to being denied access into a group. Moreover, it allowed us to test if targets were less impacted by social exclusion when they were burdensome (Study 2) than when they were not burdensome (Study 3), and whether actors excluded burdensome targets more often than non-burdensome targets.

4.1. Method

4.1.1. Participants and design

In the Leiden University lab, we gathered data of 171 participants, 12 of which indicated they participated in an exclusion study in the weeks prior, and therefore were not included in the analyses. The total

Table 1
Means and SDs of dependent variables by Role (R) \times Membership (M), including ANOVA results.

	Means (SDs)				ANOVA statistics		
	Actors		Targets			F(1,149)	p
	Prospective members	Current members	Prospective members	Current members			
Exclusion feelings	5.51 (0.91)	5.23 (1.32)	4.55 (1.27)	4.17 (1.46)	R	24.51	< .001
					M	2.67	.105
					R \times M	0.61	.806
Hurt feelings	4.51 (1.33)	4.55 (1.52)	2.66 (1.53)	2.40 (1.43)	R	72.66	< .001
					M	0.22	.642
					R \times M	0.40	.529
Negative feelings	5.27 (1.02)	5.26 (1.11)	4.42 (0.86)	4.25 (1.10)	R	31.37	< .001
					M	0.29	.593
					R \times M	0.24	.623

sample of 159 remaining participants consisted of 135 female and 24 male participants; mean age 21.46 years old ($SD = 2.24$). As in the previous study, participants were randomly assigned to be actors or targets, in a prospective member (actors $n = 41$, targets $n = 41$) or current member condition (actors $n = 39$, targets $n = 38$). With $N = 80$ among actors, the chi-square test has a power of $\beta = .80$ to detect a significant difference with effect size $\phi = 0.31$ between conditions. $N = 79$ among targets corresponds with a power of $\beta = .80$ to detect a significant difference with effect size $d = 0.64$ in a t -test between conditions.

4.1.2. Actors

4.1.2.1. Procedure and materials. This study was identical to Study 2, except that there were only minimal differences in players' performance. After completing the test round of the dot estimation task, actors received a score of 73 out of 100, and all other players obtained 70 points. As in Studies 1 and 2, in the current member condition participants chose to play the second round with one or both of their group members. In the prospective member condition participants chose to play the second round with either their team member or the prospective member, or both of them.

4.1.2.1.1. Dependent variables. The dependent variables were identical to those described in Study 2

4.1.3. Targets

4.1.3.1. Procedure and materials. After completing the dot estimation task, both group members and prospective members obtained 70 points. Their score thus was similar to the scores of their team members (70 and 73 points). As in Study 2, they learned that the player with the highest score decided they could not play along in the second round.

4.1.3.1.1. Dependent variables. After assessing exclusion ($\alpha = .77$), hurt, and negative feelings with the same measures as in Study 2, targets' need fulfilment was measured. This measure was added because besides target's feelings, their need fulfilment is often affected by exclusion (Williams, 2007). We predicted that like their feelings, targets' need fulfilment would be equally affected by removal from the group as by denial of entrance. Need fulfilment was assessed through eight statements ($\alpha = .77$, as used in Lelieveld, Moor, Crone, Karremans, & Van Beest, 2013) measuring belonging (e.g., "I feel like I belong to the team"), control (e.g., "I feel like others decide everything for me"), self-esteem (e.g., "I have high self-esteem"), and meaningful existence (e.g., "At this moment I feel invisible") after exclusion (1 = Not at all, 7 = Completely).

4.2. Results

4.2.1. Actors

4.2.1.1. Exclusion behavior. The results of a chi-square test indicated

that actors in the prospective member condition excluded the prospective member more often by denying him access (56% of the cases) than actors in the current member condition excluded a current member by removing him/her from the group (5% of the cases), $\chi^2(1, N = 80) = 24.17, p < .001, \phi = -0.55, 95\% \text{ CI } [0.32-0.65]$.

4.2.1.2. Expectations of targets' feelings. Actors expected that prospective members would feel just as excluded ($\alpha = .72$) when being denied access ($M = 5.54, SD = 0.91$) as current members would after being removed ($M = 5.56, SD = 1.09, t(78) = -0.09, p = .925, d = -0.02, 95\% \text{ CI } [-0.47-0.42]$). They also expected that after exclusion, prospective members would feel as hurt ($M = 4.39, SD = 1.63$) as current members ($M = 4.69, SD = 1.22, t(78) = -0.94, p = .352, d = -0.21, 95\% \text{ CI } [-0.94-0.34]$), and that prospective members would feel as negative ($M = 5.17, SD = 0.89$) as current members ($M = 5.36, SD = 0.81, t(78) = -0.99, p = .327, d = -0.22, 95\% \text{ CI } [-0.57-0.19]$).

4.2.2. Targets

4.2.2.1. Feelings. Prospective members felt equally excluded after being denied access ($M = 4.68, SD = 0.90$) as current members after being removed from the group ($M = 4.51, SD = 1.11, t(77) = 0.72, p = .473, d = 0.16, 95\% \text{ CI } [-0.29-0.62]$). Prospective members also felt as hurt ($M = 3.39, SD = 1.45$) as current members ($M = 3.13, SD = 1.32, t(77) = 0.83, p = .410, d = 0.19, 95\% \text{ CI } [-0.36-0.88]$), and prospective members felt as negative ($M = 4.41, SD = 1.09$) as current members ($M = 4.32, SD = 0.90, t(77) = 0.44, p = .664, d = 0.10, 95\% \text{ CI } [-0.35-0.55]$). Following convention in the literature (Williams, 2009) the need fulfilment scores were taken together to form one aggregate need fulfilment variable. There was no difference in the extent to which the needs were fulfilled after being denied access ($M = 3.98, SD = 0.92$) vs. after being removed from the group ($M = 3.89, SD = 0.79, t(77) = 0.48, p = .631, d = 0.11, 95\% \text{ CI } [-0.29-0.48]$). Analyzing the needs separately yielded no significantly different results between conditions (all $ps > .183$).

4.2.3. Actors and targets

To explore if, as in Study 2, actors overestimated how bad targets would feel after being excluded, a series of 2 (role: actor vs. target) \times 2 (membership: prospective vs. current) ANOVAs were conducted to compare actors' estimations of targets' feelings with targets' actual feelings. All means, SDs, and statistics of the main and interaction effects are reported in Table 2. For all dependent variables only the main effects of role were significant (all $ps < .001$). Replicating Study 2, actors overestimated the impact of exclusion on targets: Regardless of the process through which targets were excluded, actors expected targets to feel more excluded ($M = 5.55, SD = 1.00$), hurt ($M = 4.54, SD = 1.44$), and negative ($M = 5.26, SD = 0.85$) than targets in fact did ($M = 4.60, SD = 1.01; M = 3.27, SD = 1.38$, and $M = 4.37$,

Table 2
Means and SDs of dependent variables by Role (R) × Membership (M), including ANOVA results.

	Means (SDs)				ANOVA statistics		
	Actors		Targets			F(1,155)	p
	Prospective members	Current members	Prospective members	Current members			
Exclusion feelings	5.54 (0.91)	5.56 (1.09)	4.68 (0.90)	4.51 (1.11)	R	35.65	< .001
					M	0.20	.656
					R × M	0.34	.563
Hurt feelings	4.39 (1.63)	4.69 (1.22)	3.39 (1.45)	3.13 (1.32)	R	32.53	< .001
					M	0.01	.923
					R × M	1.56	.214
Negative feelings	5.17 (0.89)	5.36 (0.81)	4.41 (1.09)	4.32 (0.90)	R	36.91	< .001
					M	0.09	.763
					R × M	0.94	.334

SD = 1.00; respectively).

4.2.4. Cross-study analyses

To further explore the data of Studies 2 and 3, the data were pooled to perform Integrative Data Analyses (e.g., Curran & Hussong, 2009).

4.2.4.1. Feelings. The main effect of Membership on all feelings were not significant, nor were the Role × Membership interactions, or the Study × Role × Membership interactions (all p s ≥ .118). In correspondence with previous analyses, this demonstrates that targets were similarly affected by being removed from a group vs. being denied entrance into a group.

The main effects of Role on exclusion feelings, $F(1,304) = 57.90$, $p < .001$, $\eta_p^2 = .16$, and negative feelings, $F(1,304) = 67.87$, $p < .001$, $\eta_p^2 = .18$, were significant, indicating that actors overestimated how excluded ($M = 5.46$, $SD = 1.07$) and negative ($M = 5.26$, $SD = 0.95$) targets felt, compared to how they actually felt ($M = 4.48$, $SD = 1.21$, and $M = 4.35$, $SD = 0.99$, respectively).

For hurt feelings, the main effect of study was significant, $F(1,304) = 5.19$, $p = .023$, $\eta_p^2 = .02$, as were the main effect of role, $F(1,304) = 102.20$, $p < .001$, $\eta_p^2 = .25$, and the Study × Role interaction, $F(1,304) = 4.96$, $p = .027$, $\eta_p^2 = .02$. Simple contrasts show that actors expected targets to feel equally hurt by exclusion in Study 2 ($M = 4.53$, $SD = 1.42$) and Study 3 ($M = 4.54$, $SD = 1.44$), $F(1,308) = 0.00$, $p = .986$, $d = 0.00$, while burdensome targets (Study 2) were less hurt, ($M = 2.53$, $SD = 1.47$) than non-burdensome targets (Study 3), ($M = 3.27$, $SD = 1.38$), $F(1,304) = 10.52$, $p = .001$, $d = 0.52$, (see Fig. 3).

4.2.4.2. Exclusion decision. Among actors, a logistic regression on the

choice for inclusion vs. exclusion was performed, with Study, Membership, and the Study × Membership interaction as factors. The main effect of study was marginally significant, $B = -0.89$, $SE = 0.496$, Wald $\chi^2 = 3.22$, $p = .073$, indicating that actors were marginally less likely to exclude the non-burdensome target in Study 3 (31% of the cases), than to exclude the burdensome target in Study 2 (60% of the cases). The main effect of membership was significant, $B = -1.35$, $SE = 0.50$, Wald $\chi^2 = 7.16$, $p = .007$, showing that people excluded others by denying them access more often (65%) than by removing them from the group (25%). The Study × Membership interaction was marginally significant, $B = -1.82$, $SE = 0.94$, Wald $\chi^2 = 3.75$, $p = .053$. This indicates a trend that for current group members, exclusion frequency differed more between being burdensome (45%, Study 2) or not (5%, Study 3), than for prospective group members (76% vs. 56%, respectively).

4.3. Discussion

The results of Study 3 showed that even when potential group members performed as well as the other group members, actors were more likely to deny them access than to remove them from the group. Actors did this although they overestimated how impacted targets would be by exclusion, and expected targets that were denied access to feel equally excluded, hurt, and negative as targets that were removed from the group. The process of exclusion then is important to understand when actors exclude others, although actors think both processes are equally hurtful for targets. Targets experienced the end state of exclusion and the associated negative consequences both when they were denied access and when they were removed from the group. For their feelings the process was less important, as ending up excluded was equally impactful after both processes.

The, more strongly powered, exploratory aggregate analyses (Curran & Hussong, 2009) we performed corroborated the finding that targets were equally hurt, regardless of whether they were denied access or removed from the group. Furthermore, the analyses revealed that burdensome targets felt less hurt by being excluded than non-burdensome targets, although they felt equally excluded and negative. Marginally significant effects further suggest that actors were more likely to exclude burdensome targets than non-burdensome targets, and that this effect may be more influential among current group members than among prospective members. This mirrors the idea that people tend not to exclude current group members unless they have a reason to do so (i.e., when others are burdensome, Wesselmann et al., 2013), while the current research shows that for prospective members exclusion is more likely, regardless of their performance.

5. Study 4

We have demonstrated that people are more likely to exclude others

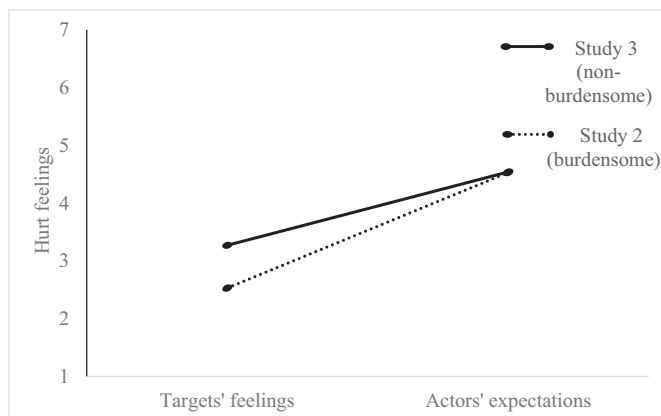


Fig. 3. Study (Study 2 vs. Study 3) × Role (actor vs. target) interaction effect on hurt feelings.

Table 3
Differences in factors proposed as underlying mechanisms between conditions.

	Means (SDs)		Independent <i>t</i> -test statistics			
	Prospective member condition	Current member condition	<i>t</i> (100)	<i>p</i>	<i>d</i>	95% CI
Identification	3.10 (1.39)	3.43 (1.14)	−1.33	.188	−0.26	[−0.83–0.17]
Similarity	4.55 (1.47)	4.84 (1.29)	−1.07	.286	−0.21	[−0.84–0.25]
Liking	4.88 (0.94)	5.52 (1.09)	−3.17	.002	−0.63	[−1.04 to −0.24]
Status quo	2.99 (1.61)	3.66 (1.44)	−2.20	.030	−0.21	[−1.27–0.07]
Norm	3.37 (1.48)	4.80 (1.78)	−4.42	< .001	−0.87	[−2.07 to −0.79]
Discomfort	3.08 (1.40)	4.09 (1.28)	−3.81	< .001	−0.75	[−1.54 to −0.49]
Positive affect	3.03 (1.34)	2.14 (1.13)	3.59	.001	0.71	[0.40–1.37]

through denying them access than through removing them from the group. In the Introduction we alluded to three possible reasons why this may be the case. First, we have argued that there may be a strong norm to include group members, while it may be less normative to include prospective members in the group. Secondly, because prospective members are outgroup members (and current group members ingroup) people may exclude them more often. This ingroup/outgroup perception may reflect in stronger identification, more feelings of similarity, and/or stronger liking for group members vs. prospective group members. Third, it is possible that people tend to maintain the status quo of their group constitution, which may motivate them to keep current group members in the group, and prospective group members out. Study 4 tested these explanations among actors. For any of these reasons, actors may also experience more discomfort, and less positive affect when excluding a current group member than a prospective group member. Therefore, we also measured differences in discomfort and positive affect directly, and tested whether these more general measurements would explain the variance in exclusion frequency between conditions.

5.1. Method

5.1.1. Participants and design

Data of 103 participants were collected at the Leiden University lab. One participant was excluded for having participated in one of the previous studies. The 102 remaining participants (mean age 19.25, *SD* = 2.12, of which 91 female, 11 male) all had the role of actor, and were randomly assigned to either the prospective member (*n* = 51) or the current member condition (*n* = 51). With *N* = 102, the chi-square test had a power of $\beta = .80$ to detect a significant difference with effect size $\phi = 0.28$ between conditions.

5.1.2. Procedure and materials

The set-up of the study was identical to that described for actors in Study 3, except for the dependent variables following the inclusion/exclusion choice.

5.1.2.1. Dependent variables. After confirming which of the other players the participants had included/excluded, participants indicated to what extent they agreed to the below statements (order within and between constructs was randomized) on a 7-point scale (1 = *Do not agree at all*, 7 = *Totally agree*). Inclusion norm ($\alpha = .89$): “In this situation you are supposed to let everyone play along”, and (reverse scored) “In this situation it is normal if you decide some players cannot play along”; identification: “I feel I can identify with Barry”, similarity (reverse scored): “I feel Barry and I have little in common”, likability ($\alpha = .62$): “Barry seems nice”, and (reverse scored) “Barry seems unsympathetic. Then, after being reminded of whom they included/excluded, participants were asked to indicate agreement to two more statements, measuring status quo ($\alpha = .68$): “I made this decision mostly because I dislike changing the initial state of the group”, and “In my decision it played a major role that I always think everything in the

group should stay the same”. Again, participants were reminded of their inclusion/exclusion decision, and those that chose to include Barry were asked to imagine how they would feel if they would play without Barry. Finally, discomfort (“A decision that Barry cannot play along makes me feel.”: “uncomfortable”, “uneasy”, “bothered”, $\alpha = .86$), and positive affect (“good”, “happy”, “energetic”, $\alpha = .92$) were assessed on a scale from 1 = *Not at all*, to 7 = *Completely* (based on Elliot & Devine, 1994).

5.2. Results

5.2.1. Exclusion behavior

Replicating the findings of Study 3, a chi-square test demonstrated that participants excluded prospective members more often by denying them access (45% of the cases) than excluding current members by removing them from the group (4% of the cases), χ^2 (1, *N* = 102) = 23.37, *p* < .001, $\phi = -0.48$, 95% CI [0.25–0.55].

5.2.2. Underlying mechanisms

Independent *t*-tests were used to test if participants differed between conditions on seven factors: a) identification, b) similarity, and c) likability of Barry, and d) agreement that inclusion was the norm, e) whether the status quo effected their decision, f) the experienced discomfort and g) positive affect when excluding the target. All relevant statistics can be found in Table 3. Participants identified equally with prospective members and current group members, and did not feel more similar to one than the other. Participants did like current group members more than prospective members. Participants in the prospective (vs. current) member condition also indicated higher agreement with the inclusion norm, and felt that maintaining the status quo was more important for their decision. Finally, participants considered it as less discomforting and experienced more positive affect when denying a prospective member access than when removing a current member from the group.

All factors were simultaneously² entered in one bootstrap analysis to determine possible mediators for the relation between condition and exclusion behavior (whether Barry was included or excluded). The process macro (Preacher & Hayes, 2008), testing Model 4 with 10,000 bootstrap resamples, provided Sobel tests demonstrating no indirect effects of condition on exclusion behavior through identification, 99% CI [−1.62–0.95], similarity, 99% CI [−0.53–1.32], liking, 99% CI [−3.07–3.67], status quo, 99% CI [−1.01–2.59], discomfort, 99% CI [−3.37–3.56] or positive affect, 99% CI [−4.10–2.56]. However, the indirect effect of condition on exclusion behavior through agreement with the inclusion norm was significant, 99% CI [−5.82 to −0.32].

5.3. Discussion

Study 4 replicates the finding that people were more likely to

² When tested separately, both positive affect, 99% CI [−1.66 to −0.07], and norms, 99% CI [−3.74 to −0.52], were significant.

exclude others by denying them access than by removing them from the group. Additionally, it demonstrates that although there were differences between the conditions in likability, importance of the status quo, and experienced discomfort and positive affect when excluding the target, these factors did not mediate the effect of condition on exclusion behavior. Different perceptions of the inclusion norm did mediate this effect. Participants believed it was more normative to include others that were currently part of the group than to include others that were not yet part of the group. Our mediation analyses supported the possibility that this difference in how normative people think inclusion is, can explain why people are more likely to exclude prospective members than current group members (see Wesselmann et al., 2013).

6. General discussion

In four experiments we provide evidence that the process of exclusion influences how likely people are to exclude others: Actors are more likely to deny targets access than to remove them from the group. Even when individuals perform well, and their exclusion does not improve group performance, are actors more likely to deny them entrance into the group. Our data support the possibility that people may act this way because they believe that including prospective members is less normative than including current group members. Furthermore, actors tend to deny targets entrance although they expect this to be equally hurtful for targets as being removed from the group. Indeed, when targets ended up excluded they felt just as excluded, hurt, and negative when they were removed from a group as when they were denied entrance into a group. Their needs were threatened to the same degree as well. Taken together, this points to an important discrepancy: Actors are more likely to exclude targets through the process of denying them access than through removing them from the group, while both experiences are equally harmful for targets.

The main goal of the current research was to demonstrate the importance of the process of exclusion in understanding when actors exclude others, and whether the processes of exclusion affected targets differently. We have also tested three possible reasons why actors were more likely to exclude targets through denying them access than through removing them from the group. We did not find evidence that differences in identification, similarity, and likability (in correspondence with an ingroup/outgroup logic), differences in the tendency to stick to the status quo, or a more general resulting experience of discomfort or positive affect explained why actors excluded others more by denying them access than by removing them from the group.

The data do support the idea that people more often exclude others by denying them access because they think that this is more normative than removing current members from the group. Previous research already suggested that it may be normative not to exclude current group members (Wesselmann et al., 2013). The present article suggests that it is less normative to include prospective members in the group – or to some extent even normative to exclude them. New members can be unwanted by the group because they consume part of the group's resources, while their contributions are often uncertain (Delton & Cimino, 2010). Moreover, the inclusion of new members in the group can shake up established status relations (Levine & Moreland, 1985; Stiff & Van Vugt, 2008). Delton and Cimino (2010) argue that such negative effects have contributed to an evolutionarily ingrained aversion to new members, that may persist even when direct costs of including them are not present. Such a general norm that is negative towards including new members fits with the findings of Studies 3 and 4, that actors even denied access to prospective members that were not burdensome to the group.

The current research demonstrates that not only characteristics of the target (whether they are burdensome, slow, immoral, disagreeable, Hales et al., 2016; Van der Lee et al., 2017; Wesselmann et al., 2013, 2015) but also the process through which actors can exclude targets, predicts whether actors are likely to exclude them. Therefore, more

attention to differences between such processes could be fruitful in understanding when actors exclude others. An important implication is that in studying actors of exclusion the choice of paradigm becomes rather important. Paradigms may differ or be ambiguous in what process of exclusion they model (removal vs. denial of entrance) and this may influence actors' behavior (for a related point on how different exclusion paradigms impact targets' reactions, see Bernstein & Claypool, 2012; Molden, Lucas, Gardner, Dean, & Knowles, 2009). For example, modeling the process of exclusion as being removed from a group may lead to the conclusion that inclusion is the norm and actors are generally unlikely to exclude others (Wesselmann et al., 2013), while when the process is modeled as a denial of access into the group, exclusion can be relatively common. Moreover, there may be different processes besides removal from the group vs. denial of access that may be relevant to distinguish between. For example, ostracizing (i.e., excluding others by ignoring them) and rejecting (i.e., explicitly communicating exclusion) could also be considered different processes of exclusion. Actors may also be more or less likely to exclude others through ostracizing them than through rejecting them. Future research could look into the processes of rejection and ostracism and determine if these processes too influence actors' likelihood of excluding others – and whether both are equally hurtful for targets.

Besides the process, future research may also focus on other factors that help us understand when people are likely to engage in exclusion. Perceived group norms can play an important role (as demonstrated in the current research), but so may other situational factors. For example, when people expect they may be blamed or punished by observers or peers for excluding others, this may discourage exclusion behavior (see Rudert, Ruf, and Greifeneder, in press; Rudert, Sutter, Corrodi, & Greifeneder, 2018). Moreover, differences at the level of the actors' experience (e.g., their feelings) may be important factors in explaining exclusion behavior. In our setting, the low levels of positive affect that actors experienced when excluding others played a non-significant role when controlling for the effect of ingroup/outgroup differences, status quo, and norms. However, the indirect effect of condition on exclusion behavior through positive affect was significant when not controlling for these factors. Future research could investigate in what situations actors' feelings do play a decisive role in exclusion behavior.

The current research makes a methodological contribution by introducing a new paradigm in which actors' volitional exclusion behavior is measured, while also differentiating between two processes of exclusion. Additionally, this paradigm measures targets' feelings after exclusion in the same design as actors' exclusion behavior. This provides the important possibility of verifying if and how bad actors' behavior impacts targets (see Zadro & Gonsalkorale, 2014). In previous paradigms, exclusion by actors has been measured by documenting actors' tendency to throw a ball less often to a burdensome target (Wesselmann et al., 2013, 2015), or to assign the next turn less often to targets (Wirth et al., 2015). However, in these settings actors rarely excluded other players completely (i.e., not choose them at least once). The extent to which this partial exclusion impacted burdensome targets' feelings was not verified in the same paradigm – although elsewhere such instances of partial exclusion are suggested to be less hurtful for targets (Gerber & Wheeler, 2014). In the paradigm introduced here, this ambiguity is bypassed as actors decide to fully include or fully exclude the target, and targets' feelings after exclusion are measured after both processes.

It is important to note that the conclusions drawn from this research are based on a paradigm in which participants were only just introduced to their groups. This group bond has nevertheless proved informative and consequential, as it was strong enough to trigger more exclusion behavior among actors towards prospective members than towards current group members. At the same time, targets were equally impacted by being removed from a group and being denied access into a group. Although this finding is in line with previous research (Williams, 2009), we acknowledge it may be limited to groups that do

not have an extensive history. Evidently, when it concerns spontaneously formed groups, being removed is as painful as being denied access. However, it is possible that the more strongly individuals bond with their group, the more painful removal from the group becomes, compared to not being allowed into a new group. In line with this, Leary (2001) has suggested that being excluded as a long-term member communicates that the group cares less about the relationship than before, and that such a devaluation is more painful than not being valued by a group from the start. Future research could investigate features of the group that determine when targets feel removal is more painful than initial exclusion.

Moreover, exploratory analyses that were conducted throughout this research returned interesting findings. First, the data of Studies 2 and 3 suggested that actors consistently overestimated the negative impact of exclusion on targets, compared to targets' indications of their own feelings. This discrepancy may be due to self-presentation concerns of actors, targets, or both, when answering these questions. But alternatively, it may indicate a true misconception on the part of the actors: Actors may underestimate targets' coping mechanisms, or may tend to err on the safe side when estimating the impact of one's wrongdoings on others (see also Baumeister, Stillwell, & Heatherton, 1994, on the social function of guilt, but cf. Sommer et al., 2001).

Additionally, exploratory cross-study analyses indicated that burdensome targets (Study 2) felt more hurt when they were excluded than non-burdensome targets (Study 3). This finding connects to recent research that demonstrates how the context and reason for exclusion can attenuate the impact of exclusion (Çelik, Lammers, van Beest, Bekker, & Vonk, 2013; Rudert & Greifeneder, 2016). The experience of exclusion may be more hurtful for non-burdensome (vs. burdensome) group members, as they may not expect exclusion, and may feel the exclusion is uncalled for (for a similar point, see Sommer et al., 2001; Tuscherer et al., 2016; Wesselmann, Butler, Williams, & Pickett, 2010). Another possibility is that exclusion may be less aversive for burdensome group members because being part of the group is less positive for them. Burdensome group members may feel distressed and guilty for underperforming while they are part of the group, and in that context exclusion may be a relatively relieving and preferred outcome (Doolaard, Noordewier, Lelieveld, Van Beest, & Van Dijk, 2019).

7. Conclusion

Four experiments provide support for the idea that the process by which targets can be excluded predicts whether actors are likely to exclude them. Even when the removal of targets does not improve the expected group outcome, are actors more likely to deny them access than to remove them from the group. Actors do this although they expect targets to be equally affected in both instances. Targets indeed are equally affected by exclusion, regardless of the process leading up to it. Seeing as actors' decision to exclude another in part depends on the process of exclusion, the field could benefit from considering such processes in its theories and studies to contribute to a more nuanced and comprehensive account of exclusion.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jesp.2019.103946>.

References

- Arrow, H., & Crosson, S. (2003). Musical chairs: Membership dynamics in self-organized group formation. *Small Group Research*, 34, 523–556. <https://doi.org/10.1177/1046496403254585>.
- Asher, S. R., Rose, A. J., & Gabriel, S. W. (2001). Peer rejection in everyday life. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 105–142). New York, NY: Oxford University Press.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529. <https://doi.org/10.1037/0033-2909.117.3.497>.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt – An interpersonal approach. *Psychological Bulletin*, 115, 243–267. <https://doi.org/10.1037/0033-2909.115.2.243>.
- Bernstein, M. J., & Claypool, H. M. (2012). Not all social exclusions are created equal: Emotional distress following social exclusion is moderated by exclusion paradigm. *Social Influence*, 7, 113–130. <https://doi.org/10.1080/15534510.2012.664326>.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86, 307–324. <https://doi.org/10.1037/0033-2909.86.2.307>.
- Buckley, K. E., Winkel, R. E., & Leary, M. R. (2004). Reactions to acceptance and rejection: Effects of level and sequence of relational evaluation. *Journal of Experimental Social Psychology*, 40, 14–28. [https://doi.org/10.1016/S0022-1031\(03\)00064-7](https://doi.org/10.1016/S0022-1031(03)00064-7).
- Çelik, P., Lammers, J., van Beest, I., Bekker, M. H. J., & Vonk, R. (2013). Not all rejections are alike: competence and warmth as a fundamental distinction in social rejection. *Journal of Experimental Social Psychology*, 49, 635–642. <https://doi.org/10.1016/j.jesp.2013.02.010>.
- Curran, P. J., & Hussong, A. M. (2009). Integrative data analysis: The simultaneous analysis of multiple data sets. *Psychological Methods*, 14, 81–100. <https://doi.org/10.1037/a0015914>.
- De Waal-Andrews, W., & Van Beest, I. (2012). When you don't quite get what you want: Psychological and interpersonal consequences of claiming inclusion. *Personality and Social Psychology Bulletin*, 38, 1367–1377. <https://doi.org/10.1177/0146167212450463>.
- Delton, A. W., & Cimino, A. (2010). Exploring the evolved concept of newcomer: Experimental tests of a cognitive model. *Evolutionary Psychology*, 8, 317–335. <https://doi.org/10.1177/147470491000800214>.
- Doolaard, F. T., Noordewier, M. K., Lelieveld, G., Van Beest, I., & Van Dijk, E. (2019) Go on without me: When low-performing group members prefer exclusion over inclusion. Manuscript in preparation.
- Elliot, A. J., & Devine, P. G. (1994). On the motivational nature of cognitive-dissonance – Dissonance as psychological discomfort. *Journal of Personality and Social Psychology*, 67, 382–394. <https://doi.org/10.1037/0022-3514.67.3.382>.
- Gerard, H. B., & Hoyt, M. F. (1974). Distinctiveness of social categorization and attitude toward ingroup members. *Journal of Personality and Social Psychology*, 29, 836–842. <https://doi.org/10.1037/h0036204>.
- Gerber, J. P., & Wheeler, L. (2014). Clarifying the relationship between ostracism and relational devaluation. *Journal of Social Psychology*, 154, 14–27. <https://doi.org/10.1080/00224545.2013.826619>.
- Gonsalkorale, K., & Williams, K. D. (2007). The KKK won't let me play: Ostracism even by a despised outgroup hurts. *European Journal of Social Psychology*, 37, 1176–1186. <https://doi.org/10.1002/ejsp.392>.
- Gruter, M., & Masters, R. D. (1986). Ostracism as a social and biological phenomenon: An introduction. *Ethology and Sociobiology*, 7, 149–158. [https://doi.org/10.1016/0162-3095\(86\)90043-9](https://doi.org/10.1016/0162-3095(86)90043-9).
- Hales, A. H., Kassner, M. P., Williams, K. D., & Graziano, W. G. (2016). Disagreeableness as a cause and consequence of ostracism. *Personality and Social Psychology Bulletin*, 42, 782–797. <https://doi.org/10.1177/0146167216643933>.
- Hodson, G., Dovidio, J. F., & Esses, V. M. (2003). Ingroup identification as a moderator of positive-negative asymmetry in social discrimination. *European Journal of Social Psychology*, 33, 215–233. <https://doi.org/10.1002/ejsp.141>.
- Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and status-quo bias. *Journal of Economic Perspectives*, 5, 193–206. <https://doi.org/10.1257/jep.5.1.193>.
- Kerr, N. L., & Levine, J. M. (2008). The detection of social exclusion: Evolution and beyond. *Group Dynamics-Theory Research and Practice*, 12, 39–52. <https://doi.org/10.1037/1089-2699.12.1.39>.
- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin*, 127, 187–208. <https://doi.org/10.1037/0033-2909.127.2.187>.
- Leary, M. R. (2001). Toward a conceptualization of interpersonal rejection. In M. R. Leary (Ed.), *Interpersonal rejection* (pp. 3–20). New York, NY: Oxford University Press.
- Legate, N., DeHaan, C. R., Weinstein, N., & Ryan, R. M. (2013). Hurting you hurts me too: The psychological costs of complying with ostracism. *Psychological Science*, 24, 583–588. <https://doi.org/10.1177/0956797612457951>.
- Lelieveld, G.-J., Moor, B. G., Crone, E. A., Karremans, J. C., & Van Beest, I. (2013). A penny for your pain? The financial compensation of social pain after exclusion. *Social Psychological and Personality Science*, 4, 206–214. <https://doi.org/10.1177/1948550612446661>.
- Levine, J., & Moreland, R. (1985). Innovation and socialisation in small groups. In S. Moscovici, G. Mugny, & E. Avermaet (Eds.), *Perspectives on minority influence* (pp. 143–170). Cambridge: Cambridge University Press. <https://doi.org/10.1017/CBO9780511897566.009>.
- Maner, J. K., & Mead, N. L. (2010). The essential tension between leadership and power: When leaders sacrifice group goals for the sake of self-interest. *Journal of Personality and Social Psychology*, 99, 482–497. <https://doi.org/10.1037/a0018559>.
- Molden, D. C., Lucas, G. A., Gardner, W. L., Dean, K., & Knowles, M. L. (2009). Motivations for prevention or promotion following social exclusion: Being rejected versus being ignored. *Journal of Personality and Social Psychology*, 96, 415–431. <https://doi.org/10.1037/a0012958>.
- Nezlek, J. B., Wesselmann, E. D., Wheeler, L., & Williams, K. D. (2015). Ostracism in everyday life: The effects of ostracism on those who ostracize. *The Journal of Social Psychology*, 155, 432–451. <https://doi.org/10.1080/00224545.2015.1062351>.
- Poulsen, J. R., & Kashy, D. A. (2011). Two sides of the ostracism coin: How sources and targets of social exclusion perceive themselves and one another. *Group Processes &*

- Intergroup Relations*, 15, 457–470. <https://doi.org/10.1177/1368430211430517>.
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The sage sourcebook of advanced data analysis methods for communication research* (pp. 13–54). Thousand Oaks, CA: Sage.
- Ren, D., Hales, A. H., & Williams, K. D. (2017). Ostracism: Being ignored and excluded. In K. D. Williams, & S. A. Nida (Eds.), *Ostracism, exclusion, and rejection* (pp. 10–28). New York, NY: Routledge.
- Rudert, S. C., & Greifeneder, R. (2016). When it's okay that I don't play: Social norms and the situated construal of social exclusion. *Personality and Social Psychology Bulletin*, 42, 955–969. <https://doi.org/10.1177/0146167216649606>.
- Rudert, S. C., Ruf, S., & Greifeneder, R. (2019). Who to punish? How observers sanction norm-violating behavior in ostracism situations. *European Journal of Social Psychology*. <https://doi.org/10.1002/ejsp.2606> (in press).
- Rudert, S. C., Sutter, D., Corrodi, C., & Greifeneder, R. (2018). Who's to blame? Dissimilarity as a cue in moral judgments of observed ostracism episodes. *Journal of Personality and Social Psychology*, 115, 31–53. <https://doi.org/10.1037/pspa0000122>.
- Scott, K. L., Restubog, S. L. D., & Zagenczyk, T. J. (2013). A social exchange-based model of the antecedents of workplace exclusion. *Journal of Applied Psychology*, 98, 37–48. <https://doi.org/10.1037/a0030135>.
- Sommer, K. L., Williams, K. D., Ciarocco, N. J., & Baumeister, R. F. (2001). When silence speaks louder than words: Explorations into the intrapsychic and interpersonal consequences of social ostracism. *Basic and Applied Social Psychology*, 23, 225–243. https://doi.org/10.1207/s15324834basp2304_1.
- Sommer, K. L., & Yoon, J. (2013). When silence is golden: Ostracism as resource conservation during aversive interactions. *Journal of Social and Personal Relationships*, 30, 901–919. <https://doi.org/10.1177/0265407512473006>.
- Stiff, C., & Van Vugt, M. (2008). The power of reputations: The role of third party information in the admission of new group members. *Group Dynamics: Theory Research and Practice*, 12, 155–166. <https://doi.org/10.1037/1089-2699.12.2.155>.
- Tuscherer, T., Sacco, D. F., Wirth, J. H., Claypool, H. M., Hugenberg, K., & Wesselmann, E. D. (2016). Responses to exclusion are moderated by its perceived fairness. *European Journal of Social Psychology*, 46, 280–293. <https://doi.org/10.1002/ejsp.2152>.
- Van der Lee, R., Ellemers, N., Scheepers, D., & Rutjens, B. T. (2017). In or out? How the perceived morality (vs. competence) of prospective group members affects acceptance and rejection. *European Journal of Social Psychology*, 47, 748–762. <https://doi.org/10.1002/ejsp.2269>.
- Wesselmann, E. D., Bagg, D., & Williams, K. D. (2009). “I feel your pain”: The effects of observing ostracism on the ostracism detection system. *Journal of Experimental Social Psychology*, 45, 1308–1311. <https://doi.org/10.1016/j.jesp.2009.08.003>.
- Wesselmann, E. D., Butler, F. A., Williams, K. D., & Pickett, C. L. (2010). Adding injury to insult: Unexpected rejection leads to more aggressive responses. *Aggressive Behavior*, 36, 232–237. <https://doi.org/10.1002/ab.20347>.
- Wesselmann, E. D., & Williams, K. D. (2017). Social life and social death: Inclusion, ostracism, and rejection in groups. *Group Processes & Intergroup Relations*, 20, 693–706. <https://doi.org/10.1177/1368430217708861>.
- Wesselmann, E. D., Williams, K. D., & Wirth, J. H. (2014). Ostracizing group members who can (or cannot) control being burdensome. *Human Ethology Bulletin*, 29, 82–103.
- Wesselmann, E. D., Wirth, J. H., Pryor, J. B., Reeder, G. D., & Williams, K. D. (2013). When do we ostracize? *Social Psychological and Personality Science*, 4, 108–115. <https://doi.org/10.1177/1948550612443386>.
- Wesselmann, E. D., Wirth, J. H., Pryor, J. B., Reeder, G. D., & Williams, K. D. (2015). The role of burden and deviation in ostracizing others. *Journal of Social Psychology*, 155, 483–496. <https://doi.org/10.1080/00224545.2015.1060935>.
- Williams, K. D. (2007). Ostracism. *Annual Review of Psychology*, 58, 425–452. <https://doi.org/10.1146/annurev.psych.58.110405.085641>.
- Williams, K. D. (2009). Ostracism: A temporal need-threat model. *Advances in experimental social psychology*. Vol. 41. *Advances in experimental social psychology* (pp. 275–314). [https://doi.org/10.1016/s0065-2601\(08\)00406-1](https://doi.org/10.1016/s0065-2601(08)00406-1).
- Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the internet. *Journal of Personality and Social Psychology*, 79, 748–762. <https://doi.org/10.1037/0022-3514.79.5.748>.
- Wirth, J. H., Bernstein, M. J., & Leroy, A. S. (2015). Atimia: A new paradigm for investigating how individuals feel when ostracizing others. *Journal of Social Psychology*, 155, 497–514. <https://doi.org/10.1080/00224545.2015.1060934>.
- Zadro, L., & Gonsalkorale, K. (2014). Sources of ostracism: The nature and consequences of excluding and ignoring others. *Current Directions in Psychological Science*, 23, 93–97. <https://doi.org/10.1177/09637271413520321>.
- Zadro, L., Williams, K. D., & Richardson, R. (2004). How low can you go? Ostracism by a computer is sufficient to lower self-reported levels of belonging, control, self-esteem, and meaningful existence. *Journal of Experimental Social Psychology*, 40, 560–567. <https://doi.org/10.1016/j.jesp.2003.11.006>.
- Ziller, R. C., Behringer, R. D., & Jansen, M. J. (1961). The newcomer in open and closed groups. *Journal of Applied Psychology*, 45, 55–58. <https://doi.org/10.1037/h0048008>.