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You are not selected: Two field studies on the association between dehumanization and social rejection

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ARTICLE INFO	A B S T R A C T
<i>Keywords:</i> Social rejection Distancing Dehumanization Distress	In the current research we investigated how people deal with decisions in which they have to reject others, something that is unavoidably part of many selection procedures. Integrating insights derived from research on social exclusion and dehumanization, we argued that when people need to reject others, they dehumanize them. To study the association between dehumanization and rejecting in a real-life setting, we conducted two field studies, in which we examined the selection process in student houses, where residents can accept some prospective members, but have to reject others. As predicted, our findings showed that when people need to reject targets, they subtly dehumanize them. Moreover, dehumanizing rejected targets was related to lower rejection aversion. This suggests that when people dehumanize those they have to reject, rejection is easier.

Social rejection can be defined as an explicit declaration that an individual or group is not wanted (Williams, 2007). It is a specific type of social exclusion that involves direct negative attention conveying relational devaluation (Wesselmann and Williams, 2017), and one that is part of many real-life events. Previous research on social rejection has focused mostly on the targets of social rejection (i.e., those who are rejected). This research has shown that targets of social rejection experience pain (Eisenberger et al., 2003) and threats to the fundamental needs of belonging, self-esteem, control, and meaningful existence (Williams, 2007). Moreover, being rejected increases negative emotions and aggression, and decreases prosocial behavior (Buckley et al., 2004; Twenge et al., 2007; Twenge and Campbell, 2003).

Previous research has thus clearly revealed the negative experience of being rejected. Increasingly, research has focused on the psychological consequences to those who reject others (i.e., the actors). In the current article we take this research to the field by studying the perspective of actors in a context of selection procedures. There are many real-life situations where people face the task of having to select some while having to reject others. For instance, job interviewers are responsible for selecting the best candidate with the best fit, and need to reject those who do not fit the job profile or score less on the job requirements. As another example, fraternities often use selection procedures to choose new members, knowing that they can accept only a limited number of new members and need to reject others. These selection procedures may be challenging not only to those who are rejected but also to those who have to reject them. People may experience distress, ego-depletion, and negative emotions when rejecting others (Ciarocco et al., 2001; Poon and Chen, 2015; Poulsen and Kashy, 2012; Wesselmann et al., 2009), evaluate it as painful (Chen et al., 2014), and experience decreases in their self-worth (Wirth and Wesselmann, 2018).

When rejecting others is an unavoidable part of the selection process, actors may have to find a way to deal with these potential negative consequences. In the current research, we argue that in such settings, rejecting others may be associated with distancing oneself from these others. This idea fits with previous research showing that the more distant targets are to people (e.g., whether targets are outgroup vs. ingroup members), the more willing people are to reject them (Lelieveld et al., 2020). While people are thus more likely to reject distant others, previous research did not examine the relationship between rejecting and actual distancing behavior. In the current studies we examined whether people also distance themselves from targets they have to reject. To study this, we conducted two field studies, in which we examined the selection process in student houses, where residents can accept some prospective members, but have to reject others. We tested the relation between rejecting and distancing, by focusing on a specific way people can distance themselves from the person they need to reject: by subtly dehumanizing the targets of rejection.

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Dehumanization when rejecting others

Dehumanization is the act of perceiving or treating people as if they are less than fully human (Haslam and Stratemeyer, 2016). Research has distinguished between subtle and blatant dehumanization. Subtle dehumanization is considered unintentional, such that actors are often unaware that they are attributing others fewer human characteristics (Levens et al., 2001). This is different from more blatant forms of dehumanization, where a target is considered less human in a way that is direct, overt, and consciously accessible to the dehumanizer (Haslam and Loughnan, 2014), for instance in the case of intergroup violence (Maynard and Luft, in press; Rai et al., 2017) or when people liken others as nonhumans in language (Haslam et al., 2011). But even within subtle forms, dehumanization can be considered a broad construct with a wide variety of conceptualizations and measures (for an overview, see Kteily and Landry, 2022). Examples of subtle dehumanization are tendencies to attribute targets less human-specific emotions (also termed infrahumanization; Levens et al., 2000) or less uniquely human traits (such as rationality or warmth, traits that were also measured in the current research; Haslam et al., 2005), but also the tendency to downplay the capacity for agency in targets (Gray et al., 2007). The current research conceptualizes dehumanization as relatively subtle and examined at the interpersonal level, by measuring the tendency to attribute targets less uniquely human traits. Research has observed such subtle dehumanization in studies on out- vs ingroup members (Leyens et al., 2000), and when people anticipate that empathizing with targets is emotionally exhausting (Cameron et al., 2016).

In the current work we argue that people also subtly dehumanize others when they have to reject them. As noted above, having to reject a target has been shown to elicit distress (Ciarocco et al., 2001; Legate et al., 2013; Poon and Chen, 2015; Poulsen and Kashy, 2012; Wesselmann et al., 2009). Previous research has shown that when people experience distress, they may try to compensate for this behavior when they witness it, especially when there is no clear reason for the rejection (Wirth et al., 2015; Wesselmann et al., 2013). We examined another important phenomenon that may be associated with having to reject others, namely distancing themselves from others they have to reject through the process of dehumanization. When people dehumanize others they need to reject, they may experience less distress in the selection process, and be less aversive to actually reject others. This is in line with previous research showing that there is a clear relation between dehumanization and the motivation to avoid experiencing emotional exhaustion, that is, the anticipated stress that is associated with helping a stigmatized target (Cameron et al., 2016). While these findings show that people dehumanize others to avoid the stress associated with helping others, the current research examines the relationship between dehumanization and stress associated with the more negative behavior of rejecting.

The logic that people dehumanize those they have to reject also fits with research describing the exclusionary functions of dehumanization for targets, showing that targets of social rejection and exclusion do think that actors dehumanize them (Bastian and Haslam, 2010), especially when the act of social exclusion is associated with animal metaphors (Andrighetto et al., 2016), and that observers witnessing rejection dehumanize targets (Park and Park, 2015). The aim of the current research is thus to examine the relation between dehumanization and rejection in a field sample by testing whether rejecting potential group members is associated with an increase in dehumanization compared to accepting potential group members. Note that we tested our hypotheses in two correlational studies, because in the present research we were primarily interested in examining the association between rejection and dehumanization in an ecologically valid context, rather than demonstrating the causal link between rejection and dehumanization.

When examining the association between rejecting and dehumanization it is relevant to also take into account the extent in which (dis) liking of the target plays a role in rejection decisions. Some researchers have argued that dehumanization is really just a manifestation of dislike (e.g., Over, 2021), and that current measures of dehumanization are problematically confounded with dislike (e.g., Rai et al., 2018), which makes it difficult to tease apart the two concepts. At the same time, dehumanization is different from, and cannot be reduced to, negative evaluations (like disliking) of others (Fincher et al., 2018; Kteily and Bruneau, 2017; Vaes et al., 2021). Treating others as less than human, with an incapacity to think or feel, is different from construing others as unlikeable or unfavorable (Bruneau et al., 2018; Kteily and Landry, 2022), and from negative evaluations in general (Haslam et al., 2005; Leyens et al., 2000). Compared to disliking, or negative evaluations in general, dehumanization is uniquely associated with aggressive attitudes and intergroup conflict (Andrighetto et al., 2016; Kteily et al., 2016). Research has shown that dehumanization is associated with more support for hostile policies affecting outgroups (Kteily and Bruneau, 2017), obstructionism and outgroup spite (Moore-Berg et al., 2020; Landry et al., 2021), and condoning violence against out-groups (Goff et al., 2008), when controlling for negative evaluations like prejudice. Moreover, Bruneau et al. (2018) identified brain regions that are parametrically sensitive to judgments of blatant dehumanization, but insensitive to conceptually related judgments of dislike, suggesting that dehumanization and dislike are distinct concepts.

Given these insights, it is worth distinguishing between dehumanization and (dis)liking, especially in the context of the selection for shared housing. The residents' decision to accept some prospective members, but to reject others, is likely to be influenced by whether or not they like the prospective member. To demonstrate that rejection is indeed associated with dehumanization it is therefore important to also examine the influence of disliking on this association, and see whether the association remains when we control for disliking. For that reason, we also measured (dis)liking of the rejected targets, examined whether and how liking was associated with dehumanization of the rejected target, and assessed whether the relationship between rejecting and dehumanization might be explained by disliking. In Study 1, we included a more general measure of negativity, and in Study 2 a more specific measure of disliking. In both studies, we examined whether the association between rejecting and dehumanization remained when we controlled for negativity/disliking.

The current research

We present two field studies in which we tested our proposition that in selection processes involving accepting and rejecting others, actors dehumanize targets they reject more than targets they accept. Moreover, we examined whether the dehumanization of targets of rejection is negatively associated with rejection aversion, such that people who dehumanize the rejected target more experience less rejection aversion. Finally, we also examined whether and how (dis)liking was associated with the dehumanization of the targets. We tested this in two field studies in the context of student housing involving roommate selection. The vast majority of students in the Netherlands live together with other students in one accommodation. When looking for a new roommate to join their house, student houses often host evenings at which interested candidates come by. These typically are social gatherings, where the residents and the candidates can get to know each other over drinks. Out of all candidates attending these social gatherings, at the end of the evening student houses choose one (or more) candidate(s) as their new roommate(s), and effectively reject all other candidates. We attended several of these evenings, and before the residents of the student house retreated to discuss whom they would reject, we presented each of them with a survey. In this survey, the residents were asked to answer questions about a candidate they wanted to reject and a candidate they wanted to accept. In both studies, we measured dehumanization and rejection aversion. All materials and datasets used in our studies are publicly available on the Open Science Framework, using the following link:https://osf.io/w86vq/?view_only=4e2f3f3769b44311a16bc52

753bb3d57.

A key strength of the current work is its high ecological validity, which fits with a commentary in this special issue that argues that research on dehumanization needs to consider the broader ecological context in which dehumanization unfolds (Maynard and Luft, in press). This includes the ideological context, social relationships, and institutional dynamics that may give rise to dehumanization. By testing the association between dehumanization and social rejection in two field samples, taking into account social relationships, we therefore provide an important contribution to existing literature. Previous studies on dehumanization and social rejection have predominantly used experimental studies in the lab to examine their effects. We examined the association between dehumanization and social rejection in a real and meaningful context, where students actually had met and interacted with those who they would accept or reject to join their house. This context is particularly interesting, as the choice to live with someone has far more wide-reaching ramifications compared to a typical in-lab dehumanization design.

Study 1

Methods

Participants. The survey was conducted amongst residents of student houses organizing meetings to select a new roommate. We aimed to collect data of as many student houses as possible that were willing to participate in the period of one month, with a minimum of 60 participants. We collected data of 69 participants across seven student houses. Among the participants, 4 gift vouchers worth \pounds 25,- were raffled to thank them for participating. Additionally, we brought a small gift (chocolates) for each house at which we collected data.

One participant was removed from analysis for not filling out the entire questionnaire (including the question which person they wanted to reject, on which many of the follow-up questions were based). The remaining sample consisted of 68 participants, of which 46 female and 22 male, with a mean age of 20.59 (SD = 1.86). A sensitivity analysis (calculated in GPower 3.1; Faul et al., 2009) indicated that with $\alpha = 0.05$, and a power of $\beta = 0.95$, a sample size of N = 68 provides sufficient power to detect effects of d = 0.44. For all reported analyses we checked for the influence of alcohol by including the number of self-reported consumed alcoholic beverages as a covariate. Participants drank 3.19 alcoholic beverages on average (SD = 3.02). Alcohol had no significant main effects or interaction effects.

Procedure. We attended the social gathering evenings of seven student houses who looked for a new roommate. During the gatherings, residents tried to get to know the candidates through informal conversations over drinks. Residents mostly interacted with candidates, although there is a chance that residents may have had brief interactions with each other going from one conversation to another. To not disturb the gatherings, we only arrived after the social gatherings had ended and thus did not participate in or record the gatherings or interactions. We therefore also did not analyze the social gatherings or the topics of conversation. After the social gathering, but before the residents retreated and discussed which of the candidates became their new roommate and which they rejected, we presented each of the participants (i.e., the residents) separately with a survey, which they could individually fill out on tablets. They filled out the questionnaires at a quiet place, where they could not be disturbed by other residents, and were instructed not to talk to other residents before finishing the survey.

Participants read and agreed with the informed consent before starting the survey. Participants were first asked to indicate who they would choose to *accept* as new roommate and who they would choose to *reject* as new roommate. For both questions, they were asked to provide one name. It was sometimes the case that one candidate was mentioned by several residents as accepted or rejected roommate, but residents of the same house were never unanimous. To check whether participants were already acquainted with one or both of the candidates, we measured to what extent they knew the candidates before the gathering on a 7-point scale (1 = not at all; 7 = very well). A total of 7 participants scored one or both of the candidates higher than the midpoint (>4) on this scale. Removing these participants from the analyses did not affect any of our results. We therefore decided to include these participants in the analyses. Participants continued to answer questions about the candidate they wanted to accept and the candidate they wanted to reject.

Measures. We measured dehumanization of the accepted and rejected candidate with a questionnaire adapted from Bastian and Haslam (2010). The questionnaire contained 12 items and participants filled out all items twice, once for the accepted and once for the rejected candidate. Responses ranged from 1 (*Not at all*) to 7 (*Very much so*), and example questions were: "I felt like (insert name) had interpersonal warmth", "I felt that (insert name) was emotional, like he/she was responsive and warm", and "I felt like (insert name) was less than human, like an animal". We reverse-scored 7 out of 12 items for both the accepted and the rejected candidate. Then, the items were combined into a dehumanization scale for the accepted ($\alpha = 0.75$) and rejected candidate ($\alpha = 0.72$), where higher scores indicate more dehumanization.

To measure participants' rejection aversion, we asked the following three questions regarding the candidate they wanted to reject: "I would find it difficult to tell (insert name) that they would not be our new roommate", "I find it difficult to reject (insert name)", and "I have no problem telling (insert name) that they were not chosen as the new roommate". We reverse-scored the last question and combined the three items into a scale for rejection aversion ($\alpha = 0.72$). Finally, as a general measure of negativity towards the target, we also asked participants to evaluate the accepted and rejected candidates, on a scale ranging from 1 (*Negative*) to 7 (*Positive*). We reverse-scored the item, such that higher scores indicated more negativity. At the end of the study, participants were debriefed and received the voucher for their participation.¹

Results

We predicted that participants would dehumanize targets they reject more than targets they accept. Moreover, we predicted that people who dehumanized the rejected target more would experience less rejection aversion. Correlations between all variables can be found in Table 1.

Dehumanization of Accepted and Rejected Candidates. In line

Table 1			
Pearson correlations between	the dependent	variables	in study 1.

	1	2	3	4	5
1. Dehumanization rejected individual	-				
 Dehumanization accepted individual 	.38**	-			
3. Rejection aversion	-0.33^{**}	-0.20	-		
 Negativity towards rejected individual 	-0.48**	-0.01	.31**	-	
 Negativity towards accepted individual 	-0.16	-0.55**	.21	.09	-

Note. All items were measured on 1–7 Likert scales. **Significant at the 0.01 level and *significant at the 0.05 level.

¹ The survey also included measures of perceived exclusion, general distress, rejection sensitivity, empathy, perspective-taking, and the preferred mode of communicating the acceptance and rejection. Because our main focus was on measuring the association between rejecting and dehumanization, we describe the results for these additional measures in the supplementary material.

with our predictions, a paired *t*-test showed that participants dehumanized those they rejected more (M = 2.98, SD = 0.61) than those they accepted (M = 2.42, SD = 0.47), t(68) = 7.53, p < .001, d = 1.03. Moreover, as predicted, a Pearson's correlation showed that dehumanization of the rejected target was negatively correlated with rejection aversion, r = -0.33, p = .006, indicating that the more participants dehumanized candidates they had to reject, the easier they found it to reject them.

Negativity Towards the Target. A paired t-test showed that participants perceived those they excluded as more negative (M = 4.79, SD = 1.14) than those they included (M = 2.25, SD = 0.82), t(68) = 15.62, p< .001, d = 2.56. Negativity towards the rejected target was positively correlated with dehumanization of the rejected target, r = 0.48, p < 0.48.001, indicating that the more participants evaluated the rejected target as negative, the more they dehumanized them. We also analyzed whether the difference between dehumanization of the rejected and accepted target remained significant when accounted for negativity. A repeated measures ANOVA with negativity towards the rejected target as covariate showed that the difference between dehumanization of the rejected and the accepted target was still significant when accounting for negativity, F(1, 66) = 5.08, p = .028, d = 0.55. Conversely, a repeated measures ANOVA with dehumanization of the rejected target as covariate showed that the difference between negativity towards the rejected and the accepted target became nonsignificant when accounting for dehumanization, F(1, 66) = 0.42, p = .519, d = 0.20. Moreover, a linear regression that controlled for negativity showed that the relationship between dehumanization of the rejected target and rejection aversion was not (or only marginally) significant, $\beta = -0.24$, p = .072, d = 0.80.

Discussion

In line with our predictions, the results of Study 1 showed that in the current real-life setting of selecting roommates, participants dehumanized candidates they rejected more than candidates they accepted as new roommates. Moreover, people who dehumanized the rejected candidate more, experienced less rejection aversion. Results also showed a strong positive correlation between dehumanization and negativity, indicating that the more participants dehumanized the rejected target the more negatively they evaluated them. However, even when controlling for negativity, we still observed that rejected targets were dehumanized more than accepted targets. The relationship between dehumanization and rejection aversion did become non- (or only marginally) significant.

Study 2

The goal of Study 2 was to investigate whether the findings of Study 1 would replicate. In Study 2, we again attended evenings in student houses at which candidates who are interested in a room in the house can come by. To test whether rejecting others was associated with distancing, we again measured dehumanization and rejection aversion. Moreover, instead of including a general measure of negativity, we now included a more specific measure of (dis)liking to examine the association with dehumanization of the target. We preregistered Study 2, which can be found at https://osf.io/wmn8b.

Method

Participants. We aimed for a similar sample size as in Study 1, again with a minimum of 60 participants. We collected data of 61 participants across eight student houses, of which 40 female, 20 male, and 1 participant did not identify with either, with a mean age of 21.10 (*SD* = 1.94). A sensitivity analysis (Faul et al., 2009) indicated that with α = 0.05, and a power of β = 0.95, a sample size of *N* = 61 provides sufficient power to detect effects of *d* = 0.47. We again raffled 4 gift vouchers

worth \notin 25,- among participants and brought a small gift for each house (chocolates). Participants indicated that they drank 2.61 alcoholic beverages on average (*SD* = 2.15). We again checked the influence of self-reported alcohol on the predicted effects, but as in Study 1, alcohol had no significant main effects or interaction effects.

Procedure. We used a similar procedure as in Study 1, but made several changes. Similar to Study 1, participants were asked to indicate who they would choose to *accept* as new roommate and who they would choose to *reject* as new roommate. We again measured to what extent they knew the candidates before the gathering, and none of the participants scored one or both of the candidates higher than the midpoint (>4) on this scale.

Measures. Using the same questionnaire as in Study 1, we measured dehumanization of the accepted ($\alpha = 0.66$) and rejected candidate ($\alpha =$ 0.79). In Study 1, the measure of rejection aversion focused only on how difficult it was to reject the target. Being rejection averse, however, does not only mean that people find it difficult to reject, but also that they may experience negative feelings when rejecting (Ciarocco et al., 2001; Legate et al., 2013; Poulsen and Kashy, 2012). To take these negative feelings into account, in Study 2, we extended the measure of rejection aversion by also measuring how negative participants thought it would feel. We now assessed rejection aversion with the following five items: "I would find it difficult to tell (insert name) that they would not be our new roommate", "I find it difficult to reject (insert name)", "I would feel guilty after rejecting (insert name)", "I would feel bad if I had to tell (insert name) that he/she could not live with us", and "It would bother me if I had to reject (insert name)". We combined the five items into a scale for rejection aversion ($\alpha = 0.89$). One other change that we made to the procedure of Study 1 was that in Study 2 we also measured (dis) liking of the target, by asking participants to indicate to what extent they liked the accepted and rejected candidates, on a scale ranging from 1 (= Not at all) to 7 (Very much). Finally, participants were debriefed and the participants received the voucher for their participation.

Results

We investigated whether we would replicate the main findings of Study 1 and thus again predicted participants would dehumanize targets they reject more than targets they accept. We also predicted that people who dehumanized the rejected target more would experience less rejection aversion. Correlations on all main dependent variables can be found in Table 2.

Dehumanization of Accepted and Rejected Candidates. As predicted, a paired *t*-test showed that participants dehumanized those they rejected more (M = 2.99, SD = 0.65) than those they accepted (M = 2.31, SD = 0.41), t(61) = 8.21, p < .001, d = 1.25. Moreover, dehumanization was again negatively correlated with rejection aversion, r = -0.37, p = .003, indicating that those that dehumanized candidates they had to reject, found it easier to reject them.

Liking. A paired *t*-test showed that participants liked those they excluded less (M = 4.15, SD = 1.15) than those they included (M = 5.84,

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Pearson correlations between the dependent variables in study 2.

	1	2	3	4	5
1. Dehumanization rejected individual	-				
 Dehumanization accepted individual 	.33**	-			
3. Rejection aversion	-0.37**	-0.20	-		
 Liking towards rejected individual 	-0.62**	-0.07	.32**	-	
 Liking towards accepted individual 	-0.19	-0.32**	.03	.36**	-

Note. All items were measured on 1–7 Likert scales. **Significant at the 0.01 level and *significant at the 0.05 level.

SD = 0.78), t(61) = 11.64, p < .001, d = 1.72. Liking of the rejected target was negatively correlated with dehumanization of the rejected target, r = -0.63, p < .001, indicating that the more participants liked the rejected target, the less they dehumanized them. We also analyzed whether the difference between dehumanization of the rejected and accepted target remained significant when accounted for liking. A repeated measures ANOVA with liking of the rejected target as covariate showed that the difference between dehumanization of the rejected and the accepted target was still significant when accounting for liking, F(1,59) = 63.78, p < .001, d = 2.08. Conversely, a repeated measures ANOVA with dehumanization of the rejected target as covariate showed that the difference between liking of the rejected and the accepted target became non-significant when accounting for dehumanization, F(1, 59)= 2.39, p = .128, d = 0.41. Moreover, a linear regression that controlled for liking showed that the relationship between dehumanization of the rejected target and rejection aversion was not (or only marginally) significant, $\beta = -0.28$, p = .073, d = 0.85.²

Meta-analysis. In two studies we showed that 1) participants dehumanized targets they rejected more than targets they accepted, when controlling for negativity/liking and that 2) dehumanization was negatively correlated with rejection aversion. To evaluate the aggregate effect with a larger sample, we conducted two meta-analyses using the *Meta-Essentials* workbook (Van Rhee et al., 2015). The first analysis estimated the combined overall effect across both studies of rejecting vs. accepting on dehumanization when controlling for negativity/liking. For this meta-analysis, the Cohen's *d* statistic was used as a measure of effect size. The meta-analysis showed that rejecting vs. accepting had a large-sized overall effect on dehumanization, when controlling for negativity/liking, *Z* = 8.34, *p* < .001, *d* = 1.12, 95 % CI [0.84, 1.41], which indicated that rejecting was associated with more dehumanization than accepting.

The second analysis estimated the overall relationship between dehumanization and rejection aversion across both studies, when controlling for negativity/liking. For this meta-analysis, the Cohen's *d* statistic was again used as a measure of effect size. The meta-analysis showed that dehumanization and rejection aversion have a large-sized overall association, Z = 6.30, p < .001, d = 0.82, 95 % CI [0.55, 1.10], which indicated dehumanization and rejection showed a strong association across studies.

Discussion

Study 2 replicated the findings of Study 1 that participants dehumanized targets they rejected more than targets they accepted. Our meta-analysis showed that this difference was also significant when aggregating the effects across studies. Moreover, we again found that dehumanizing the rejected target was associated with less rejection aversion, which was also corroborated by our meta-analysis. Results also showed a strong negative correlation between liking and dehumanization, indicating that the more participants dehumanized the rejected target the more they disliked them. However, when we accounted for liking, results showed that participants still dehumanized rejected targets more than accepted targets. The relationship between dehumanization and rejection aversion was non- (or only marginally) significant when we controlled for liking. However, the meta-analysis showed that across the two studies the relationship remained significant.

General discussion

In the current research, we investigated the association between dehumanization and social rejection in a real and meaningful context. We conducted two field studies, in which we examined the selection process in student houses, where residents can accept some prospective housemates, but have to reject others. We tested the relation between dehumanization and rejecting, by examining whether people subtly dehumanize prospective housemates they need to reject.

In line with our predictions, our findings showed that when people need to reject targets, they subtly dehumanize them. These findings were supported by a meta-analysis that aggregated the effects across both studies. Moreover, we showed that people who dehumanized the rejected target more, experienced less rejection aversion. These findings provide important insights into the link between dehumanization and rejection. Previous research has demonstrated that dehumanizing others serves to reduce the affective and moral consequences of one's actions (e.g., Castano and Giner-Sorolla, 2006), a process that is evident in the use of military force (McAlister et al., 2006), execution practices (Osofsky et al., 2005), bullying among children (Van Noorden et al., 2014), and delinquent behavior (Bandura et al., 1996). The current research adds to this literature, by showing that people also dehumanize when they need to reject others (i.e. in selection settings).

Our findings add to previous research linking dehumanization to social rejection and exclusion. This work has shown that targets of social rejection and exclusion judged themselves and those who rejected them as less human, and believed they were viewed as less human by actors (Bastian et al., 2012; Bastian and Haslam, 2010). Moreover, observing social rejection reduces judgments of humanness of targets, but not of actors (Park and Park, 2015). The current work extends this line of research by focusing on those who reject. People are reluctant to reject others, primarily because it requires individuals to violate a strong inclusion norm (Wesselmann et al., 2013; Zadro and Gonsalkorale, 2014). Dehumanizing targets people have to reject may reduce the associated distress that comes with violating the inclusion norm. Our studies further showed that people who dehumanized the rejected target more, experienced less rejection aversion. This relation suggests that distancing from the target they needed to reject, made rejecting easier.

We also measured negativity (Study 1) and liking (Study 2) and showed that participants liked the accepted target more than the rejected target. Moreover, our results showed a strong negative correlation between liking and dehumanization (and a strong positive correlation between negativity and dehumanization in Study 1), indicating that the more participants dehumanized the rejected target the more they disliked them. This is in line with previous research that generally shows that liking and dehumanization are strongly correlated (Borinca et al., 2021; Kteily and Bruneau, 2017). However, when we accounted for liking (or negativity in Study 1), we still found that dehumanization was stronger for rejected targets than accepted targets. Moreover, even though the relationship between dehumanization and rejection aversion was not (or only marginally) significant when we accounted for liking, the results of our meta-analysis showed that across studies dehumanization and rejection showed a strong association. This suggests that even though liking may have influenced participants' decisions, in the current context of student housing dehumanization may be meaningfully distinct from general dislike of the target (Kteily and Bruneau, 2017; Vaes et al., 2021). Also note that the association between liking and rejection (or negativity and rejection in Study 1) became nonsignificant when we accounted for dehumanization of the rejected target. This indicates that dehumanization may be more relevant to how people deal with rejecting targets than (dis)liking is. By teasing apart the influence of dehumanization and (dis)like, the current research adds to the discussion on the effects of dehumanization above and beyond (dis) liking. Based on the correlational nature of our research, we are, however, hesitant in drawing firm conclusions on the conceptual differences and similarities of both constructs. Future research could experimentally

² One may wonder whether the student house that participants belonged to may have affected the results. To test this, we conducted a multi-level analysis and added the results to the supplementary material. Results showed that the effect of accepting vs. rejecting on dehumanization was significant when accounting for house.

distinguish between dehumanization and liking to test whether they capture different constructs in the context of social rejection.

The current research conceptualized dehumanization as relatively subtle and examined at the interpersonal level. As discussed in the Introduction, however, there are many different conceptualizations of dehumanization used and measured in the literature that range from subtle to more blatant conceptualizations (for an overview, see Kteily and Landry, 2022). Even though these conceptualizations share important underlying assumptions, they also differ in the ways they characterize the construct of dehumanization (Over, 2021). With so many different conceptualizations of dehumanization, some researchers have argued that the construct may be too broad to be useful (see Bloom, 2022). Taking a broad perspective on dehumanization makes it difficult to recognize dehumanization above and beyond attributing negative traits or being unable or unwilling to empathize with others.

A broad perspective may thus blur the concept of dehumanization, and may lead one to draw conclusions on the effects of dehumanization on for instance cruelty, when in fact dehumanization may not be the source of this cruelty. This may especially be the case for measures of subtle dehumanization like the one we used in the current research. Over (2021) argued that findings that show that outgroup members are subtly dehumanized may be better explained in terms of intergroup preference effects (i.e., the tendency to prefer the ingroup over the outgroup). This is supported by other research that shows that outgroups are attributed negative and antisocial, but still human, traits (Enock et al., 2021a,b; but for an opposing account see Vaes, 2023). To advance the field of dehumanization, our suggestion would be to replicate the current findings with different measures of dehumanization, not only to demonstrate that dehumanization is indeed the process that is associated with rejecting, but also to examine potential differences between the types of dehumanization. Future research could, for instance, compare our relatively subtle conceptualization of interpersonal dehumanization, where we measured the tendency to attribute targets less uniquely human traits, to more blatant conceptualizations of dehumanization, or other types of subtle dehumanization (see Kteily and Landry, 2022), and examine whether they have stronger or weaker associations with social rejection.

Our studies were conducted in the context of a selection process in student houses, which is a key strength of the current work. There are many advantages that come with using this field approach. One obvious advantage is that we study rejecting in real-life, thereby increasing the ecological validity of our findings. Also, one of the challenges of rejection research in the lab is to device ecologically valid paradigms where people reject others (see Zadro and Gonsalkorale, 2014), primarily because it is difficult to let individuals violate the strong inclusion norm and to experimentally mimic the rich interpersonal setting where people socially reject others (e.g., as found in student houses). With the current studies, we examined real-life situations where people had to violate the norm, and investigated the association between dehumanization and social rejection, taking into account social relationships (Maynard and Luft, in press). This field approach thus provides an important contribution to existing literature.

Our approach also had some disadvantages. Our goal was to examine the association between dehumanization and rejecting. Because we did not manipulate rejecting, we caution against drawing strong conclusions on the causal relations between rejecting and dehumanization. With this limitation in mind, it is relevant to note that the associations we observed would fit with previous insights that imply a causal path. In particular, the observed associations would fit with insights suggesting that having to reject targets increases distress, and that people dehumanize to mitigate this distress to make the actual act of rejecting easier. In line with social functionalist frameworks (e.g., Tetlock, 2002), many studies have shown that interpersonal dehumanization can function to facilitate harm-doing and alleviate stress. This was also observed in research that, like us, focused more on subtle forms of dehumanization. Cameron et al. (2016), for instance, showed that people dehumanize stigmatized targets (i.e., drug addicts) to avoid the emotional distress from helping the stigmatized target. Fincher and Tetlock (2016) showed that people dehumanize norm-violators, making it easier to punish them. Research in medicine also shows physicians dehumanize patients when they have to inflict pain on these patients; a strategy that may also protect the physicians from experiencing distress (Haque and Waytz, 2012; Vaes and Muratore, 2013). Research on more blatant forms of dehumanization, however, also shows that dehumanization can facilitate harm-doing. Studies have shown that dehumanization increases aggression (Bandura et al., 1975), violence without moral restraint (Kelman, 1973), and support for the exclusion of others (see Opotow, 1990). Similarly, during wartime, soldiers have been shown to dehumanize their enemies. This way, soldiers distance themselves from their enemies, which makes it easier to harm them (Ivie, 1980). Moreover, Viki et al. (2012) examined the role of dehumanization in people's attitudes toward the rehabilitation of sex offenders, and showed that the more participants dehumanized sex offenders, the more likely they were to support their exclusion from society.

These studies support our reasoning that people experience distress when they have to reject targets, and that they dehumanize these targets to make rejection easier. We could also envisage an alternative path, such that the actual act of rejecting increases distress and that in a postdecisional process people dehumanize targets to minimize the distress and rationalize the act of rejection. This in a way resembles the process described in Bandura's (1999) seminal theory of moral engagement, which posits that people have cognitive mechanisms that allow them to sidestep their moral standards and behave immorally when this helps to avoid distress. One of these mechanisms of moral disengagement is dehumanization (see also Castano and Giner-Sorolla, 2006; Čehajić et al., 2009). In line with this reasoning, previous research on violence in wartimes showed that the more blatant dehumanization of targets was the consequence, rather than the cause of enduring violence (Luft 2015, 2022).

Whether distress and dehumanization are the determinants or the consequences of rejecting is important to examine in future research. In the current research, participants were asked to indicate who they wanted to reject, and not who they actually rejected. It therefore seems most likely that the experienced distress and dehumanization can be considered determinants and not consequences, because the actual act of rejection has not taken place yet. Future research could experimentally manipulate rejecting and measure dehumanization. Even though it may be difficult to experimentally mimic the rich interpersonal setting as found in student houses, manipulating rejecting directly could shed more light on the causal relations and clarify the theorized process.

Second, participants were asked to answer questions about a candidate they *wanted* to reject and a candidate they *wanted* to accept, instead of asking them to answer questions about candidates they *actually* rejected or accepted in the end. In student houses, residents make such decisions together. This set-up was used to examine how our individual participants were affected by having to reject others and to avoid that group processes would influence these ratings. If we would have assessed the actual group decision to reject, dehumanization would perhaps have played a smaller role, because individual residents may then have felt less accountable for rejecting the target (Bandura et al., 1975). Future research could investigate the processes related to the actual rejection decision, possibly also in relation to how group dynamics could intensify or weaken distancing.

Finally, because we did not analyze the social gatherings before residents filled out our survey, we do not know whether conversations they had with the candidates and with each other influenced the results. Also, we do not know whether residents had discussed with each other what type of person they would like to accept to the house before the gathering. Topics of conversation and social norms regarding who would fit the house can possibly influence the decision to reject. Whether these variables would also affect the association between rejecting and dehumanization is an empirical question that future

research could investigate.

In conclusion, the current research demonstrates that when people have to reject others, they may distance themselves from them. In particular, when rejecting targets, people dehumanize them. These strategies are related to lower rejection aversion, suggesting that distancing reduces the distress associated with rejecting, making rejecting easier for people. Social rejection is inevitable in many situations, and we show that it does not only affect the rejected, but also the rejecter. By providing insights into the relationship between rejecting and dehumanization, in rich, ecologically valid field samples, this work sheds new light on the strategies people use when having to reject others.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.cresp.2024.100182.

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