The Impact of Intergroup Helping on Third Parties’ Perceptions of Group Reputation

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Abstract: We investigated the consequences of intergroup helping for both the offering and the receiving group’s reputation in the eyes of third parties. In two experiments (N = 116 and N = 78), observers were presented with a group that offered versus requested help. Observers’ status beliefs confirmed the emergence of a status hierarchy that favored the group that offered help. Study 2 demonstrated that the newly emerged status differential quickly solidified. In particular, observers judged the help-offering group as more attractive and allocated more resources to this group. Consistent with the social structural hypothesis on stereotype content, attributions of competence were more relevant for groups’ reputation than attributions of warmth. We discuss the implications of our findings for societies comprising diverse groups.

Keywords: intergroup helping, group reputation, emergence and perpetuation of status hierarchies, competence and warmth

The exchange of help is a pervasive part of intergroup relations which substantially affects the daily life of individual group members. Abundant research over the past decade has demonstrated that groups use help strategically in order to challenge or maintain existing status relations (e.g., Halabi, Dovidio, & Nadler, 2008; Nadler, 2002, 2016; Nadler & Halabi, 2006; Nadler, Harpaz-Gorodesky, & Ben-David, 2009; Täuber & van Leeuwen, 2012; van Leeuwen & Täuber, 2010, 2011) and in order to reaffirm threatened identities (Hopkins et al., 2007; van Leeuwen, 2007). However, while prior research has shown that status and identity needs are important motives for intergroup helping, there is a surprising absence of empirical research to demonstrate that acts of intergroup helping have the intended effect of boosting the ingroup’s public reputation (or damaging the outgroup’s reputation) on third parties.

The lack of research into the consequences of intergroup helping for both the offering and the requesting group’s reputation is remarkable because the negotiation of status and identity does not take place in a social vacuum. Social status implies a certain level of consensus or social sharedness to give it legitimacy (Balkwell, 1991; Magee & Galinsky, 2008; Ridgeway, Boyle, Kuipers, & Robinson, 1998). For example, a football team is only “the best” if this is acknowledged by others and by shared rules (such as winning an official competition). The same holds for university rankings: Harvard is considered a top university only because others agree upon its reputation based on shared criteria. Similarly, in personnel selection, the most appropriate candidate can only be determined in light of the required qualifications for the position agreed upon. The examples above illustrate the relevance of socially shared perceptions of status (of a football team, a university, or a job applicant). Thus, if the group’s own perception that a helping exchange has boosted their status is socially unshared, the strategy of intergroup helping must be considered more in terms of social creativity rather than having real potential at achieving social change (Tajfel & Turner, 1979). But full consensus over relative group status with a competing outgroup may be difficult to obtain. Third parties are therefore crucial for providing legitimacy to status relations. Indeed, several studies have demonstrated that group members are highly motivated to convince a third party of their ingroup’s status position relative to a second party (e.g., Hopkins et al., 2007; Wakefield, Hopkins, & Greenwood, 2013a).

Once status differentials have emerged, however, the resulting hierarchy can become remarkably stable (e.g., Balkwell, 1991). Emerged status relations continue to favor the higher status group, even if this group initially gained the status advantage by chance (Brashears, 2008). What makes status beliefs so powerful is “…the appearance of consensuality that objectifies them, making them seem like social facts that must be accepted” (Ridgeway et al., 1998, ...
Therefore, once third parties develop beliefs about the status of groups, they will consensually start to act as if these status differences were really true, even if they are based on completely arbitrary features. In a similar vein, to the extent that others believe a group has status, they will create opportunities that favor those with status over those without status (e.g., Magee & Galinsky, 2008).

The above considerations underscore that taking into account the effects of intergroup helping on third parties’ status beliefs regarding the groups involved in the helping encounter is pivotal, since they will likely have tangible outcomes for the affected groups. In addition, accounting for third parties’ status beliefs allows to more objectively determine the impact of intergroup helping on social reality. Consequently, the aim of the present paper is to complement and extend existing research on intergroup helping by investigating its effects on both the offering and the requesting group’s reputation in the eyes of third parties. In the following paragraphs, we will detail our theoretical rationale.

The Communicative Nature of Help and Group Status

Intergroup helping relations are special because they communicate status divides (Nadler, 2002). This can be illustrated by considering the double implications of seeking and offering help. Seeking assistance might help a group to overcome difficulties, but also indicates that this group lacks access to and control over valuable resources and skills. Thus, seeking help might convey the impression that a group is dependent on and inferior to the help-providing group (Nadler, 2002; Täuber & van Leeuwen, 2012). By contrast, offering help is a kind and prosocial act, but also implies that the help giver has access to or control over resources that the help-seeking group is lacking.

As a consequence of the above peculiarities of help, the motives for intergroup helping are not exclusively prosocial in nature. Numerous studies showed that group members use help strategically to challenge negative meta-stereotypes held by outgroups (van Leeuwen & Täuber, 2011, 2012; Wakefield, Hopkins, & Greenwood, 2013b), to reaffirm threatened social identities (van Leeuwen, 2007), or to challenge superiority claims made by outgroups (Täuber & van Zomeren, 2012, 2013). More important for the present paper, concerns about group status are motivationally highly relevant in intergroup helping (Halabi et al., 2008; Nadler, 2002; Nadler & Halabi, 2006; Nadler et al., 2009; Täuber & van Leeuwen, 2012; van Leeuwen & Täuber, 2010, 2011).

The research reviewed above examined intergroup helping exclusively with respect to its effectiveness for resolving the involved groups’ struggles for reputation, identity affirmation, and status. For instance, researchers often ask Israeli Jews and Israeli Arabs about how helping exchanges affect their respective status (Nadler, 2002; Nadler & Halabi, 2006; Halabi, Dovidio, & Nadler, 2012). What these studies do not reveal is the impact of helping exchanges on third parties. We propose that observing a group offering help communicates two important characteristics of that group to third parties. Firstly, it suggests that this group has access to resources. Such resources can be tangible or non-tangible, but they must be of some value for the group requesting help (van Leeuwen & Täuber, 2011). Thus, on a more abstract level, offering help implies that the helping group is competent. Secondly, offering help may also be perceived as a prosocial act by third parties, indicating that the helping group is warm and caring (van Leeuwen & Täuber, 2012). Because social status is awarded to others based on the extent to which the other possesses valuable attributes (Wegener, 1992), and competence and warmth are highly valued and fundamental dimensions of social judgment (e.g., Fiske, Cuddy, & Glick, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005; Wojciszke, 1994, 2005), we hypothesized that third parties perceive a group that offers help as having higher status compared to a group that requests help.

Research indicates, however, that the relation between status and competence is different from the relation between status and warmth. Fiske and her colleagues (Cuddy, Fiske, & Glick, 2008; Fiske, Cuddy, Glick, & Xu, 2002; Fiske et al., 2007) proposed and showed that observers infer how warm but not how competent a group is from this group’s cooperativeness. By contrast, observers infer how competent, but not how warm a group is from this group’s status in a social hierarchy. In line with this functionalist approach to stereotype content (Fiske et al., 2007), we anticipate that in the reverse process, only third parties’ attributions of competence will be related to the status beliefs they develop about the groups observed in a helping exchange, whereas attributions of warmth will not.

The Present Research

We conducted two studies to investigate the effectiveness of helping exchanges in affecting third parties’ status beliefs regarding equal status groups that offer versus request help. Because status hierarchies can evolve based on any specific tangible or non-tangible resource (i.e., territory, money, knowledge, skills), but our research question addresses a fundamental process, we kept status a broad and nonspecific concept in the current research. Our approach fits best with a definition of status as being respected and admired by others (Magee & Galinsky, 2008).
This approach consequently capitalizes on acknowledging that status hierarchies are primarily subjective, while also eliciting a high degree of consensus about others’ positions in the status hierarchy (cf. Magee & Galinsky, 2008, p. 359). Status beliefs were therefore operationalized as third parties’ attributions of status and power to the groups without relating them to any specific domain. We expected observers to attribute higher status to a group that offers as opposed to requests help (the Status Creation Hypothesis). We further predicted that the direct effect of Help on status beliefs would be mediated by attributions of competence (the Competence Hypothesis), but not by attributions of warmth. In both studies, we focused on third parties’ judgments about the group that acted (thus, the group that offered or requested help).

**Study 1**

The first study served to establish, in a highly controlled setting, the predicted effect of intergroup helping on third parties’ status beliefs and to examine whether attributions of competence and warmth are mediators of this effect. We used fictitious groups as targets of social perception. This procedure allowed to plausibly create initial status equality by minimizing participants’ association of the groups with actual or historically based status differences.

**Method**

**Participants and Design**

One hundred sixteen participants recruited via MTurk were randomly assigned to the conditions of a one-factorial between-subjects design (Help: Offer vs. Request vs. Control; \( N = 42, 42, 32 \), respectively; \( M_{age} = 38.19, SD_{age} = 10.50 \), range from 23 to 68 years; 46 female).

**Procedure**

Two fictitious societies called Nirfs (hereafter referred to as actor group) and Mungs were introduced.\(^1\) Participants read the following introduction: “Two groups, the Nirfs and the Mungs, live in a remote valley on a distant planet. Members of the two groups live together only with members of their own group, but both groups share the valley peacefully. Not much is known about the society of Nirfs and Mungs. Both groups have approximately the same amount of members. Please imagine that you come to the valley as a neutral observer trying to form an impression about the two groups and their living together.” In the control condition, no more information about the groups was extended. All participants were then asked a number of questions to make sure they understood the context. One of these questions asked which of the two groups had higher status at the moment (\( 1 = \text{Nirfs}, 0 = \text{equal}, -1 = \text{Mungs} \)). All participants indicated that the groups were of equal status.

Participants in the offering and requesting help conditions further read: “As on the earth, groups evolve. This can influence how they live together and interact in the future. We are interested in your personal opinion regarding whether and how the event described in the following will change the cohabitation of Nirfs and Mungs.” In the offering help conditions, participants read “One day, the Nirfs offered the Mungs to help them.” In the requesting help conditions, participants read “One day, the Nirfs asked the Mungs to help them.” Participants then completed a questionnaire that comprised the dependent measures. Upon completion, they were thanked, debriefed, and compensated.

**Dependent Measures**

Unless indicated otherwise, all measures were assessed with 7-point Likert scales (from 1 = *not at all* to 7 = *very much*).

**Status Beliefs**

Status beliefs were assessed by two items (“Which of the two groups will have higher status in the future?” and “Which of the two groups will have more power in the future?,” from 1 = *Mungs*, 4 = *status will be equal*, 7 = *Nirfs*). These items were combined to form an index of status beliefs (\( r = .84, p < .001, N = 116 \)).

**Warmth and Competence**

Attributions of warmth and competence were assessed by ratings of the group’s warmth, friendliness, cooperation, intelligence, competence, and capability. A factor analysis performed on the six items showed, not surprisingly, that the items load on one factor rather than on two (total variance explained 78.85%, all factor loadings > .81), suggesting that third parties think of a group more positively in general, rather than distinguishing between a group’s warmth and competence. This is consistent with the notion that “…the act of helping can score high on both dimensions, demonstrating warmth as well as competence” (van Leeuwen & Täuber, 2010, p. 88). Confirmatory factor analyses (CFAs) conducted for both studies tested whether a one-factor solution was superior to a two-factor solution regarding warmth and competence. Good model fit was shown by a residual

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\(^1\) A pre-test conducted with an independent sample of 41 students (13 male, 28 female, \( M_{age} = 20.29, SD_{age} = 1.77 \)) revealed no differences in evaluations of competence and warmth for Nirfs and Mungs, all \( t < 1.5 \), all \( ps > .20 \) and no order effects, all \( F s < 0.80, all \( ps > .38 \). Consequently, no evaluative difference between the fictitious groups was in place prior to our manipulations.
index below .080 (root-mean-square error of approximation [RMSEA]; see Kline, 1998) for the two-factor solutions (Study 1: RMSEA = .068, Study 2: RMSEA = .027), but not for the one-factor solution (Study 1: RMSEA = .202, Study 2: RMSEA = .105). The $\chi^2$ difference between the one- and the two-factor solution was 9.86 ($df = 1$), $p = .002$ for Study 1, indicating that the two-factor solution significantly improves model fit compared to the one-factor solution. In Study 2, the $\chi^2$ difference was 2.63 ($df = 1$), $p = .105$, thus the two factor solution marginally improves model fit. Taken together, we believe that the CFA provide sufficient justification for treating and reporting Competence and Warmth as two separate factors. In order to test our hypothesis that competence but not warmth mediates the effect of Help on status beliefs, attributions of warmth and competence were combined into separate scales ($\alpha = .92$ and $\alpha = .95$, respectively).

### Results

All analyses were separate analyses of variance (ANOVARAs) with Help (offer vs. request vs. control) as between-subject factor.

#### Status Beliefs

The analysis yielded the predicted effect of Help on status beliefs, $F(2, 113) = 13.19$, $p < .001$, $\eta^2_p = .19$. Participants attributed a clear status advantage to the actor group when it offered help ($M = 4.32$, $SD = 0.83$) compared to when it requested help ($M = 3.65$, $SD = 0.49$) and in the control condition ($M = 4.05$, $SD = 0.27$). While status beliefs in the request condition were significantly lower than in the offer and control condition ($p < .001$ and $p = .018$, respectively), the difference between the offer and control condition was not significant ($p = .15$).

However, in line with expectations, status beliefs in the offering help condition differed significantly from the midpoint of the scale which was labeled “both groups have the same status/power” ($t = 2.50$, $df = 41$, $p = .016$). This difference indicates a clear status advantage for the actor group. Similarly, status beliefs in the requesting help condition differed significantly from the midpoint of the scale ($t = 3.65$, $df = 41$, $p < .001$). This difference indicates a clear status disadvantage for the actor group. By contrast, status beliefs in the control condition did not differ from the midpoint of the scale ($t = 1.00$, $df = 31$, $p = .325$), indicating that it is information about offering and requesting help that alters initial status equality both to the advantage of a group offering help, and to the disadvantage of a group requesting help.

#### Warmth and Competence

The analysis showed a significant effect of Help on attributions of competence, $F(2, 113) = 4.54$, $p = .013$, $\eta^2_p = .07$. In line with expectations, participants attributed significantly more competence to the actor group when it offered help ($M = 6.06$, $SD = 0.74$) than when it requested help ($M = 5.52$, $SD = 0.77$) and in the control condition ($M = 5.14$, $SD = 0.81$). Tests for simple main effects show that the actor group was perceived as significantly more competent in the offer condition than in both the request and the control condition ($p = .042$ and $p = .027$, respectively). By contrast, no difference in attributions of competence was evident between the requesting help and the control condition ($p = .981$).

The analysis further yielded a significant effect of Help on attributions of warmth, $F(2, 113) = 13.69$, $p < .001$, $\eta^2_p = .20$. In line with expectations, participants attributed significantly more competence to the actor group when it offered help ($M = 6.06$, $SD = 0.74$) than when it requested help ($M = 5.52$, $SD = 0.77$) and in the control condition ($M = 5.14$, $SD = 0.81$). Tests for simple main effects show that the actor group was perceived as significantly warmer in the offer condition than in both the request and the control condition ($p = .004$ and $p < .001$, respectively). By contrast, no difference in attributions of competence was evident between the requesting help and the control condition ($p = .108$).

#### Mediation

We tested the prediction that attributions of competence rather than warmth mediate the effect of Help on status beliefs in a multiple mediation model using a bootstrap technique with 1,000 resamples (as predefined in the PROCESS macro provided by SPSS). The independent variable Help was treated as a categorical variable using effect coding. Specifically, the first effect $D1$ tested Help Request ($-1$) against the Control condition ($1$), while Help Offer was the reference category ($0$). The second effect $D2$ tested Help Request ($-1$) against Help Offer ($1$), while the Control condition was the reference category ($0$).

Regarding attributions of warmth, $D1$ had a negative effect ($\beta = -.44$, $p < .001$), while $D2$ had a positive effect ($\beta = .49$, $p < .001$). Thus, a group requesting help was seen as warmer than a control group, while a group offering help was seen as warmer than a group requesting help. Regarding attributions of competence, $D1$ had no significant effect ($\beta = -.22$, $p = .093$), while $D2$ had a positive effect ($\beta = .36$, $p < .003$). Thus, competence attributions between a group requesting help and a control group did not differ, while a group offering help was seen as more competent than a group requesting help. Finally, the model for status beliefs was significant, $F(4, 111) = 9.70$, $p < .001$, $R^2_{adj} = .26$. In line with predictions, attributions of competence ($\beta = .27$, $p = .004$) but not warmth ($\beta = -.16$, $p = .164$) affected third parties’ status beliefs. Further, $D1$ had no significant effect ($\beta = .03$, $p = .733$), while $D2$ had a positive effect.
Relevance to competence and warmth to a group that offered help. This prediction was informed by 
research on the social structural hypothesis on stereotype content (Caprariello, Cuddy, & Fiske, 
2007)). Thus, while third parties view a group that offers help as uniformly more positive in 
terms of warmth and competence, it is competence alone which translates into ascribed status advantages to that group. This finding is consistent with our reasoning that the functionalist approach to stereotype content (Fiske et al., 2007) also operates in reversion. Put differently, in contexts where no status hierarchy is yet in place, third 
parties will infer group status from attributions of competence, but not from attributions of warmth.

The control condition allowed us to more closely inspect the effect of intergroup help on third parties’ status beliefs. From the analyses reported above, it appears that while a group offering help uniformly benefits concerning how competent and warm they are perceived by third parties, a group requesting help is not harmed in terms of attributions. Specifically, the mediation analysis demonstrates that a group requesting help is seen as warmer than and as equally competent as a control group. Thus, the image boost accompanying a group that offers help is not parallelized by an image decline of a group requesting help. Put differently, the beneficial impact of offering help appears to be bigger than the harmful impact of requesting help in terms of third parties’ status beliefs.

The findings of Study 1 provide strong support for our hypotheses with artificial groups and in a highly controlled setting. We chose this procedure in order to ensure that participants’ judgment of the groups was not influenced by associations with any actual intergroup relations. One disadvantage of this procedure is that our results might not generalize to more natural helping exchanges. In Study 2, we therefore test our propositions with less artificial groups and in a more natural context.

Discussion

Study 1 strongly supports our prediction that helping exchanges are effective means to influence third parties’ status beliefs about groups involved in the exchange. These status beliefs reflected a clear advantage for a group that offered help, and a status disadvantage for a group that requested help. In line with prior research (e.g., van Leeuwen & Täuber, 2010), observers attributed more competence and warmth to a group that offered help. Supporting our predictions, the effect of help on status beliefs was mediated only by attributions of competence, but not attributions of warmth. This prediction was informed by research on the social structural hypothesis on stereotype content (Caprariello, Cuddy, & Fiske, 2009; Cuddy et al., 2008) according to which observers infer competence from groups’ positions in the status hierarchy, whereas they infer warmth from the perceived cooperativeness of groups.

Indeed, only attributions of competence mediated the effect of help on observers’ status beliefs (Caprariello et al., 2009; Cuddy et al., 2008). Thus, while third parties view a group that offers help as uniformly more positive in terms of warmth and competence, it is competence alone which translates into ascribed status advantages to that group. This finding is consistent with our reasoning that the functionalist approach to stereotype content (Fiske et al., 2007) also operates in reversion. Put differently, in contexts where no status hierarchy is yet in place, third parties will infer group status from attributions of competence, but not from attributions of warmth.

These results strongly support the Competence Hypothesis holding that offering help positively affects status beliefs formed by third parties about the offering group through attributions of competence, but not through attributions of warmth. Further, these findings suggest that offering help might be beneficial to a greater extent than requesting help is harmful.

(β = .29, p < .001) on third parties’ status beliefs. Importantly, the relative indirect effects through warmth were non-reliable for both D1 and D2 as indicated by zero being included in the confidence interval. The relative indirect effect of competence was reliable for D2, but not for D1. Figure 1 shows the observed associations between the variables, as well as the confidence intervals for the indirect effects.

![Figure 1. Partial mediation of the effect of Help on observers’ status beliefs by attributions of competence and warmth in Study 1.](image-url)
Study 2

We aimed to replicate findings of Study 1 in a more natural intergroup setting in an organizational context. A major goal of the second study was to demonstrate that third parties’ status beliefs extend beyond their present observation of the helping exchange and consequently perpetuate status differences emerging from a helping exchange. Informed by research on the self-reinforcing nature of status hierarchies (Magee & Galinsky, 2008; Ridgeway, 2006), we included observers’ ratings of the actor group’s attractiveness (reflecting more positive evaluations of higher status groups) and observers’ allocation of resources to the groups (reflecting the accumulation of opportunities among higher status groups). Attractiveness ratings and resource allocation thus operationalize the notion that status hierarchies, once created, tend to be self-reinforcing by granting advantaged groups more chances to perform and more positive evaluations of their performances compared to the disadvantaged groups (Berger, Ridgeway, Fiske, & Norman, 1998; Brashears, 2008; Magee & Galinsky, 2008). We further assessed participants’ attributions of warmth and competence.

The following hypotheses were tested: Third parties form more beneficial status beliefs about a group that offers as opposed to requests help (the Status Creation Hypothesis) and this effect is mediated by attributions of competence (the Competence Hypothesis), but not warmth. Regarding the self-reinforcing nature of status hierarchies, the following hypotheses were tested: Third parties evaluate a group that offers help as more attractive relative to a group that requests help, and they allocate more resources to a group that offers help relative to a group that requests help. We expected that these effects would be mediated by attributions of competence and attributions of status itself. These predictions were combined in the Status Perpetuation Hypothesis.

Method

Participants and Design

In return for course credit, 78 undergraduate students from the University of Groningen (M_{age} = 21.08, SD_{age} = 5.31; 47 female) were randomly assigned to conditions of a one-factorial between-subjects design (Help: offer vs. request; N = 39 in both conditions).²

Procedure

Participants read a description of a large organization that had undergone restructuring. In the course of this restructuring, two new departments had been created through dissolving and reorganizing existing departments. These new departments were referred to as departments A and B in the remainder of the study and were described as equal in size and qualifications of employees.

In the offer condition, participants learned that after some time, employees of department A stated that “Department A is willing to help with the execution of specific tasks if department B had difficulties with the handling of these tasks” (offer) or “Members of department A state that they need help with the execution of specific tasks” (request).³ After reading about the respective event, participants completed a questionnaire that comprised the dependent measures. Upon completion, participants were thanked and debriefed.

Dependent Measures

Manipulation Checks

Two items served as checks for the departments’ status before the manipulations (“How high do you think is the status of department A/B?”). Two items measured participants’ perception that department A offered versus requested help.

Status Beliefs

Status beliefs were assessed with two items after the manipulation ["Department A will have higher status in the future” and “Department A will have more power in the future”]; from 1 (= not at all) to 7 (= very much)]. These items were combined to form an index of status beliefs (r = .78, p < .001, N = 78).

Warmth and Competence

Participants rated the extent to which they perceived employees of department A as intelligent and capable, and as friendly and cooperative. Consistent with Study 1, a factor analysis showed that the items load on one factor rather than on two (total variance explained 61.31%, all factor loadings > .74), indicating a more positive view of a

² In order to explore whether the predicted effect was limited to instrumental support (the main type of help typically investigated in helping research) or would also extend to emotional support, we included type of support as an additional factor in the second study. No evidence for an impact of type of support on any of our dependent variables was found. In light of the absence of effects of type of support, the reported analyses are collapsed over type of support for Study 2. More detailed information about the manipulation and findings are available from the authors upon request.

³ These statements refer to the conditions in which instrumental help was offered and requested. In the conditions in which emotional support was offered and requested, participants read that “Members of department B can always knock on the doors of members of department A if they ever feel the need to talk about potential problems and difficulties that they might experience” (offer) and “Members of department A state that they would like to talk about problems and difficulties that they experience at the moment” (request).
group in general. Attributions of warmth and competence were combined into separate scales \( r = .56, p < .001 \) and \( r = .52, p < .001 \) respectively in order to test our hypothesis that competence but not warmth mediates the effect of Help on status beliefs.

Perpetuation of Status Differentials
We asked participants to allocate resources between the two departments with five items in order to examine the behavioral consequences of the observed helping exchange. Specifically, participants were asked to allocate €5,000 between the two departments (from 1 = all the money to department B, over 6 = distribute equally, to 11 = all the money to department A). We further asked participants to indicate which department should be granted the one nice corner office that is left and a spare luxurious espresso machine. Participants were also asked to indicate to what extent the organizations' headquarters would evaluate the department’s performance over one year’s time and how much they would like to work in the departments if they were offered a job in this organization. These latter four items were all scaled from (1 = department A, over 4 = both groups equally, to 7 = department B, reverse coded). We combined these items into an index of resource allocation (\( \alpha = .73 \)) after rescaling the money allocation item to match the other allocation items, with values diverging from 4 indicating an allocation bias in favor of one of the departments. Finally, participants indicated how attractive the actor group was on four items (e.g., “I think the atmosphere in department A is very good”, \( \alpha = .91 \)). We are aware that two items of the allocation bias scale could also be perceived as indicating attractiveness (i.e., evaluation of and willingness to work in the department). Results of a principal axis factor analysis with oblimin rotation (\( \delta = 0 \)), however, clearly show that consistent with our conceptualization, the items referring to allocation and attractiveness as specified here load on two separate factors, with cross-loadings < .22.

Results
Unless indicated otherwise, all analyses were analyses of variance (ANOVAs) with Help (offer vs. request) as between-subject factor. Table 1 provides an overview over means, standard deviations, and statistical coefficients pertaining to the analyses of variance for all dependent variables. Table 2 summarizes the correlations between the constructs referring to the emergence and the perpetuation of a status hierarchy.

Manipulation Checks
The check of participants’ status beliefs before the manipulation revealed that, as intended, participants perceived the departments as having equal status, \( t(77) = 1.42, p = .159 \) (department A: \( M = 4.69, SD = 0.94 \), department B: \( M = 4.67, SD = 0.95 \)).

For the item that assessed whether department A had offered help, the predicted main effect of Help was observed, \( F(1, 76) = 291.79, p < .001, \eta^2_p = .79 \). Participants correctly indicated that department A offered help in the offering help condition to a greater extent (\( M = 6.21, SD = 0.95 \)) than in the requesting help condition (\( M = 1.92, SD = 1.24 \)). For the item that assessed whether department A had requested help, the predicted main effect of Help was observed, \( F(1, 76) = 534.27, p < .001, \eta^2_p = .88 \). Participants correctly indicated that department A requested help in the requesting help condition (\( M = 6.41, SD = 0.79 \)) more than in the offering help condition (\( M = 1.69, SD = 1.00 \)). The manipulations of Help can thus be considered successful.

Emergence of Status Hierarchy
The analyses reported in the following zoom in on the emergence of a status hierarchy, testing the Status Creation Hypothesis.

Status Beliefs
The analysis yielded the predicted effect of Help on participants’ attributions of status to department A, \( F(1, 76) = 57.94, p < .001, \eta^2_p = .43 \). Significantly more status was attributed to department A when it offered (\( M = 4.90, SD = 1.28 \)) compared to requested help (\( M = 2.82, SD = 1.13 \)). This demonstrates the emergence of a substantial status differential through offering and requesting help.

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**Table 1.** Means, standard deviations, and results of analyses of variance (ANOVA) for Study 2, displayed separately for requesting and offering help.

<table>
<thead>
<tr>
<th></th>
<th>Request M</th>
<th>SD</th>
<th>Offer M</th>
<th>SD</th>
<th>F(1, 76)</th>
<th>( \eta^2_p )</th>
</tr>
</thead>
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<tr>
<td>Status beliefs</td>
<td>2.82</td>
<td>1.13</td>
<td>4.90</td>
<td>1.28</td>
<td>57.94***</td>
<td>.63</td>
</tr>
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<td>Competence</td>
<td>4.49</td>
<td>1.01</td>
<td>5.19</td>
<td>0.96</td>
<td>10.02**</td>
<td>.12</td>
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<td>Warmth</td>
<td>4.76</td>
<td>0.80</td>
<td>5.67</td>
<td>0.62</td>
<td>31.60***</td>
<td>.29</td>
</tr>
<tr>
<td>Money</td>
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<td>0.55</td>
<td>4.55a</td>
<td>0.66</td>
<td>32.88***</td>
<td>.30</td>
</tr>
<tr>
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<td>0.82</td>
<td>4.49a</td>
<td>0.82</td>
<td>12.79</td>
<td>.14</td>
</tr>
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<td>Espresso machine</td>
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Notes. For the Resource Allocation scale and the single items pertaining to Resource Allocation, superscript “a” indicates significant differences from the midpoint of the scale (4, indicating equal treatment of the departments). ***p < .001, **p < .01, *p < .05.
Table 2. Correlations for Study 2

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</table>

Notes. N = 78. Help is coded 1 (offering) and –1 (requesting). Resource Allocation refers to the scale, while the single items 6–10 depict the single items composing the scale. ***p < .001, **p < .01, *p < .05.

Warmth and Competence
A main effect of Help was evident for warmth, \( F(1, 76) = 31.40, p < .001, \eta_p^2 = .29 \), and for competence, \( F(1, 76) = 10.02, p = .002, \eta_p^2 = .12 \). Participants evaluated members of department A as warmer (\( M = 5.67, SD = 0.622 \)) and as more competent (\( M = 5.19, SD = 0.96 \)) when it offered compared to when it requested help (\( M = 4.76, SD = 0.80 \), and \( M = 4.49, SD = 1.01 \), respectively).

Processes Underlying the Emergence of Status Hierarchy
To test the hypothesis that attributions of competence but not warmth mediate the effect of Help on status beliefs, we tested a multiple mediation model (model 4) using a bootstrap technique with 10,000 intervals (as predefined in the PROCESS macro provided by SPSS). The model for status beliefs was significant, \( F(3, 74) = 22.12, p < .001, R^2_{adj} = .47 \). In line with predictions, only attributions of competence mediated the effect of Help on status beliefs, as indicated by zero not being included in the confidence interval computed around the indirect effect (95% CI \([.016, .249]\)), while the indirect effect of warmth was not reliable (95% CI \([- .143, .204]\)). These findings support the Competence Hypothesis and replicate the findings of Study 1. Figure 2 summarizes the findings.

Perpetuation of Status Hierarchy
The analyses reported below zoom in on the expected solidification of an emerging status hierarchy, testing the Status Perpetuation Hypothesis.

Attractiveness Ratings
The predicted main effect of Help was observed regarding how attractive participants rated the actor group, \( F(1, 75) = 15.54, p < .001, \eta_p^2 = .17 \). Participants rated the target group as more attractive when it offered (\( M = 5.27, SD = 0.90 \)) compared to requested help (\( M = 4.43, SD = 0.95 \)).

Resource Allocation
The predicted main effect of Help was observed regarding resource allocation, \( F(1, 76) = 32.88, p < .001, \eta_p^2 = .30 \). Participants allocated more resources to the actor group when it offered (\( M = 4.55, SD = 0.66 \)) compared to requested help (\( M = 3.71, SD = 0.63 \)). Importantly, comparing the means with the midpoint of the scale (4, indicating equal treatment of both departments) reveals both a boost by offering help, \( t(38) = 5.17, p < .001 \), and a harmful effect of requesting help, \( t(38) = -2.89, p = .006 \). Together, the results for attractiveness ratings and resource allocation yield support for the Status Perpetuation Hypothesis.

Processes Underlying the Perpetuation of Status Hierarchy
To test the prediction that attributions of competence and status beliefs reflect a solidification of the newly emerged status hierarchy, we used a similar mediation technique as above, this time testing for mediators operating in sequence (Hayes, 2012). We ran four models, testing the effects of the sequence competence attributions (mediator 1) and status beliefs (mediator 2) on attractiveness ratings and resource allocation, and then testing the effects of the sequence warmth attributions (mediator 1) and status beliefs (mediator 2) on attractiveness ratings and resource allocation. We included attributions of warmth in the tested model although they did not mediate the direct effect of Help on status beliefs. This is simply because a different statistical model is tested now, which might change the statistical relevance of warmth attributions as a mediating variables.

Competence Attributions
The model was significant for attractiveness ratings, \( F(3, 73) = 15.28, p < .001, R^2_{adj} = .48 \). The direct effect of Help on attractiveness ratings was \( \beta = .12, t(73) = 1.07, ns \). The indirect effect of Help on attractiveness ratings through attributions of competence was the only reliable sequence
of the model (95% CI [.071, .331]). This is noteworthy, as it suggests that factors operating toward the perpetuation of a status hierarchy in terms of attractiveness ratings (or, more abstractly, positive evaluations) do so independently from factors operating toward the emergence of a status hierarchy, in this case status beliefs.

The model was significant for resource allocation, $F(3, 74) = 15.44, p < .001, R^2_{adj} = .47$. The direct effect of Help on resource allocation was $\beta = .18, t(73) = 1.92, p = .059$. The indirect effect of Help on resource allocation was reliable through attributions of competence alone (95% CI [.012, .177]), through status beliefs alone (95% CI [.043, .313]), and through both attributions of competence and status beliefs (95% CI [.002, .065]). Figures 3A and 3B summarize the model for attributions of competence.

**Warmth Attributions**

The model was significant for attractiveness ratings, $F(3, 73) = 24.47, p < .001, R^2_{adj} = .52$. The direct effect of Help on attractiveness ratings was $\beta = .11, t(73) = -1.01, ns$. The indirect effect of Help on attractiveness ratings was reliable through attributions of warmth alone (95% CI [.196, .537]) and through status beliefs alone (95% CI [.024, .358]). The lack of evidence for a sequential mediation is not surprising given that warmth attributions were not significantly associated with third parties’ status beliefs, $\beta = .23, t(73) = 0.91, p = .364$.

The model was significant for resource allocation, $F(3, 74) = 12.74, p < .001, R^2_{adj} = .41$. The direct effect of Help on resource allocation was $\beta = .18, t(73) = 1.98, p = .051$. The indirect effect of Help on resource allocation was reliable only through status beliefs (95% CI [.062, .387]). Again, because warmth attributions were not significantly associated with third parties’ status beliefs, $\beta = .24, t(73) = 0.95, p = .345$, the absence of a sequential mediation is not surprising. Figures 3C and 3D summarize the model for attributions of warmth.

Together, these findings yield strong support for the Status Perpetuation Hypothesis.

**Discussion**

The second study replicates findings of Study 1 regarding the effectiveness of helping exchanges to influence third parties’ status beliefs about the groups involved in the exchange. As in Study 1, observers developed more favorable status beliefs about a group offering help and less favorable status beliefs about a group requesting help. Further replicating Study 1, significantly more competence and warmth was attributed to the group that offered help. The absence of a mediational effect of warmth attributions on status beliefs supports the prediction that attributions of warmth are relatively less relevant for emerging status beliefs than attributions of competence. This is consistent with research on the social structural hypothesis on stereotype content (e.g., Caprariello et al., 2009; Cuddy et al., 2008). It further corroborates insights from Study 1, which equally demonstrated that only attributions of competence appear to elicit a status differential between groups of initially equal status. As in Study 1 with artificial groups, also in the more natural context of Study 2, this effect is intriguing particularly because of the strong main effect of help on attributions of both warmth and competence.

Study 2 also yielded support for the prediction that third parties’ status beliefs extend beyond the initial observation of a helping exchange, thereby solidifying the status divide that they now perceive. Specifically, third parties clearly favored the group that was already benefitting from a status advantage because it offered rather than requested help both with respect to how attractive they rated that group and how much resources they were willing to allocate to that group. In line with expectations, mediation analyses revealed that third parties’ resource allocation benefitted
the help-offering group through favorable competence attributions and status beliefs.

Interestingly, third parties do not seem to consider status when positively evaluating groups based on attributions of competence inferred from offering versus requesting help. Rather, competence perceptions appear sufficient to directly translate into positive evaluations such as a group’s attractiveness. By contrast, third parties consider status when they positively evaluate groups based on warmth perceptions, resulting in attributions of warmth alone not being sufficient to determine positive evaluations such as a group’s attractiveness. This observation fits nicely with

Figure 3. (A, B) Sequential mediation of the effect of Help on observers’ attractiveness ratings through attributions of competence and status beliefs, Study 2. (C, D) Sequential mediation of the effect of Help on observers’ resource allocation through attributions of warmth and status beliefs, Study 2. ***p < .001, **p < .01, *p < .05, †p = .051. Coding of Help: 1 = offer, −1 = request.
the notion that, once status differentials between groups are in place, the resulting hierarchy can become remarkably stable and continue to favor one group, even if the status advantage was based on arbitrary dimensions initially (Brashears, 2008).

**General Discussion**

The present studies are the first to demonstrate that acts of intergroup helping effectively influence third parties’ status beliefs about the groups involved in the exchange. Third parties – initially agreeing on the groups’ having equal status – developed strong status beliefs favoring the help-offering over the help-requesting group. Supporting the functionalist approach to stereotype content (Fiske et al., 2007), both studies showed that third parties’ status beliefs were partially mediated by attributions of competence, but not by attributions of warmth. Across both studies, observers attributed both more warmth and more competence to the help-offering group, which is consistent with our anticipation that offering help conveys both an impression of being kind and of being competent (van Leeuwen & Täuber, 2012).

Because both competence and warmth are highly valued attributes (Wegener, 1992), favoring a group on these dimensions should be associated with a status advantage for this group. Informed by the structural hypothesis of the stereotype content model (Caprariello et al., 2009; Cuddy et al., 2008), however, we have suggested that warmth attributions are less relevant to third parties’ status beliefs than competence attributions. Our results support this assumption. Particularly in light of the strong effect of helping on both sets of attributions, with warmth attributions actually consistently being more strongly affected than competence attributions, we are confident that the studies’ findings provide strong support for the predicted relation between status and competence, but not warmth.

Findings of Study 1 suggest that the development of a status differential is driven to a greater extent by the beneficial effects of offering help than by the harmful effects of requesting help. Specifically, in comparison to a control condition, offering help led to a clear status advantage, while requesting help did not lead to a clear status disadvantage. Further, requesting help was associated with greater warmth than and equal competence attributions as a control group. Thus, the emerging status differential appears to be driven by the beneficial effects of offering help in terms of warmth and competence attributions. In a related vein, the differential effects of warmth and competence on different status perpetuation indexes are noteworthy. Specifically, while both warmth and competence translate into a more positive evaluation of a group by third parties, it is competence alone that translates into third parties’ willingness to allocate resources to a group. On the other hand, attributions of warmth alone do not seem sufficient to translate into positive evaluations and resource allocation. These findings are in line with our reasoning that competence, but not warmth translates into status advantages granted to groups by third parties.

Besides offering an empirical test of the effectiveness of helping exchanges to impact on third parties’ status beliefs about the groups involved in such an exchange, we have also proposed that concerns about group reputation should extend beyond the involved groups because reputation is essential for groups in the larger social context (Verkuyten, Hagedoorn, & Masson, 1996). In addition, we have suggested that the status beliefs of the groups directly involved in a helping exchange are likely colored by their respective motives, and might therefore not be a valid reflection of social reality. Our findings provide evidence that the implications for status that arise from intergroup helping exchanges find their echo also in third parties, who can be important allies or opponents of groups struggling for status within a larger social system.

Our findings complement and extend prior research on intergroup helping that has focused on the effects of helping exchanges on the groups involved in the exchange (e.g., Nadler, 2002; Nadler & Halabi, 2006; van Leeuwen & Täuber, 2010, 2011; Wakefield et al., 2012b). We showed that outsiders to the helping exchange are affected by the powerful implications of offering versus requesting help: Third parties develop status beliefs that clearly put the group that offers help in an advantaged position. Importantly, consistent with prior research, such advantages in status tend to become remarkably stable and self-reinforcing (Brashears, 2008; Magee & Galinsky, 2008; Ridgeway et al., 1998).

Extending the first study, the second study illustrated how intergroup helping exchanges resulted in a status advantage for the offering group in the eyes of third parties, and how these status beliefs in turn stimulated an accumulation of opportunities to perform through biased allocation of resources. This is consistent with the mechanisms operating toward the self-reinforcement of status hierarchies identified by other researchers (e.g., Magee & Galinsky, 2008). According to these authors, the processes operating to make status hierarchies self-reinforcing comprise the evaluation of individuals’ behavior by others according to his or her status (expectancy confirmation), which leads to behavior that confirms others’ expectancies (behavioral confirmation). These processes result in an accumulation
of opportunities for individuals who already have a status advantage. Finally, individuals who violate expectations grounded in status divides are socially punished. Our studies suggest that similar processes are at play at the group level.

Limitations and Future Research

Of course, the studies we have presented here are not without their limitations. For instance, the help offer in Study 2 refers to hypothetical future problems that may or may not arise, while the help request refers to an existing need for help. This difference in ambiguity might have affected participants’ conclusions about the two groups involved. Different from Study 1, Study 2 did not use a status equality anchor, which at least gives rise to the possibility that both groups decreased or increased in status. Future research should pay careful attention to possibly establishing equally ambiguous experimental conditions. Nevertheless, in combination with the control group in Study 1, and the consistency of the findings between the two studies, we are confident that our findings are reliable and valid.

Further, manipulating rather than measuring the proposed mediators warmth and competence would further substantiate the causal chain (Spencer, Zanna, & Fong, 2005). In a related vein, all our measures were taken at once. To make solid causal and sequential claims, longitudinal studies should be conducted, and optimally with real groups. The processes that we demonstrated in controlled but artificial settings could be investigated within newly formed groups such as student mentor groups, but also with newcomer groups into bigger society. In particular, we believe our research lends itself to more systematically analyze the role of policy in how groups in society are treated. In line with prior research (e.g., Magee & Galinsky, 2008; Ridgeway, 2006), our second study showed that, once formed, status beliefs perpetuate and reinforce, creating an ever-increasing advantage of one group relative to the other. This has implications for both newcomers and established groups. Think about the elderly, newly arrived immigrants, or unemployed people. These are groups in society who rarely get the chance to demonstrate either competence or warmth, with potentially grave consequences for not only the status ascribed to them, but in extension also the resources third parties are willing to allocate to those groups.

Thus, while our research shows that strategic helping exchanges between groups have the potential to facilitate or impede social change, reality constraints will limit the use of help offers as a strategy to stimulate social change: Those groups that would benefit most from social change often have no or limited access to resources to offer help. Recent examples from The Netherlands, however, highlight the potential benefits of working with helping exchanges between groups: Community housing is made available for refugees, older people, and students together. The condition of being allowed to live there is that one helps others for at least 2 hr per week. By capitalizing on letting these groups help each other, each group’s unique contribution is made salient and valuable. Furthermore, by helping each other, each group is both offering and receiving help, thereby benefitting from the advantages of offering help and circumventing the costly consequences of requesting help.

Related to the above, we believe that a better understanding is warranted regarding the attributes that are associated with greater status across different domains. Whereas our studies consistently demonstrated that competence mediates the effect of helping on status beliefs, it seems plausible that warmth plays a role when status is not defined broadly but domain-specific. For instance, being warm or empathetic might be more status-defining among nurses, while attributes like dominance or confidence might be more status-defining among brokers.

We hope that our research (and its limitations) stimulates other researchers to investigate the impact of intergroup helping exchanges on reputation of the groups involved, preferably in real-life contexts. The impact of helping exchanges on groups’ welfare in society might be substantial. For instance, policy makers might contribute to the inclusion of refugees and other disadvantaged groups by letting them help in a more structured way and more frequently, as illustrated in the example of community housing. Such measures could counteract an ever-increasing status divide between majority and minority groups.

Conclusions

The present research is the first to offer empirical support for the effectiveness of intergroup helping exchanges to affect third parties’ status beliefs. It thereby valuable extends prior research on intergroup helping which has exclusively focused on the groups directly involved in the helping exchange. We show that offering help indeed boosts group reputation in the eyes of third parties. Importantly, and in line with prior research, those status beliefs are then solidified through more favorable evaluations of attractiveness and resource allocations on behalf of the group believed to have higher status, underlining the self-reinforcing nature of status hierarchies (Magee & Galinsky, 2008; Ridgeway, 2006). The studies demonstrate the profound impact of intergroup helping exchanges within their broader social context.
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References


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