The Combined Effects of Meta-Stereotypes and Audience on Outgroup and Ingroup Helping

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Salient meta-stereotypes can promote outgroup helping in a way that allows an ingroup to make a good impression. Although the presence of an audience can similarly activate impression-management concerns, their combined effects on intergroup helping have never been investigated, which was the goal of the current research. Across 2 field experiments ($N = 100$, $N = 170$) and 1 laboratory experiment ($N = 230$), we tested 2 opposing hypotheses. The amplification hypothesis predicted that the positive effect of meta-stereotype salience on outgroup helping (but not ingroup helping) would be amplified by the presence of an audience. The suppression hypothesis predicted that this effect would be suppressed by an audience. Most support was found for the suppression hypothesis. Studies 2 and 3 also illustrate that people do not always favor the ingroup over the outgroup in helping, and reveal several situations in which an outgroup-favoring bias can be found.

Keywords: intergroup helping, meta-stereotypes, audience, impression management, ingroup bias

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Our innate concern with how we are perceived and evaluated by others is not limited to concerns about our individual selves, but extends to the social groups we belong to—from small teams to broad social categories (Rodriguez Mosquera, Uskul, & Cross, 2011). People seek to refute negative stereotypes, and create positive intergroup comparisons by presenting their group in a more favorable light (Brewer & Weber, 1994; von Hippel et al., 2005). One way to create a positive impression is by helping others. Helping is generally perceived as an act of kindness, but can also portray important qualities such as knowledge or skill (Hopkins et al., 2007; Täuber & van Zomeren, 2012; van Leeuwen & Täuber, 2011, 2012). The motivation to present the ingroup in a more favorable light through helping can be activated in several ways. Previous research has shown that an awareness of others' views of a given ingroup (i.e., a salient meta-stereotype) activates impression-management motives which promote helping efforts directed at other groups or individuals outside the ingroup (Hopkins et al., 2007; van Leeuwen & Mashuri, 2012; van Leeuwen & Täuber, 2012). Other research illustrates the power of the presence of an audience on impression-management motives, demonstrating that people become more generous toward others when their behavior is public (Campbell & Slack, 2006; Gabriel, Banse, & Hug, 2007; Riordan, James, & Dunaway, 1985). Until now, meta-stereotype salience and audience effects have never been combined in a single study to investigate their joint effects on intergroup helping. As we will discuss in the following, there is both theoretical ground to expect that an audience will *amplify* the effect of meta-stereotype activation on outgroup helping, and sufficient reason to expect that the effect of meta-stereotype activation will be *suppressed* by an audience. The three studies presented in this paper were designed to provide an answer to the question: What is the combined effect of meta-stereotype activation and the presence of an audience on outgroup helping?

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Meta-Stereotypes and Outgroup Helping

Meta-stereotypes reflect people's beliefs about how their ingroup is perceived by others outside their ingroup (Vorauer, Hunter, Main, & Roy, 2000). Meta-stereotypes are different from self-stereotypes in the sense that they refer to how people believe that they, as members of their ingroup, are viewed by others. This does not mean that people have to agree with this perception. Meta-stereotypes can be activated by thinking about how the outgroup views the ingroup, for example through informing people they can be evaluated by the outgroup (Vorauer et al., 2000). Once activated, meta-stereotypes automatically trigger self-presentation concerns (Klein & Azzi, 2001).

The effect of meta-stereotype salience on outgroup helping was first investigated by Hopkins and colleagues (2007). They found that Scottish participants who believed that the English viewed them as mean were more motivated to help the Welsh (a second outgroup), but not the Scots (the ingroup). In a follow-up investigation, van Leeuwen and Täuber (2012) demonstrated that this effect extends to helping the source of threat (i.e., the outgroup believed to hold a negative stereotypic view of the ingroup). Moreover, outgroup helping could be directly linked to group members' concerns about their ingroup's image. Van Leeuwen and Mashuri (2012) also found that the effect of meta-stereotype salience on outgroup helping disappeared when attention was diverted away from the ingroup through the enhanced salience of a shared, superordinate identity. These effects are further corroborated by recent research demonstrating that the motivation to seek help from another group decreased when group members believed the outgroup viewed their ingroup as dependent, suggesting that group members are willing to sacrifice the possibility of accessing needed help to avoid a possible confirmation of a negative stereotype of their group (Wakefield, Hopkins, & Greenwood, 2013).

Audience Effects

The manipulation of the presence of an audience is used as a standard procedure for eliciting self-presentation concerns (Schlenker, Britt, & Pennington, 1996). The term "audience" is gen-erally used to refer to the question of whether others are privy to one's behavior—that is, whether one's behavior is public or private. Strictly speaking, when helping is not anonymous, the outgroup target of help could simultaneously be construed as an outgroup audience. However, in the current research, we conceptualize the term "outgroup audience" as those outgroup members who witness the exchange of help without actively being part of the helping interaction, for example, as the target of help. There is ample research showing that people become more generous toward others when their behavior is visible to a broader audience (Gabriel et al., 2007; Levine & Crowther, 2008; Riordan et al., 1985). For example, in an investigation of charitable donations over 15 years by 14 companies from the Financial Times/London Stock Exchange (FTSE) 100 list, Campbell and Slack (2006) found that high-visibility companies gave to charity at a higher rate than low-visibility companies. In fact, research has shown that mere cues of an audience are enough to trigger more generous behavior, even when behavior in effect remains anonymous (Haley & Fessler, 2005).

The question that now arises is how the presence of an audience combines with the effect of meta-stereotype salience in people's motivation to help outgroup members. Based on existing literature, two opposing hypotheses can be advanced: an amplification hypothesis and a suppression hypothesis.

The Amplification Hypothesis

A salient meta-stereotype increases the motivation to help other groups as a demonstration of ingroup warmth and kindness. Given this motivation to present the ingroup in a positive light, it can be expected that this effect would be more widespread if witnessed by more people than the direct target of help. In other words, the presence of an audience should amplify the effect of meta-stereotype salience on outgroup helping. Indirect evidence for this hypothesis can be found in a study by Rabinovich and Morton (2010). In Study 3 of their paper, they found that ingroup members reported more positive behavioral intentions in response to outgroup criticism when they believed their responses were communicated to an outgroup audience.

The Suppression Hypothesis

Alternatively, an audience could suppress outgroup helping when combined with an activated meta-stereotype. Public settings cause arousal and increase self-consciousness, which inhibits controlled behavior (Baumeister, 1984; Lambert et al., 2003). The strategic helping of outgroup members to create a favorable ingroup impression is a clear example of controlled behavior. Gabriel and colleagues (2007) demonstrated that, in a public setting, heterosexuals with a positive attitude toward the outgroup (homosexuals) and a strong motivation to control prejudiced reactions helped an outgroup member *less* than heterosexuals with a negative attitude toward homosexuals. The authors argued that the combination of being motivated to treat the outgroup positively, the confrontation with an outgroup member, and an awareness that others were watching their behavior produced a cognitive load which reduced control over conscious responses. A similar argument could be made in answer to the current research question. Salient meta-stereotypes are known to raise anxiety levels and occupy cognitive resources (Vorauer et al., 1998; Vorauer, Martens, & Sasaki, 2009). These cognitive resources are further taxed by the knowledge that others are watching one's responses (Gabriel et al., 2007). The combination of a salient meta-stereotype and an audience could therefore produce a cognitive overload, the result of which the effect of meta-stereotype salience on outgroup helping is suppressed by the presence of an audience.

Overview of the Studies

The combined effect of meta-stereotype salience and audience on helping was investigated in two field experiments and one laboratory experiment. The first study was designed as an initial examination of the two opposing hypotheses, and compared helpfulness toward tourists in response to a salient meta-stereotype (vs. a nonsalient control condition) under public and private conditions. In Study 2, participants were students at two rivaling universities in the same town who were asked for directions by other students, ostensibly from either their own university or from the rivaling university. This study thus extended the design of Study 1 with a manipulation of group membership of the help recipient. The third study, a laboratory experiment, investigated participants' helpfulness in volunteering their time and effort to help other students, and extended Study 2's design by comparing the effects of an ingroup audience to that of an outgroup audience.

Study 1

In this study, inhabitants of Amsterdam were interviewed on the street to assess their support for the introduction of welcome teams in their city, with the goal of helping visiting tourists. In addition to manipulations of meta-stereotype salience and audience, which were embedded in the interviewer's explanation of the survey's ostensible background and purpose, this study contained a measure of identification with Amsterdam. Because previous research has shown that the effect of meta-stereotype salience on helping is more pronounced among high identifiers (Hopkins et al., 2007), identification is a potential moderator in both the amplification hypothesis and the suppression hypothesis.

Method

One hundred inhabitants of Amsterdam, the Netherlands (54 women; $M_{age} = 50.70$, $SD = 15.57$, range 25–83) were randomly assigned to the cells of a 2 (meta-stereotype salience: low vs. high) × 2 (audience: public vs. private) between-participants design. Identification with Amsterdam was included as a continuous variable.

In a busy shopping area, a male confederate, who presented himself as a representative of the Dutch Board of Tourism (NBTC), approached participants with a request for a brief interview to assess locals' attitudes toward tourists in the country's capital. Only participants who reported currently living in Amsterdam were included in the study. To assess identification with Amsterdam, the confederate first asked participants to what extent they agreed with three statements ("I identify with Amsterdam," "I feel part of Amsterdam," "I am proud of Amsterdam"; 1 = *not at all*, 5 = *very much*). These items were later averaged into a single scale ($\alpha = .69$; $M = 3.68$, $SD = 0.64$). He then proceeded by providing some background information about the survey, which included the manipulations. In the *high-salience meta-*

stereotype condition, participants were informed that ". . . tourists often rely on locals for information, for instance by asking directions. Research has shown that tourists often have negative experiences with people from Amsterdam in this regard, claiming that the locals are unapproachable and unhelpful. The NBTC is therefore conducting a survey, together with Dutch travel agencies, to examine locals' willingness to help tourists." In the *low-salience meta-stereotype* condition, he omitted the second sentence (i.e., "Research . . . unhelpful"). In the *private* condition, he subsequently informed participants that ". . . the results of this survey are confidential and will not be made public in any way." In the *public* condition, he instead explained that ". . . the results of this survey will be included in information that travel agencies provide to their customers, and on various websites that compare travel destinations. This way, people are better informed about the type of welcome they can expect among the locals in the city or country they plan to visit. Do you agree with the use of your responses for this purpose?" The audience is thus the group of future (potential) tourists in Amsterdam. All participants in this condition agreed to this public use of their responses.

The subsequent interview included 12 questions that were primarily intended to reinforce the cover story (e.g., "Does it bother you if tourists ask you for help?" "Do you think tourism is good for Amsterdam?"). Embedded among these was a question to assess participants' *support* for welcome teams to better help tourists: "The municipality is considering the introduction of 'welcome teams', which are teams of local volunteers placed in busy areas in the city, whose sole task is to help tourists with directions or other requests. To what extent do you think these welcome teams are necessary to help tourists?" Participants' answers were assessed on a 5-point scale (1 = *not at all*, 5 = *very much*). The confederate subsequently asked participants if they would be willing to *volunteer* for a welcome team (*no*, *yes*). Support and volunteering for welcome teams thus represent participants' willingness to help the outgroup of tourists. Upon recording their age and gender, participants were thanked for their participation.

Results

Support for welcome teams was analyzed in a regression analysis with meta-stereotype salience (coded as −1 for *low salience*, 1 for *high salience*), audience (−1 for *private*, 1 for *public*), identification (*z*-transformed) and all possible interaction terms as predictors. Age and gender were included to explain additional variance. All significant effects are reported. Age was a significant positive predictor of support, $\beta = .22$, $t = 2.11$, $p = .04$. The analysis further revealed a significant two-way interaction between audience and meta-stereotype salience, $\beta = −.21$, $t = −2.08$, $p = .04$. The means are presented in Figure 1. The interaction was explored through simple slope analyses. In the low-salience meta-stereotype condition, participants expressed more support for welcome teams to help tourists under public compared with private conditions, $\beta = .20$, $t = 1.98$, $p = .05$. When the meta-stereotype was salient, however, no significant difference was found in participants' support for welcome teams under public or private conditions, $\beta = −.11$, $t = −1.09$, $p = .28$. The interaction effect of meta-stereotype salience and audience was not moderated by identification, $\beta = .13$, $t = 1.05$, $p = .30$.

Only 26% of participants were prepared to participate voluntarily in a welcome team. Ordinal logistic generalized linear modeling re-
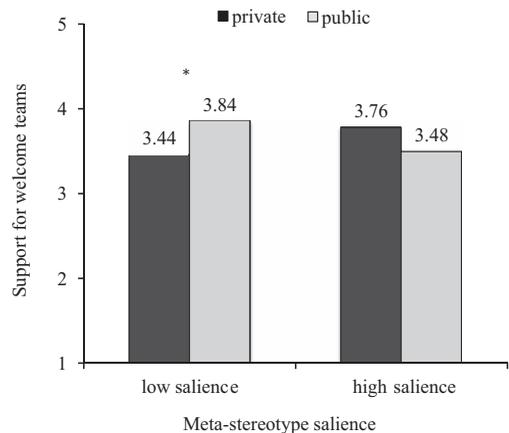

Figure 1. Support for welcome teams as a function of audience and meta-stereotype salience, Study 1. *Note.* Support for welcome teams was measured on a 5-point scale (1 = *not at all*, 5 = *very much*). * $p < .05$.

vealed only a main effect of meta-stereotype salience, $\chi^2 = 7.14$, $p = .008$. Of participants in the high-salience meta-stereotype condition, 14% were willing to volunteer for a welcome team, compared with 38% in the low-salience meta-stereotype condition.

Discussion

Without activation of the meta-stereotype, participants in the public condition were more supportive of welcome teams to help tourists in their city than participants in the private condition. This observation replicates previous research demonstrating that people are generally more helpful in public contexts (e.g., Levine & Crowther, 2008; Riordan et al., 1985). When the meta-stereotype was salient, however, this effect was eliminated. Although a small trend was observed in which participants in the public condition were somewhat less supportive of welcome teams for tourists than participants in the private condition, this effect was not significant. This pattern of results clearly speaks against the amplification hypothesis, which predicted the highest level of support in the salient meta-stereotype, public condition. However, given the nonsignificance of the audience effect when the meta-stereotype was salient, we also did not obtain clear support for the suppression hypothesis, which predicted that the presence of an audience would suppress support when combined with a salient meta-stereotype.

Unexpectedly, the interaction was not moderated by identification. High identification may not be necessary to motivate responses to meta-stereotypes. Indeed, other research have also failed to find a moderating effect of identification in the relationship between meta-stereotype salience and helping (van Leeuwen & Täuber, 2012).

The overall willingness to volunteer for welcome teams was very low. Of course, participating in welcome teams can be quite demanding, requiring a serious investment of time, a good physical condition, detailed knowledge of the city, and sufficient international language skills. Individual differences on these variables could easily interfere with the effectiveness of the manipulations. This may explain why no effects were found on this variable, other than the observation that meta-stereotype salience reduced the willingness to volunteer for a wel-

come team. Given the fact that this finding contradicts a host of prior research demonstrating a positive effect of meta-stereotype salience on outgroup helping (e.g., Hopkins et al., 2007; van Leeuwen & Täuber, 2012; van Leeuwen & Mashuri, 2012), it should be interpreted with care.

Study 2

The goal of the second study was twofold. First, we compared ingroup helping with outgroup helping to assess whether the predicted private and public responses to salient meta-stereotypes are indeed limited to outgroup helping, as one would expect, or whether they reflect a more general willingness to help. Second, we aimed to investigate the effects of meta-stereotype salience and audience on a behavioral measure of helping, as opposed to the support measure which was used in the first study.

Participants were students at two rivaling universities in Amsterdam who were approached on their own university campuses by a male experimenter with a request for directions. The experimenter posed either as a local student or a student from the rivaling university, and approached participants either at a busy location where many other students could witness the interaction, or at a quiet location where the interaction was private. Rather than providing participants with the negative content of a meta-stereotype, he merely stated that he was writing a thesis on how students from the other university in town viewed students from the participants' university. As prior research has shown, merely thinking about how the ingroup is viewed by others is sufficient to trigger image concerns (Klein & Azzi, 2001; van Leeuwen & Täuber, 2012). The dependent variable of providing directions was assessed in a stepwise manner, in which compliance with an initial request was followed up by an additional, more demanding, request.

Method

A total of 170 students (85 women, 3 unclassified) from the Vrije University Amsterdam (VU; $n = 83$) or the University of Amsterdam (UA; $n = 87$) were randomly assigned to the cells of a 2 (meta-stereotype salience: low vs.

high) $\times$ 2 (audience: public vs. private) $\times$ 2 (target group: ingroup vs. outgroup) between-participants design.

Participants were approached by a male confederate on their own respective university campuses (VU or UA)[1] at previously selected locations that were either crowded (public) or quiet (private). Due to the nature of this field experiment, the experimenter could not always guarantee that no others were present in the private condition. However, by comparison, the private condition contained fewer to no other observers than the public condition. Upon approaching a participant, the confederate first asked if he or she[2] studied at this university. If so, the confederate explained that he was a student of the same university (*ingroup* condition), or a student from the other university (*outgroup* condition). He carried a coffee mug with the logo from his university to reinforce this manipulation. The confederate mentioned that he was doing a research project on how students from the other university viewed students from this university (high-salience meta-stereotype condition), or a project on computer facilities in different universities (low-salience meta-stereotype condition). He explained that he was looking for the university information center.

The confederate proceeded by asking participants for directions to the information center, using a stepwise approach, with each step requiring more time and effort from participants. First, he asked for general directions. A total of 137 participants complied with this request. Those who complied were subsequently asked to draw a map. When necessary, the experimenter provided them with a pen and paper for this purpose. The 69 participants who complied with this request were then asked to walk with the confederate to the exit of the current building and point to the direction of the information center. Of the 48 people who complied with this request, a total of 12 subsequently accompanied the confederate all the way to the information center. The dependent variable "helping" reflects the last request that a participant complied with. The variable ranges from 0–4, where 0 means that a participant did not comply with any request, a value of 1 means that he or she only gave general directions, 2 means he or she additionally drew a map, 3 means he or she walked to the exit and pointed to the right

direction, and 4 means he or she accompanied the confederate to his final destination.

Results

Helping was analyzed in an ordinal, logistic, generalized, linear modeling analysis with meta-stereotype salience, audience, target group, and all possible interaction terms as the independent variables. All significant effects have been reported. The cell frequencies are presented in Figure 2. The overall height of the bars reflects participants' willingness to meet at least one of the confederate's requests (vs. refusing to help at all). The different shades reflect the degree of helping: The darker shades at the top of the bars indicate compliance with the more demanding requests.

The analysis yielded a number of effects. A significant main effect of meta-stereotype salience was found, $\chi^2 = 5.02$, $p = .03$. Overall, respondents in the high-salience meta-stereotype condition complied more with the confederate's requests than respondents in the low-salience meta-stereotype condition. A main effect of target group, $\chi^2 = 9.39$, $p = .002$, revealed that respondents complied more with the confederate's requests when he presented himself as an outgroup member compared with when he presented himself as an ingroup member. The analysis further revealed a significant three-way interaction, $\chi^2 = 4.31$, $p = .04$, which was explored by conducting separate analyses within each level of audience. In the public condition, only a main effect of target group was found, $\chi^2 = 5.23$, $p = .02$, reflecting the aforementioned tendency to help outgroup members more than ingroup members. In the private condition, the main effect of target group was also significant, $\chi^2 = 4.32$, $p = .04$. In addition, we found a marginally significant main effect of meta-stereotype salience, $\chi^2 = 3.67$, $p = .06$, which was qualified by a marginally significant interaction between target group and meta-stereotype salience, $\chi^2 = 3.07$,

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[1] University location (VU, UA) had no effect on helping, either as a main effect or in conjunction with any of the manipulations. It was therefore excluded from further analyses and the data were collapsed over university location.

[2] Participant gender was equally distributed across conditions, and had no effect on helping, either as a main effect or in conjunction with any of the manipulations. The reported analyses are therefore collapsed across gender.
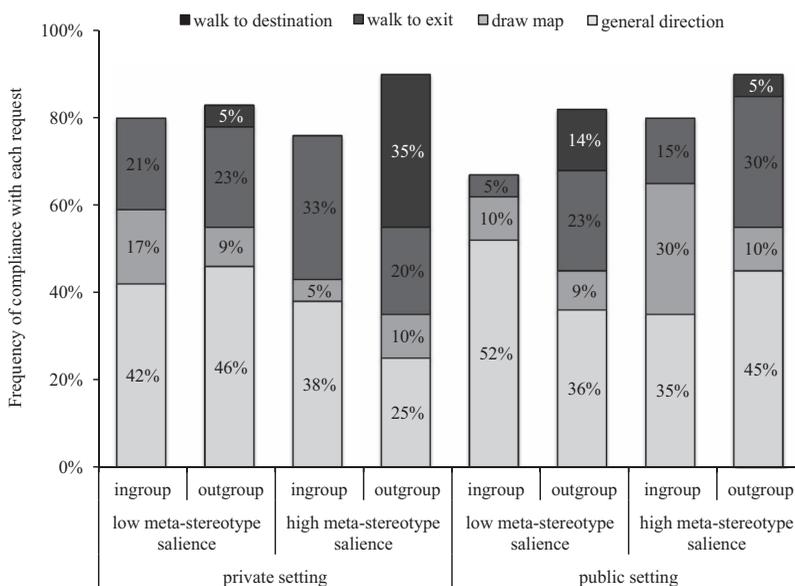
Figure 2. Providing directions in private and public settings, Study 2.

$p = .08$. Inspection of the frequencies in Figure 2 shows that participants were most willing to help the confederate when he presented himself as an outgroup member and the meta-stereotype was salient. In fact, 35% of the participants in that condition accompanied him all the way to his destination, compared with only 5% in the low-salience meta-stereotype condition.[3]

Discussion

If the public setting had enhanced the effect of meta-stereotype salience on the motivation to present the ingroup in a more positive light through helping, then participants would have been most inclined to comply with the outgroup confederate's requests in the public high-salience meta-stereotype condition. This was clearly not the case. In fact, the highest level of outgroup helping was observed in the private high-salience meta-stereotype condition. As in Study 1, this pattern of results clearly speaks against the amplification hypothesis. Although not all comparisons reached traditional levels of significance, the overall pattern of results was consistent with the suppression hypothesis.

The comparison with an ingroup condition enabled us to demonstrate that efforts to improve the meta-stereotype were clearly directed at the outgroup and not at the ingroup. Because

ingroup helping is not diagnostic of warmth and kindness (as Hopkins et al., 2007, argued, this type of behavior is expected from group members), only acts of kindness directed at the outgroup have the potential to improve the ingroup's reputation.

We found it interesting that participants were more willing to help the confederate when he presented himself as an outgroup member than when he presented himself as an ingroup member. This finding appears to contradict prior research demonstrating a general ingroup favoring bias in helping (e.g., Gaertner, Dovidio, & Johnson, 1982; Levine, Prosser, Evans, & Reicher, 2005). However, because a salient meta-stereotype increases the desire to help outgroup members (but not ingroup members), no ingroup favoring bias was expected. Moreover, it seems plausible that in the case of a visiting student, the need for help was more apparent

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[3] We alternatively analyzed the data in an analysis of variance, treating the helping scale as an interval variable. This analysis yielded similar results to those reported here: a main effect of meta-stereotype salience, $F(1, 162) = 4.76$, $p = .031$, $\eta_p^2 = .03$, a main effect of target group, $F(1, 162) = 10.78$, $p = .001$, $\eta_p^2 = .06$, and a marginally significant three-way interaction, $F(1, 162) = 3.86$, $p = .051$, $\eta_p^2 = .02$. A graph depicting the cell means is included as a online supplement to this paper.

than in the case of a local student, who should know where important university facilities are located.

It should be noted that we did not manipulate the content of the meta-stereotype in this study. Our manipulation was based on earlier research demonstrating that merely thinking about how the ingroup is viewed by a rivaling outgroup is sufficient to trigger impression-management concerns (Klein & Azzi, 2001; van Leeuwen & Täuber, 2012). Prior research has shown that it is the negative valence of those meta-stereotypes that promotes outgroup helping; positive meta-stereotypes did not elicit the same effect (van Leeuwen & Täuber, 2012). The relatively negative valence of meta-stereotypes has been illustrated in studies showing that meta-stereotypes contain more negative than positive traits (Hopkins et al., 2007; van Leeuwen & Täuber, 2012), as well as in studies demonstrating that meta-stereotypes are generally more negative than autostereotypes (Krueger, 1996; Vorauer et al., 1998). However, the current study did not include any measures to confirm the implicit assumption that the activated meta-stereotype was indeed a negative one.

Study 3

The amplification hypothesis predicts that outgroup helping (but not ingroup helping) in response to a salient meta-stereotype increases in the presence of an audience to witness the behavior. It stands to reason that this effect would be most pronounced when that audience represents the very group that triggered the impression-management concerns. If a member of Group A is concerned about her group's appearance in the eyes of Group B, then helping a member of Group B would be even more effective in making a good impression if other members of Group B witnessed that act. Whereas in Study 1, the audience represented the relevant outgroup (tourists), the audience in Study 2 was comprised mostly of ingroup members. The goal of this third study was therefore to investigate the role of the nature of the audience in more detail. Specifically, we examined whether the effect of meta-stereotype salience on the willingness to help either ingroup members or outgroup members was influenced by an awareness of the fact that either an exclusively in-

group audience, an exclusively outgroup audience, or nobody, was privy to one's behavior.

Literature suggests that an exclusively ingroup audience would promote ingroup helping. An ingroup audience enhances the salience of ingroup norms, and could lead to increased feelings of responsibility for the welfare of other ingroup members (Dovidio et al., 1997). Levine and Crowther (2008) found that participants were more likely to help an ingroup member in the presence of an ingroup audience compared with private settings.

Ingroup and outgroup helping was further expected to be influenced by the combination of the type of audience and meta-stereotype salience. Extending the amplification hypothesis, it could be expected that meta-stereotype salience would promote outgroup helping (but not ingroup helping), and that this effect would be most pronounced in the outgroup-audience condition.

Alternatively, an audience could suppress outgroup helping when combined with an activated meta-stereotype. As argued previously, an activated meta-stereotype could raise anxiety levels and occupy cognitive resources (Vorauer et al., 1998; Vorauer et al., 2009). Intergroup anxiety reduces the level of control people have over conscious behavior (Amodio, 2009; Lambert et al., 2003), which includes the strategic intention to create a more favorable impression through outgroup helping. Intergroup anxiety is further taxed by the knowledge that others are watching one's responses (Gabriel et al., 2007). We found this interesting because both group types can increase levels of self-consciousness and anxiety, so it should not matter in this regard whether the audience is comprised of outgroup or ingroup members. Extending the suppression hypothesis, it could therefore be expected that the effect of meta-stereotype salience on outgroup helping (but not ingroup helping) would be suppressed by the presence of an outgroup or an ingroup audience.

Method

Participants were 230 students from the VU Amsterdam (142 women, $M_{age} = 20.08$, $SD = 2.43$, range 17–34), who participated in this study in exchange for a small fee. Participants were randomly distributed across the cells of a 3 (audience: ingroup audience vs. outgroup au-

dience vs. private) $\times$ 2 (meta-stereotype salience: low vs. high) $\times$ 2 (target group: ingroup vs. outgroup) between-participants experimental design.

Upon arrival at the experimental laboratory, participants were seated in separate cubicles in front of a computer, which was used to present instructions and questions, and instructed to register their answers. The procedure was adopted from van Leeuwen and Täuber (2012), with a few small modifications. Participants were informed that they were participating in a program called the Amsterdam Student Platform (ASP), comprised of the two Amsterdam universities (VU and UA) and an Amsterdam school for higher education. In this program, students could appeal to other students to help them out with small tasks, each of which could take no longer than 5 min to complete. Participants in the high-salience meta-stereotype condition were subsequently asked to list five traits that they believed students from the UA find typical for VU students (cf. van Leeuwen & Täuber, 2012). This part was skipped in the low-salience meta-stereotype condition. The traits listed in the high-salience meta-stereotype condition were later coded as negative, neutral, or positive. Participants reported significantly more negative ($M = 1.77$, $SD = 1.35$) than positive traits ($M = 0.95$, $SD = 1.16$; $t = 4.16$, $p < .001$), demonstrating that the overall valence of the activated meta-stereotype was negative. Participants then received further information about the ASP, and were informed that they would be presented with one help request from within the platform. Before presenting the task, participants received a notification on their computer screen. In the audience conditions, the notification stated that, to gain more insight into the use of the ASP, the VU (ingroup audience) or the UA (outgroup audience) was collecting behavioral information from the platform, such as the type of requests that are posted, and the helpfulness levels of students from the three participating universities. Participants were asked to give their consent for the VU/UA to use their responses as part of this enquiry. It was stressed that personal information, such as name or student number, would not be collected, but group-based information, such as their university affiliation, would be part of the enquiry. Participants needed to click an "I agree" button to continue with the task. In the private condition, participants only received a short mes-

sage stating that confidentiality was considered very important in the ASP, and that their responses were guaranteed to be anonymous to everyone except the recipient of help, who would be informed of the helper's name and university affiliation.

Participants were then presented with the actual helping task, which was a brainstorming task. Participants were instructed to generate as many ideas as possible for promoting the use of public transport as a means of reducing traffic congestion. The student requesting their help was described as either a VU student (ingroup member) or a student from the UA (outgroup member). Following the brainstorm session, participants were presented with a maximum of three additional requests, using a stepwise approach similar to Study 2. It was emphasized that participation was on a voluntary (unpaid) basis only. The first request was to rank the generated brainstorm ideas in terms of their feasibility. A total of 162 participants complied with this request. Those who complied were subsequently asked to elaborate on one of their ideas in more detail, including suggestions regarding its implementation. A total of 107 participants complied with this request. Finally, participants who complied with both requests were asked to volunteer for a group discussion on the problem of traffic congestion, to be held later that day. An additional 11 participants volunteered for this task. The dependent variable helping thus ranges from 0–3, where 0 means that the participant did not comply with any request, 1 means that he or she was only willing to rank his or her ideas in terms of their feasibility, 2 means she or he was also willing to elaborate on one of those ideas, and 3 means he or she also volunteered for a group discussion. At the end of the study, participants were paid, thanked, and debriefed.

Results

Ordinal, logistic, generalized linear modeling was conducted with the helping index as the dependent variable, and audience, meta-stereotype salience, and target group, as well as their interaction terms, as independent variables. Age and gender were included as covariates to explain additional variance. All significant effects are reported. The cell frequencies are presented in Figure 3. The analysis yielded
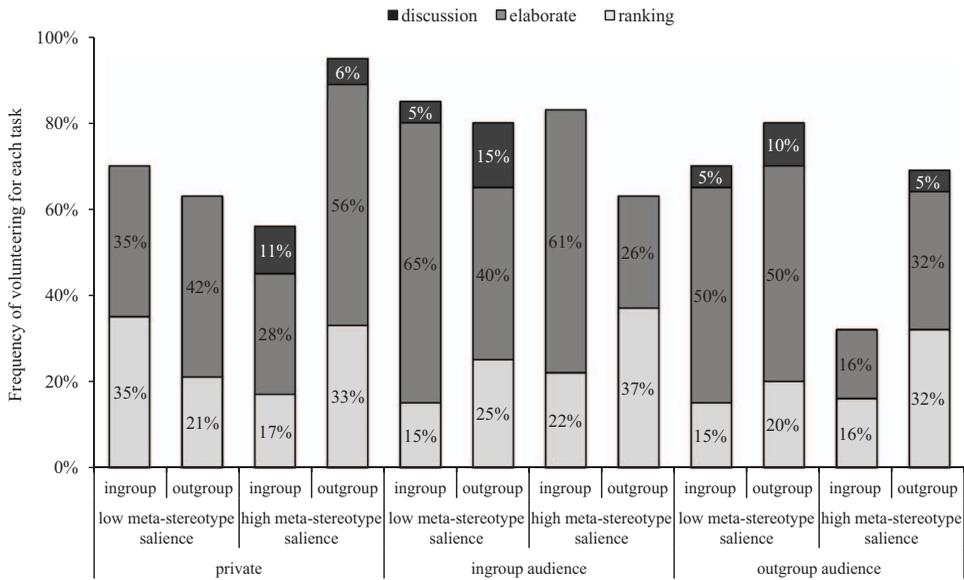
Figure 3. Volunteering for extra tasks in public and private settings, Study 3.

a number of effects. A main effect of meta-stereotype salience, $\chi^2 = 5.03$, $p = .025$, indicated that, overall, participants in the high-salience meta-stereotype conditions were less willing to volunteer for additional tasks compared with those in the low-salience meta-stereotype conditions. This effect was moderated by audience, as indicated by the significant interaction term between audience and meta-stereotype salience, $\chi^2 = 10.82$, $p = .004$. To explore this interaction, we conducted separate analyses within each level of audience. The main effect of meta-stereotype salience was significant in the ingroup audience condition, $\chi^2 = 4.02$, $p = .045$, as well as in the outgroup audience condition, $\chi^2 = 8.50$, $p = .004$, but absent in the private condition, $\chi^2 = 1.20$, $p = .274$.

The analysis further revealed an interaction between audience and target group, $\chi^2 = 8.04$, $p = .018$. To explore this interaction, we conducted separate analyses for ingroup helping and outgroup helping. Among participants who had helped an ingroup member, a main effect of audience was found, $\chi^2 = 11.22$, $p = .004$. Separate comparisons of the audience conditions revealed that participants in the ingroup-audience condition were more willing to help a fellow ingroup member than those in the out-

group-audience condition, $\chi^2 = 8.95$, $p = .003$, and those in the private condition, $\chi^2 = 6.09$, $p = .014$, whereas the latter two did not differ from each other, $\chi^2 = 0.42$, $p = .519$.

Among participants who had helped an outgroup member, the main effect of audience was not significant, $\chi^2 = 0.41$, $p = .814$. Instead, we found a significant interaction between audience and meta-stereotype salience, $\chi^2 = 8.73$, $p = .013$. Separate analyses within each audience condition revealed that, in the private condition, participants in the high-salience meta-stereotype condition were more willing to help an outgroup member than those in the low-salience meta-stereotype condition, $\chi^2 = 5.28$, $p = .022$. In contrast, in the presence of an ingroup audience, $\chi^2 = 3.54$, $p = .06$, or an outgroup audience, $\chi^2 = 1.88$, $p = .17$, participants in the high-salience meta-stereotype condition were somewhat less willing to help an outgroup member than participants in the low-salience meta-stereotype condition. Because the suppression hypothesis does not differentiate between the type of audience (ingroup or outgroup), we also examined the effect of meta-stereotype salience on outgroup helping within the ingroup and outgroup conditions combined. This effect was significant, $\chi^2 = 5.38$, $p = .020$, demonstrating that, in the presence of an audi-

ence, participants in the high-salience meta-stereotype condition helped the outgroup member significantly less than participants in the low-salience meta-stereotype condition.[4]

Discussion

The presence of an outgroup audience did not amplify the effect of meta-stereotype salience on outgroup helping. Instead, when a salient meta-stereotype was combined with either an outgroup audience or an ingroup audience, the motivation to help an outgroup member (but not an ingroup member) plummeted. This result is consistent with Study 1 and Study 2, and speaks in favor of the suppression hypothesis.

Overall, participants were more willing to help an ingroup member in the ingroup-audience condition than in the outgroup-audience or private conditions. Levine and Crowther (2008) reasoned that the presence of other ingroup members increases depersonalization, and, as a consequence, a greater adherence to the norms and values of the group. The current finding is in line with this argument.

General Discussion

We set out to examine two opposing hypotheses in this line of research: An amplification hypothesis, which predicted that an audience would amplify the effect of meta-stereotype salience on outgroup helping, and a suppression hypothesis, which predicted that an audience would suppress this effect. The results from three studies clearly speak against the amplification hypothesis. Whereas helping for the purpose of making a positive ingroup impression on the outgroup could arguably have a stronger impact when the behavior is not just observed by the single outgroup member who is the recipient of help, but by a broader audience, the presence of an audience did not increase outgroup helping. Instead, both an outgroup audience (Studies 1 and 3) and an ingroup audience (Studies 2 and 3) reversed the effect of meta-stereotype salience on outgroup helping, lending support to the suppression hypothesis. The observation that this reversal was not limited to an outgroup audience, but was equally observable in the presence of an ingroup audience, further confirms the suppression hypothesis,

which does not differentiate between the nature of the audience.

The expectation that activated meta-stereotypes and audiences, when taken separately, can stimulate outgroup helping because group members want to communicate a positive impression of the ingroup, was based on the knowledge that many forms of outgroup helping are strategic in nature. Van Leeuwen and Täuber (2010) argued that outgroup helping is often a form of communication, in which group members attempt to signal to other groups important ingroup attributes, or information about the desired relationship with the outgroup. For example, outgroup helping can be used to demonstrate not only kindness and generosity (Hopkins et al., 2007; van Leeuwen & Täuber, 2012), but also specific ingroup skills or knowledge (van Leeuwen & Täuber, 2011). Moreover, research by Nadler and colleagues (Halabi, Dovidio, & Nadler, 2008; Nadler, Harpaz-Gorodeisky, & Ben-David, 2009) showed that group members can use helping as a signal of power, in an attempt to challenge or maintain social dominance relations between groups. The current paper complements this body of research on strategic outgroup helping by demonstrating that two strategies that are well-known to increase the motivation to help, lose much of their effectiveness when combined in a single setting.

The current research has a number of strengths and weaknesses that need to be acknowledged. Among its strong points is the consistency of the results as observed in two unobtrusive field experiments and one laboratory study that assessed behavioral intentions as well as actual behavior, which ranged from volunteering time and effort to providing directions. The focus on behavioral measures, however, did mean that possible mediating factors could not always be assessed. Most notable is the fact that we have not provided conclusive evidence for the role of anxiety as a mediator of the

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[4] Analysis of variance of the helping scale yielded similar results to those reported here: a marginally significant main effect of meta-stereotype salience, $F(1, 216) = 2.72$, $p = .055$, $\eta_p^2 = .02$, a significant interaction between meta-stereotype salience and audience, $F(1, 216) = 5.86$, $p = .003$, $\eta_p^2 = .05$, and a significant interaction between audience and target group, $F(1, 216) = 3.98$, $p = .02$, $\eta_p^2 = .04$. A graph depicting the cell means is included as an online supplement to this paper.

suppression hypothesis. Although anxiety might be assessed directly using a self-report measure, Amodio (2009) found that this measure did not associate with controlled responses—only a physiological measure of cortisol reactivity did. Future research should include such physiological measures to examine the role of anxiety in the suppression effect.

Without evidence supporting the role of anxiety as a mediator of the suppression effect, at this point, we also need to acknowledge an alternative explanation for our findings. It is possible that participants were motivated to help an outgroup member in response to a salient meta-stereotype, not because they wanted to refute this stereotype, but because they wanted to deny the self-relevance of this stereotype. Von Hippel and colleagues (2005) demonstrated that people who are concerned with impression management often cope with negative stereotyping through denying the accuracy of the stereotype insofar as it describes themselves. Such an individual strategy may be more likely to occur in private settings than in public settings, as public settings could enhance the salience of group membership. Although the current studies cannot rule out this alternative explanation, van Leeuwen and Täuber (2012), using a paradigm virtually identical to that employed in Study 3 did demonstrate conclusively that helping in response to meta-stereotype salience was driven by the motivation to create a more favorable ingroup impression, and not by the motivation to deny the self-relevance of the meta-stereotype.

The inclusion of an ingroup-helping condition in Studies 2 and 3 also allows us to shed some additional light on the age-old question: Are people generally less inclined to help outgroup members than members of their own group? Although psychologists often assume that a general tendency to discriminate against outgroups also translates into a lack of helping (e.g., Rosenberg & Treviño, 2003), actual evidence supporting this assumption is mixed (see Saucier, Miller, & Doucet, 2005, for a meta-analysis). Studies reporting ingroup bias in helping (e.g., Gaertner et al., 1982; Levine et al., 2005) are accompanied by those reporting a bias favoring the outgroup (e.g., Dovidio & Gaertner, 1981; Dutton & Lake, 1973). The results from the current studies suggest that the tendency to favor ingroup members or outgroup

members in helping depends on the underlying motive. Ingroup members may be favored over outgroup members when the helper's actions are observed by an ingroup audience. By contrast, outgroup members may be favored when people are concerned about their group's image or reputation and their behavior is private, or when an outgroup member's request is seen as more legitimate in a specific setting. Stürmer and Snyder (2010) argued that the mixed findings with respect to the existence of an ingroup bias in helping can be explained in part by the fact that the motives for helping outgroup members differ from those for helping ingroup members. The current findings appear in full support of that argument.

Although the current research highlights several factors that can stimulate outgroup helping, it also clearly illustrates the risk of blindly compiling these strategies in an attempt to maximize the willingness to help other groups. Practitioners should therefore exert caution in their motivational attempts. For example, several times a year, public fundraisers are organized and presented live on national TV to stimulate people to donate money to help other regions of the world that suffer from natural disasters, or the consequences of war. Those televised fundraisers often provide live updates to a wide audience regarding how much money was donated. The current research indicates that such efforts might be most successful when people are not very concerned with the impression they make on the target group. Conversely, however, fundraising efforts that do not include a wide audience could benefit from activating such impression-management concerns, for example, by asking people to consider how they are viewed by the intended target group.

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Correction to O'Neill et al. (2013)

In the article "Developing the Systems-Centered Functional Subgrouping Questionnaire-2" by Richard M. O'Neill, Susan P. Gantt, Gary M. Burlingame, Jacqueline Mogle, Jennifer Johnson, and Rebecca Silver (*Group Dynamics: Theory, Research, and Practice,* Vol 17(4), 252–269. doi:10.1037/a0034925), the caption for Figure 1 should have included the following: Reprinted with permission of Susan Gantt. Previously published in "Functional Subgrouping and the Systems-Centered Approach to Group Therapy" by S.P. Gantt, 2011, in J. Kleinberg (Ed.), *The Wiley-Blackwell handbook of group psychotherapy* (pp. 116–117). Oxford, UK: Wiley.

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