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The Effect of Metastereotyping on Judgements of a Higher-Status Outgroup when Reciprocity and Social Image Improvement Motives Collide

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Abstract

Two experiments examined the effect of metastereotype valence on high and low identifiers' judgments of an outgroup. As high identifiers are strongly emotionally invested in the ingroup, we expected that such group members would feel angry when they activate negative metastereotypes which would correspondingly lead to less favorable evaluation of the outgroup. We further expected this pattern to be particularly visible when high identifiers could communicate their dissatisfaction to an outgroup (but not an ingroup) audience presumably to persuade the outgroup to re-evaluate their attitudes towards the ingroup. We did not expect low identifiers to reflect the valence of metastereotypes in their outgroup attitudes and judgments, given their weak emotional ties with the ingroup and because such members are likely to feel that metastereotypes do not apply to them personally. Results from two studies (Study 1, N = 78; Study 2, N = 80) supported these predictions and are discussed in light of the implications of metastereotyping for intergroup relations.

Key words: social judgements, stereotypes, social image, reciprocity, intergroup relations.

The Effect of Metastereotyping on Judgements of a Higher-Status Outgroup when Reciprocity and Social Image Improvement Motives Collide

Peace talks, trade negotiations and union vs. management dialogues are all instances when concerns about what other people might think of one's social group are rife. Often in these circumstances, people's behaviour towards an outgroup tend to be governed by one of two key motives: To reciprocate gestures from the outgroup and/or to engage in group-serving behaviours which offer strategic benefits for their social group (Owuamalam, 2009; van Leeuwen & Täuber, 2010). In particular, numerous evidence across a variety of social science disciplines suggest that people generally reflect the actions of others in their behaviour towards them (Akerlof, 1982; Ben-Ner, Putternam, Kong, & Magan, 2004; Coyle-Shapiro & Kessler, 2002; Eisenberger, Lynch, Aselage, & Rohdieck, 2004; Esser & Komorita, 1974; Fehr & Gaechter, 2000; Stroebe, Lodewijkx, & Spears, 2005). Such reciprocity, according to Gouldner (1960), regulates social exchange and provides cues for evaluating the likely costs (or benefits) to oneself of behaving in a certain way towards others.

Although reciprocity of *explicit* positive or negative behaviours has enjoyed extensive empirical attention (e.g., Curtis & Miller, 1986; Doosje & Haslam, 2005), little is known about whether *mere thoughts* about the impressions that members of an outgroup might hold of one's own social group (so-called *metastereotypes*: Sigelman & Tuch, 1997; Vorauer, Main, & O'Connell, 1998) similarly elicit reciprocal intergroup attitudes and judgements. Although recent studies have begun to examine this relationship (e.g., Vorauer & Kumhyr, 2001; Vorauer & Sasaki, 2009) none—as far as we are aware—has articulated the underlying mechanism for such reciprocity and the situational constraints that determine whether or not this behaviour is exhibited. It is important to examine these relationships since reciprocal negativity between

groups can be expected to hinder intergroup harmony further (Kamans, Gordijn, Oldenhuis, & Otten, 2009).

In the current study, we examined whether people would reflect the valence of the salient metastereotypes in their attitudes and judgements of a relevant outgroup. We focused on members of low-status groups, since they are particularly prone to activating metastereotypes compared to higher status group members (Lammars, Gorjin, & Otten, 2008), and derived our predictions from social identity theory (SIT; Tajfel & Turner, 1986).

Reciprocity according to SIT

According to social identity theory (Tajfel & Turner, 1986), people belong to a variety of social groups and these group memberships define—at least partly—who they are as individuals. Group memberships also prescribe norms that guide members' behaviour towards fellow group (ingroup) members and outsiders (outgroups). When an ingroup is perceived to be positively valued by an outgroup, this can enhance group members' self-esteem (Cialdini, 1976; Snyder, Lassegard, & Ford, 1986). The opposite detrimental effect on self-esteem is also possible when the ingroup is negatively valued (Branscombe, 1998; Gordijn, 2010; Owuamalam & Zagefka, 2011; Vorauer et al., 1998). For this reason, group members—especially those with strong emotional and psychological attachment to the ingroup—strive to maintain (or enhance) the external reputation of the ingroup (Hogg & Abrams, 1988; Tajfel & Turner, 1986), particularly when its image is threatened in some way. There are a range of possible threats to social identity and these can come in a variety of ways (see Cotterell & Neurberg, 2005; Ellemers, Barreto, & Spears, 1999). In this investigation, we focus on the identity challenge that an awareness of negative metastereotypes can pose to group members (Gomez, 2002; Shelton, Richeson, & Salvatore, 2005; Shelton, Richeson, & Vorauer, 2006).

Metastereotypes might threaten social identity because they are largely negative (Vorauer et al., 1998) and tend to correspond to actual views of the ingroup held by the outgroup (Sigelman & Tuch, 1997). To the extent that group members seek a positive social identity, believing that outgroup members hold negative impressions of the ingroup could obstruct this goal. This is because negative metastereotypes are likely to be perceived as unfair and inaccurate (Hopkins et al., 2007) and can elicit negative emotions (e.g., anger), particularly among those with strong emotional ties to the ingroup (i.e., high identifiers: Kamans, Otten, & Gordijn, 2010), which can lead to reciprocal negativity towards the outgroup (Chen, Chen, & Shaw, 2004). Afterall, anger is an *action* oriented emotion (Frijda, Kuipers, & Ter Schure, 1989; Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006; Kessler & Hollbach, 2005; Mackie, Devos, & Smith, 2000; cf. Roger & Prentice-Dunn, 1981; see also van Zomeren, Spears, Fischer, & Leach, 2004), and high identifiers who feel this emotion when concerns about negative metastereotypes are raised can be expected to reciprocate such ingroup directed negativity.

Metastereotype reciprocity, however, should not be visible among those who are weakly identified with the ingroup, since such group members are less personally invested with the ingroup and may feel that metastereotypes are less applicable to them. For example, past research has shown that low identifiers tend to resist being categorised along ingroup stereotypes regardless of valence: they generally describe themselves less with attributes or stereotypes commonly associated with the ingroup, and emphasise ingroup heterogeneity under conditions of social identity threat (Owuamalam & Zagefka, 2011; Spears, Doosje, & Ellemers, 1997). As their level of emotional investment in the ingroup is generally low, it is unlikely that low identifiers would experience heightened levels of anger arousal when negative

metastereotypes are activated (see also Kamans et al., 2010). Consequently, it was not expected that low identifiers' attitudes and judgements of the outgroup would be affected by metastereotypes as a result of anger.

Strategic social identity improvement motive according to SIT. Although social identity theory leads one to expect that the valence of metastereotypes should be reciprocated (Tajfel & Turner, 1986), it could also be argued that activating negative metastereotypes will lead group members to adopt a pro-social attitude towards the outgroup (Hopkins et al., 2007; van Leeuwen & Täuber, 2011; see also van Leeuwen & Täuber, 2010 for a review). For example, Hopkins et al. (2007) found that highly-identified group members (Scottish people) in particular provided more help to an outgroup (a Welsh charity) compared to the ingroup when a negative help-related metastereotype (tight-fisted) was salient. Hopkins et al. concluded that this reaction was a strategic means of refuting a negative stereotype associated with the ingroup.

In the current research, however, we suggest that such an *anticipatory reciprocity* (or image improvement) assumption derived from social identity theory is not necessarily incompatible with the *tit-for-tat* reciprocity enshrined within the same theory. While the former involves a cognitive appraisal process in which group members evaluate the benefits and costs of their actions before acting (Lazarus & Folkman, 1984; cf. Owuamalam, Tarrant, Farrow, Zagefka, 2012), the latter ostensibly presupposes a spontaneous reaction driven by the negative emotion of anger (Kamans et al., 2010). Put differently, individuals do not like their groups to be held in negative regard, and they try to disconfirm such negative regard if they can (e.g., if given an opportunity to help and thereby directly challenge a stereotype) but reciprocate negativity towards the ingroup if they cannot presumably out of frustration (Berkowitz, 1969;

1989; see also Branscombe, Schmitt, & Harvey, 1999; Branscombe & Wann, 1994; Voci, 2006, Doosje & Haslam, 2005).

Summary of Hypotheses

We hypothesised negative metastereotypes should elicit greater anger among high identifiers compared to those who activate positive metastereotypes and, as a result, their attitudes and evaluation of the outgroup should be correspondingly less favourable (see Figure 1a): An effect that should be particularly visible when they could communicate their discontent to the outgroup but not ingroup members (see Figure 1b). Low identifiers distance themselves from ingroup stereotypes (Spears et al., 1997); thus, it is unlikely that there would be a measurable variation in their levels of anger arousal following activation of negative or positive metastereotypes. For this reason, their attitudes and evaluations of the outgroup should be correspondingly unaffected by metastereotype induced anger, regardless of the social context. Unlike previous research in the social identity tradition which makes use of minimal groups, we tested our assumptions using real social groups to enhance the ecological validity of our findings.

Study 1

A pilot study was first conducted to examine group members' perceptions of the legitimacy of metastereotypes. This revealed that high identifiers perceived metastereotypes to be unfair and inaccurate representations of the ingroup to a greater degree when they focused on negative metastereotypes compared to when they focused on positive metastereotypes. This effect was absent for low identifiers[1]. Based on these pilot data, Study 1 tested the prediction

[1] In this study, psychology students (N = 100) were asked to indicate the extent to which junior doctors' stereotypes of their discipline were fair and accurate. Responses to this single-item scale were made on a 9-point

that high (but not low) identifiers for whom anger is aroused following the activation of negative metastereotypes would report less favourable attitudes and evaluation of the outgroup (a moderated-mediation effect: Preacher, Rucker, & Hayes, 2007). The intergroup context for the current study was shop-floor assistants vs. managers. We focused on shop-floor assistants as the target low-status group, given their subordinate position in the organisational hierarchy relative to managers (Knights & Collinson, 1987).

Method

Participants and Design

Seventy-eight shop-floor assistants at a grocery store in Stoke-on-Trent, UK, agreed to take part in this study (35 males and 43 females; M_{age} = 32.74, SD = 12.43). A between subjects design was used: Metastereotype valence (the focal independent variable) was manipulated, while anger (the proposed mediator), outgroup attitude and evaluation (dependent variables) and identification (the proposed moderator) were measured. Identification refers to members' emotional attachment to the ingroup.

Procedure and Measures

Participants completed the study materials at their place of work. First, they were informed that the study was about people's attitudes towards, and perceptions of different social groups. They then completed a four-item measure of identification adapted from Schmitt, Branscombe, Kobrynowicz and Owen (2002). Items included: "I am proud to be a shop-floor

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scale (1 = *extremely unfair and inaccurate*, 9 = *extremely fair and accurate*) having asked one group to focus on negative metastereotypes and another group on positive metastereotypes. Participants' levels of identification were also measured (using Schmitt, et al's 2002, 4-item scale) prior to the manipulation of metastereotype valence. Results revealed a significant interactive effect of metastereotype valence and identification, B = -.31, SE = .10, p = .003: High identifiers perceived metastereotypes to be less fair and accurate when they focused on negative metastereotypes compared to when they focused on positive metastereotypes, B = -.85, SE = .23, p < .001. This effect was absent for low identifiers, B = .20, SE = .24, p = .403 (see Appendix A for a graphical illustration).

assistant"; "Being a shop-floor assistant is a positive experience"; "I value being a shop-floor assistant"; and "I like being a shop-floor assistant". Responses were obtained on a 6-point scale (1 = ***strongly disagree*** to 6 = ***strongly agree***; α = .79, $CI_{95\%}$ LL = .711, UL = .858).

Following completion of the social identification measure, participants were then assigned to one of two metastereotype valence conditions. In line with an activation paradigm used by Branscombe (1998; see also Owuamalam & Zagefka, 2011), half the participants (*n* = 39) were asked to think about the positive impressions that managers might hold of shop-floor assistants while the other half (*n* = 39) were asked to think about the negative impressions that managers might hold of shop floor assistants. To establish that participants' cognitions across the two conditions corresponded with the instructions they were given (i.e., to assess the effectiveness of this manipulation) participants completed a single-item measure of metastereotype positivity: "The impressions that managers hold of shop-floor workers are generally..." Responses on this item were obtained on a 6-point scale (1 = *very negative*, 6 = *very positive*).

Next, participants completed a four-item measure of anger adapted from Spielberger, Jacobs, Russell and Crane (1983). Specifically, participants were asked: "To what extent did you experience the following emotions when you thought about the impressions that managers have of shop floor assistants": anger, resentment, irritation, and frustration. Ratings were made on a 6-point scale (1 = *a little*, to 6 = *a lot*; α = .80, $CI_{95\%}$ LL = .716, UL = .864).

Participants then indicated their attitude towards the outgroup using a "feeling thermometer" (Dasgupta & Greenwald, 2001). They were instructed to: "Use the thermometer below to indicate your feelings towards your managers" (0% = *very cold*, through 50% = *neutral*, to 100% = *very warm* [reverse scored]).

Finally participants' evaluation of the outgroup was obtained using twelve traits adapted from Anderson's (1968) 555-personality trait list. Six of these traits were negative (disrespectful, lazy, forgetful, preoccupied, impressionable and demanding) and six were positive (honest, reliable, confident, talented, organised and productive). These traits were chosen because they were deemed relevant in a working context. Participants were asked to select as many of the traits they thought could be used to describe the outgroup (managers). Negative trait selections were summed for each participant, as was the number of positive trait selections. In line with previous approaches to establishing evaluation bias (e.g., Ellemers, van Dyck, Hinkle, & Jacobs, 2000), an index of outgroup evaluation was calculated by subtracting the sum of positive trait selections from the sum of negative trait selections. Thus, values on the resulting scale ranged from -6 to 6, with higher scores indicating a greater negative evaluation of the outgroup. On completing the study, participants were debriefed and thanked for taking part.

Results

Metastereotype manipulation check

A moderated hierarchical regression analysis was performed to establish the effect of the independent variables on the metastereotype positivity measure. Following the recommendation of Aiken and West (1991), metastereotype valence (1 = negative, -1 = positive) was effect coded, while identification was mean centred prior to performing this analysis. These two variables, together with their 2-way interaction term were entered as predictors. Metastereotype positivity was specified as the dependent variable. In this study and the one that follows, high identifiers are those whose scores on the identification measure were

1SD above the mean for this scale whereas low identifiers are those whose scores were 1SD below the mean.

Results revealed a significant main effect of metastereotype valence, $B = -.35$, $SE = .09$, $p < .001$ on metastereotype positivity. Metastereotype positivity was lower in the negative metastereotype condition ($M = 2.95$, $SD = .83$) compared to the positive metastereotype condition ($M = 3.64$, $SD = .81$). The main effect of identification was also significant, $B = .30$, $SE = .10$, $p = .003$. However, the 2-way interaction between metastereotype valence and identification was not significant, $B = -.07$, $SE = .10$, $p = .463$. These results show that although increased identification is associated with increased metastereotype positivity reports, participants generally focused on the relevant valence of the metastereotypes regardless of their levels of identification.

Main analyses

Bivariate correlations depicting the relationships between the constructs assessed in the current study together with descriptive statistics are presented in Table 1. A moderated mediation analysis was performed to examine the interactive effect of metastereotype valence and identification on anger and then, the effect of anger on attitude and evaluation of the outgroup. Although the causal approach to establishing moderated mediation (Baron & Kenny, 1986; Muller, Judd, & Yzerbyt, 2005) has been used extensively in the literature, it has been criticised for prematurely ending the search for indirect effects, especially in cases when one or more path(s) from the focal independent variable (X) to the outcome (Y) is not significant (see Hayes, 2009 for an extensive discussion). Methodologists have also expressed concerns over the Sobel (1982) z test which has been used as an add-on to the causal approach to establishing indirect effect for incorrectly assuming normality of the indirect effect. For these reasons, and

following the recommendations of Preacher, Rucker, and Hayes (2007), bootstrap procedures was used to obtain a confidence interval around the indirect effect of the focal independent variable (metastereotype valence) on the dependent variables (attitudes towards the outgroup / outgroup evaluation) via the mediator (anger) at conditional values of the moderator (identification). According to Preacher et al. (2007), conditional indirect effect is established if the upper and lower limits of a bootstrapped 95% confidence interval (CI) for the indirect effect at conditional values of the moderator do not contain zero.

Prior to performing this analysis, metastereotype valence was effect coded (1 = negative, -1 = positive), while identification and anger were mean centred (Aiken & West, 1991). Attitudes and then evaluation of the outgroup were included as dependent variables in separate runs of the moderated mediation analysis using the macro provided by Preacher et al. (2007; Model 2). We controlled for gender in the current analysis to rule out the possibility that the predicted effect would have been driven by the responses of male participants given the finding that men are more prone to anger and aggression on average than women (Eagly & Steffen, 1986; cf. Rodriguez Mosquera, Manstead, & Fischer, 2002).

Results from the moderated mediation analyses are presented in Table 2. For the path from metastereotype valence to anger (see Figure 1a), there was a significant interaction between metastereotype valence and identification in predicting anger (B = .36, SE = .12, p = .004). As expected, simple slope analysis (Aiken & West, 1991) showed this was because high identifiers reported increased anger in the negative metastereotype condition compared to the positive metastereotype condition, B = .71, SE = .15, p < .001 (see Figure 2a), while this effect was not visible for low identifiers (B = .08, SE = .15, p = .595, [see Figure 2a]). Furthermore, anger significantly predicted both attitudes towards the outgroup, and evaluation of the

outgroup (see Table 2). Importantly, and as predicted, the lower (LL) and upper (UL) bounds of the bootstrapped 95% CIs for the conditional indirect effects of metastereotype valence on attitudes and evaluation of the outgroup for high identifiers did not contain zero: Indicating more negative attitudes towards, and less favourable evaluation of, the outgroup with increasing levels of anger when they focused on negative metastereotypes (see Table 2, and also Figure 2b-c for a plot of the conditional indirect effects). This effect was not visible among low identifiers (see Table 2 and Figures 2b-c). In particular, the Metastereotype valence x Identification *direct* interaction effects on both attitude towards (and evaluation of) the outgroup did not emerge significant (see Table 2), suggesting that anger adequately explains the effect of metastereotyping on outgroup judgements for high identifiers.

Discussion

The findings supported the hypothesis and showed that high identifiers who activated negative metastereotypes and were more angry as a result correspondingly reported less positive attitudes towards, and evaluation of, the outgroup. As expected, low identifiers' anger arousal was similar across the two metastereotype valence conditions and consequently their attitude and judgements of the outgroup remained close to the scale's midpoint (i.e., neutral see Figure 2b-c).

Although the pattern of responses among high identifiers is consistent with a reciprocity hypothesis (see Figure 2b-c), it is noteworthy that when negative metastereotypes were activated, high identifiers' evaluations of the outgroup were not necessarily negative even at high levels of anger arousal (slightly above the midpoint of the scale; see Figure 2c). One explanation for this somewhat positive evaluation of the outgroup even when negative metastereotypes were activated is that high identifiers in the current study may be weary of a

possible backlash from their superiors given their investment to their role (see Shelton et al., 2006). This is unsurprising since those who are highly committed to their jobs (i.e., high identifiers) may aspire to a promotion within the company, and therefore they might be less likely to behave in a manner that could jeopardize this aspiration. Thus, in Study 2, we used an intergroup context that was not confounded with power. Another advantage of the intergroup context used in Study 2 (university membership) was that it circumvents the issue of progressive aspiration inherent in the intergroup context in the present study.

Study 2

Study 2 was designed to: a) address the limitations of Study 1, b) generalise the findings of Study 1 to another real intergroup context, and c) examine our predictions regarding the moderating impact of social context (or audience) on the reciprocity patterns shown in Study 1 (see Figure 1b). In this study an intergroup context with unequal status connotations (where Keele University occupies a lower status position relative to University of Warwick, see http://www.guardian.co.uk/education/table/2010/jun/04/university-league-table), but without a power imbalance was used (University of Keele students vs. University of Warwick students). As similar interactive effects of metastereotyping and identification were obtained with the two dependent measures in Study 1 (outgroup evaluation and attitude towards the outgroup), the current study focused only on outgroup evaluation for parsimony sake.

Method

Participants and Design

Eighty undergraduate students recruited opportunistically from a UK university campus took part in this study (29 males and 51 females; $M_{age} = 20.71$, $SD = 2.17$). A between subjects design was used: Metastereotype valence (focal independent variable) and audience (proposed

moderator) were manipulated, while identification (proposed moderator), anger (proposed mediator) and outgroup evaluation (the dependent variable) were measured.

Procedure and Measures

The intergroup context for the current study was Keele University students' (ingroup) versus students of University of Warwick (outgroup). First, participants were informed that the study was about people's attitudes towards, and perceptions of different social groups, such as those from high profile universities (e.g., University of Cambridge, University of Warwick and University of Oxford) and relatively lower profile ones (e.g., University of Staffordshire, Keele University and Coventry University). They were then led to believe that responses from students in some of the higher profile universities have been collected and that we were now interested in the responses of students from some of the lower profile ones. Participants were then asked to complete a four-item measure of identification identical to the one used in Study 1, but adapted to suit the target social group membership for the current study (e.g., "I am proud to be a Keele University student"). Responses were obtained on a 6-point scale (1 = ***strongly disagree*** to 6 = ***strongly agree***; α = .92, $CI_{95\%}$: LL = .881, UL = .942). Next, the audience manipulation was introduced following a similar approach described in Owuamalam (2009). Participants were led to believe that their responses would either be analysed by an outgroup member (a student of University of Warwick, n = 40) or an ingroup member (a student of Keele University, n = 40). Specifically, participants were told that:

> "The data generated in the current study will be made available to a third year student, Sam Dove, who is a student of University of Warwick [Keele University]. This student

will analyse the data from this study as part of a final year undergraduate project[2].

If you are willing for your answers to be used in this way, please continue."

Following the audience manipulation, participants completed a metastereotype valence manipulation task identical to the one used in Study 1, but reflecting the current intergroup focus. Specifically, half of the participants were asked to reflect on negative metastereotypes (n = 40), and half were asked to reflect on positive metastereotypes (n = 40). Again, the effectiveness of this manipulation was assessed using the single-item measure of metastereotype positivity described in Study 1. Next, participants completed a similar measure of anger to that used in Study 1 (1 = *a little*, to 6 = *a lot,* α = .85, $CI_{95\%}$: LL = .773, UL = .907).

Finally, participants evaluated the outgroup using a similar approach as in Study 1: They were asked to select from a list of twelve traits, as many traits that can be used to describe the outgroup (students of University of Warwick). Six of these traits were negative (boastful, snobbish, disagreeable, annoying, disrespectful and gullible) whereas the other six were positive (studious, organised, hardworking, observant, wise and resourceful). As in Study 1, we selected traits that were deemed to be relevant for the current intergroup context. Negative trait selections were summed for each participant, as was the number of positive trait selections. Outgroup evaluation was calculated by subtracting total positive trait selections from total negative trait selections (scale ranged from -6 to 6 with higher scores indicating less favourable evaluation of the outgroup). On completing the study, participants were debriefed and thanked for taking part.

Results

[2] Note that all participants consented for their data to be used in this way.

Metastereotype manipulation check

A moderated hierarchical regression analysis was performed to establish the effect of the independent variables on the metastereotype positivity measure. Metastereotype valence (1 = negative, -1 = positive) and audience (-1 = ingroup audience, 1 = outgroup audience) were effect coded, while identification was mean centred (Aiken & West, 1991). These variables were entered as predictors together with their 2-way and 3-way interaction terms. Audience was included in this analysis to rule out the possibility that it could have confounded our metastereotype manipulation (Vorauer, Hunter, Main, & Roy, 2000). Metastereotype positivity was included as the dependent variable. Results revealed a significant main effect of metastereotype valence, $B = -.36$, $SE = .13$, $p = .006$ on metastereotype positivity. As in Study 1, metastereotype positivity was lower in the negative metastereotype condition ($M = 3.45$, $SD = .96$) compared to the positive metastereotype condition ($M = 4.15$, $SD = 1.19$). Neither the main effect of identification, $B = .14$, $SE = .18$, $p = .452$, audience, $B = -.04$, $SE = .12$, $p = .754$ nor their 2-way and 3-way interaction terms emerged as significant (ps > .05). Reflecting the effectiveness of the metastereotype manipulation, these results suggest that participants generally focused on the relevant metastereotypes regardless of levels of identification and group membership of the audience.

Main analyses

Bivariate correlations are presented in Table 1 depicting the relationships between the constructs assessed. Two conditional process models were analysed first to test the robustness of the first model presented in Study 1 without audience (see Figure 1a) and then, an additional model which extends the first model via the inclusion of audience effects (see Figure 1b). Metastereotype valence (1 = negative, -1 = positive), and audience (1 = outgroup, -1 = ingroup)

were effect coded, while anger and identification were mean centred prior to these analyses. As in Study 1, gender was included as a covariate (Eagly & Steffen, 1986). Again, a bootstrapping procedure was used to obtain a confidence interval around the proposed indirect effect (Preacher et al., 2007; Model 2).

Model 1: Consistent with results from Study 1, and as predicted, the path from metastereotype valence to anger (see Figure 1b) revealed a marginal interaction between metastereotype valence and identification in predicting anger (see Table 2). Simple slope analysis for this interaction (Aiken & West, 1991) revealed that high identifiers reported greater levels of anger in the negative metastereotype condition than in the positive metastereotype condition, $B = .46$, $SE = .16$, $p = .004$: An effect that was absent for low identifiers, $B = .07$, $SE = .16$, $p = .686$ (see Figure 3a).

Anger significantly predicted high identifiers' evaluation of the outgroup (see Table 2). Corroborating Study 1, high identifiers' who focused on negative metastereotypes evaluated the outgroup less favourably with increasing levels of anger (see Table 2, and also Figure 3a-b). This effect was again absent for low identifiers (see Table 2, and also Figure 3a-b).

To examine our audience hypothesis, the path from anger to outgroup evaluation was interacted with audience (see Figure 1b) in a further conditional process analysis using a macro provided by Preacher et al. (2007; Model 4). Results showed a marginally significant interactive effect of anger and audience on outgroup evaluation, $B = .42$, $SE = .24$, $p = .08$. Importantly, bootstrapped CIs supported our prediction, and showed that high identifiers who reported increased anger arousal following negative metastereotype activation expressed less favourable evaluation of the outgroup, when the audience was outgroup ($B = .53$, $SE = .26$, 95% CI: UL = -.083, LL = -.368), but not when the audience was ingroup ($B = .15$, $SE = .17$,

95% CI: UL = .016, LL = -.080) (see also Figure 3c-d for graphical illustrations). Low identifiers' evaluation of the outgroup again remained fairly neutral either when the audience was ingroup (B = .04, SE = .08, 95% CI: UL = -.083, LL = -.368) or outgroup (B = .12, SE = .22, 95% CI: UL = -.083, LL = -.368) (see Figures 3c-d for graphical illustrations). Note also, as in Study 1, that the Metastereotype valence x Identification direct interaction effect on outgroup evaluation was not significant (see Table 2), indicating that anger adequately explains the effect of metastereotyping on outgroup judgements for high identifiers.

Discussion

Consistent with Study 1, high identifiers who activated negative metastereotypes evaluated the outgroup less favourably with increasing levels of anger arousal. This effect was visible, however, only when they believed their feelings would be communicated to the outgroup. Again, no measurable difference was seen in the levels of anger arousal expressed by low identifiers and consequently their evaluations of the outgroup were fairly neutral.

General Discussion

We aimed to show in the present research that metastereotyping can prompt reciprocal outgroup attitudes and evaluations of an outgroup—provided group members are strong identifiers—and, that this effect would be driven by anger. It was further hypothesised that such reciprocity would be most evident when high identifiers could communicate their feelings to the perceived source of these stereotypes - the outgroup. We did not expect that these effects would emerge for low identifiers as they generally distance themselves from the ingroup when metastereotypes are activated (Owuamalam & Zagefka, 2011). Results supported these predictions and were generally consistent across two studies and two intergroup contexts.

First, findings across the two studies support a reciprocity interpretation in that high identifiers who activated negative metastereotypes correspondingly evaluated the outgroup less favourably and reported more negative attitudes towards the outgroup with increasing levels of anger (Studies 1 and 2). This finding is consistent with previous work on intergroup reciprocity (e.g., Doosje & Haslam, 2005; Roger & Prentice-Dunn, 1980), but extends it in one important way: by showing that *mere focus* on metastereotypes—as opposed to actual behaviour of an outgroup—can motivate reciprocal reactions. Although Kamans et al (2009) show that ingroup members acted more negatively (lazier) towards an outgroup when they activated negative metastereotypes, their result suggests assimilating into a known group stereotype and not necessarily reciprocity in a strict sense (i.e., "if you think we are lazy, then I will show you what laziness looks like"). Thus, and although complimentary to Kamans et al.'s findings, our results demonstrate that group members do reciprocate opinions they believe outgroup members have of the ingroup. This is particularly important in understanding tractable intergroup conflicts, where continued hostility towards an outgroup may not necessarily reflect actual negative behaviour from rival groups, but rather may be fuelled by the expectations that ingroup members have concerning how their ingroup is perceived by the relevant outgroup.

Second, the present finding that anger explains direct reciprocity reconciles—at least partly—two traditions within social identity theory (reciprocity and social identity management research). Previous research in the social identity management literature has suggested that high identifiers are likely those who would be motivated to present the ingroup in a 'good light' when they activate negative metastereotypes and believe their messages would be communicated to the outgroup, by engaging in pro-social attitudes and behaviour towards the

outgroup (Hopkins et al., 2007; Owuamalam, 2009; Owuamalam et al., 2012). As we have argued earlier, this assumption is not necessarily incompatible with the idea that high identifiers also reciprocate metastereotypes particularly before an outgroup audience, in that such a forum affords group members the opportunity to try to change the status quo. However, we suspect that the process for these two outcomes following negative metastereotype activation may well be different. For example, we have argued that high identifiers' negative attitudinal orientation following negative metastereotype activation was because they believe negative metastereotypes are unfair and inaccurate depictions of the ingroup and, as such, focusing on these stereotypes makes them angry, which then makes them ***strike-back*** at the source of ingroup directed negativity (Chen et al., 2004). But, there may be times when high identifiers feel that negative metastereotypes are legitimately ascribed and under such circumstances it might be possible that these group members adopt a different more pro-social attitude and behaviour towards the outgroup (e.g., helping; see also Marques & Yzerbyt, 1988). Indeed research on the intergroup sensitivity effect suggests that group members are less sensitive to criticisms from an outgroup particularly when they believe such criticisms are constructive (Hornsey, Robson, Smith, Esposo, & Sutton, 2008). However, we did not directly compare these competing assumptions, neither did we directly examine the moderating/mediating role of perceived legitimacy of negative metastereotypes on outgroup attitudes and judgments and future studies could benefit from doing so.

In contrast to the effect found for high identifiers in the outgroup condition[i], there was no visible effect for these group members when the audience was ingroup, confirming our expectation that a social identity improvement motivated reciprocity is not relevant when the audience is ingroup since fellow group members cannot directly change these stereotypes. This

is not to say, however, that high identifiers would never make negative judgements or report negative attitudes towards the outgroup before fellow group members. Indeed such a forum would present group members with an 'uncensored' opportunity to relate with others who may hold the same reservations about the outgroup. What we are suggesting, however, is that as long as the motivation is to improve social identity (and not simply seeking ***support*** from fellow members), then an outgroup audience presents a feasible forum in which members can communicate their dissatisfaction in anticipation of change (van Zomeren et al., 2004). We acknowledge, though, that these competing processes were not examined in the present study and we believe this could be an important direction for future investigation.

Low identifiers, on the other hand, maintained a generally neutral-to-favourable orientation in their attitudes and evaluations of the outgroup and this was because they did not experience significant fluctuations in their levels of anger arousal following negative metastereotype activation, as expected. As we have argued earlier, these group members' emotional investment to the ingroup is generally low and, as a result, it is unlikely they would be concerned by negative metastereotypes to the same extent as high identifiers. It is unsurprising, therefore, that their attitudes and evaluations of the ingroup were fairly neutral and further reinforce previous suggestions that these group members generally disconnect from the ingroup when concerns about their social identity are raised (Owuamalam & Zagefka, 2011; Spears et al., 1997). We do not contend, however, that low identifiers would always refrain from reciprocal negativity towards the higher status outgroup when negative metastereotypes are salient. Rather, we maintain that so long as low identifiers are not sufficiently angered by these stereotypes, then one should expect patterns similar to the one shown in the current investigation (see Figures 2a and 3a; cf. Berkowitz, 1969; 1989).

Limitations

It is important to note that although we tested and found support for the metastereotype reciprocity prediction using two different intergroup contexts, the groups employed in this research had relatively good relations[ii]. Indeed we acknowledge that outgroup judgements are generally positive across the two studies ($M_{\text{Study 1}}$ = -1.01; M_{Study} 2 = -1.29): A finding which is also generally consistent with the literature on outgroup favouring judgements amongst members of low status groups (Sachdev, & Bourhis, 1987; see also Ellemers et al., 1999). Thus, one might expect a different pattern in contexts where the intergroup setting is characterized by historical negative relations (such as Israeli vs. Palestinian context). Having said that, we see no theoretical reasons why the processes shown here would be any different in intergroup settings with historical animosity towards one another. It is entirely possible that effects demonstrated in the current research may even be more pronounced in such settings because metastereotypes might in fact reflect *actual* negative intergroup experiences. Also, and although we have suggested that perceived illegitimacy of the metastereotypes might be reason why group members, particularly high identifiers, feel angry about these beliefs, this was not directly examined in the current research. Future research could benefit from exploring this relationship directly.

Furthermore, we have suggested that anger arousal following negative metastereotype activation led members to *strike-back* at perceived source of negativity via corresponding negative judgements of the outgroup. Some might argue, based on the reciprocity norm (Gouldner, 1960) that negative outgroup judgement may be seen by members as a *socially acceptable* means of conveying discontent with unflattering stereotypes of the ingroup and, therefore, a *pro-social* (rather than a '*hot-headed*') reaction. In other words, we do not yet

know whether an effect of anger following negative metastereotype activation is restricted to normative expressions of discontent or extends beyond this to non-normative reactions (e.g., violent behaviour towards the outgroup). That said, demonstrating an effect negative metastereotyping on normative and non-normative reactions is beyond the scope of the current investigation, but nonetheless one that future research could explore.

Conclusion

The current investigation showed that *merely focusing* on metastereotypes can elicit reciprocal attitudes and judgements of the outgroup and such reciprocity is driven by anger and visible only among high identifiers, particularly when they believe their feelings (in terms of reciprocal evaluations of the outgroup) would be made known to the outgroup. Those who were weakly identified with the ingroup did not engage in this retaliatory behaviour presumably because the outgroup's opinions of the ingroup bears little relevance to how they perceive themselves personally. Peace negotiations between groups could potentially benefit by understanding these often unspoken views and expectations which the relevant parties have of each other.

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Table 1. *Bivariate correlations (and descriptive statistics) of the key variables in Studies 1 and 2*

	1	2	3	4	5	6	7	*M*	*SD*
1. Metastereotype valence	1	-.39**	.02	--	.37**	.30**	.12	0.00 (0.00)	1.01 (1.01)
2. Metastereotype positivity	-.31**	1	.30**	--	-.39**	-.35**	-.34**	3.29 (3.80)	0.88 (1.13)
3. Identification	-.06	.10	1	--	-.19†	-.39**	-.36**	3.82 (5.00)	0.89 (0.80)
4. Audience	.00	-.02	.20†	1	--	--	--	-- (0.00)	-- (1.01)
5. Anger	.29**	-.23*	-.06	-.07	1	.49**	-.52**	3.05 (2.09)	1.07 (0.99)
6. Outgroup evaluation	.19†	-.09	-.02	-.30**	.38**	1	-.36**	-1.01 (-1.29)	2.38 (2.23)
7. Outgroup Attitude	--	--	--	--	--	--	--	51.15	17.73

† $p < .10$, * $p \leq .05$ & ** $p < .01$ respectively (all two-tailed). Study 1 correlation coefficients are shown at the upper diagonal of the correlation matrix, while that of Study 2 are shown below the diagonal. Study 1 means (*M*) and standard deviation (*SD*) are presented outside the parentheses while those for Study 2 are presented in parentheses. Coding for categorical variables: metastereotype valence (1 = negative, -1 = positive), audience (1 = outgroup, -1 = ingroup). Note: Presentation of the variables in this table does not reflect the actual sequence of measurement of these constructs (the actual sequence is already reported in the respective method section).

Table 2. *The conditional indirect effects of metastereotype valence on outgroup evaluation (and outgroup attitude) when anger is the mediator while identification is the moderator*

	Study 1			*Study 2*		
	B	*SE*	Two-tailed *p*	*B*	*SE*	Two-tailed *p*
Mediator Variable Model (Anger)						
Constant	.23	.35	.510	.33	.39	.401
Metastereotype valence (MV)	.40	.11	< .001	.26	.11	.017
Identification (ID)	-.23	.12	.062	-.13	.15	.399
MV*ID	.36	.12	.004	.25	.15	.099
Gender	-.15	.21	.476	-.20	.23	.399
Dependent Variable Model (Outgroup Judgments)						
Constant	-1.18 (3.14)	.72 (.82)	.106 (< .001)	-1.60	.87	.071
MV	.43 (-.08)	.24 (.18)	.074 (.670)	.19	.25	.441
ID	-.86 (-.55)	.25 (.20)	.001 (.006)	.14	.33	.656
MV*ID	.24 (.14)	.26 (.20)	.371 (.496)	-.34	.33	.308
Anger (AG)	.73 (.76)	.24 (.19)	.004 (< .001)	.85	.26	.001
Gender	.11 (-.22)	.44 (.34)	.813 (.509)	-.18	.51	.726

Conditional indirect effect of MV on outgroup evaluation (and attitude) via AG at ±1SD of mean ID	*Boot B*	*Boot SE*	*95% CI*		*Boot B*	*Boot SE*	*95% CI*	
			LL	UL			LL	UL
High identifiers [+1SD]	.52 (.54)	.22 (.20)	.165 (.202)	1.022 (.981)	.38	.18	.116	.854
Low Identifiers [-1SD]	-.06 (.06)	.13 (.14)	-.168 (-.165)	.357 (.392)	.08	.16	-.212	.292

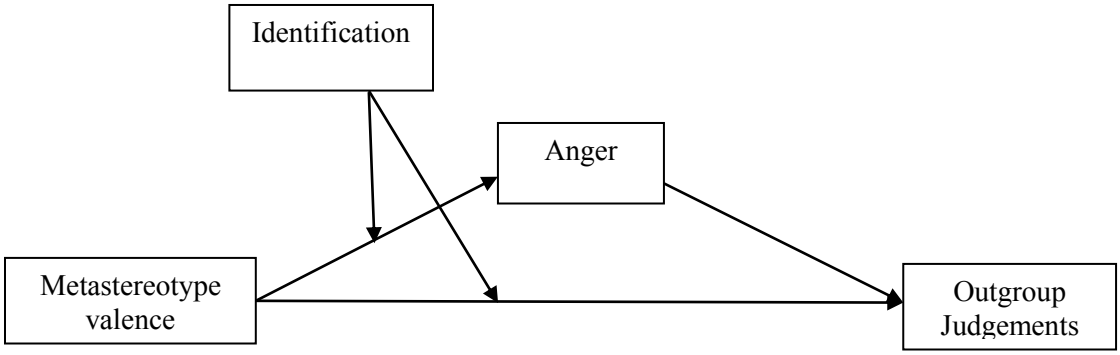
Number of bootstrap resamples in both studies = 5, 000 (original *N* = 78 & 80 for Studies 1 and 2 respectively). *B* = Unstandardized beta weights, *SE* = standard error. The boot *B* coefficients reported at ±1*SD* of mean ID are bootstrapped estimates for the indirect effect of MV on outgroup evaluation and attitudes towards outgroup via anger (numbers in parentheses in Study 1 relate to attitudes towards the outgroup). Note: Bias corrected and accelerated CIs are reported here to adjust for bias (i.e., the difference between estimates from the original sample and its bootstrapped equivalent) and skewness in the bootstrap distribution (Efron, 1987). Coding for binary predictors: Metastereotype valence (1 = negative condition, -1 = positive condition), Audience (1 = outgroup audience, -1 = ingroup audience), Gender (1 = men, 2 = women).

Figure Captions

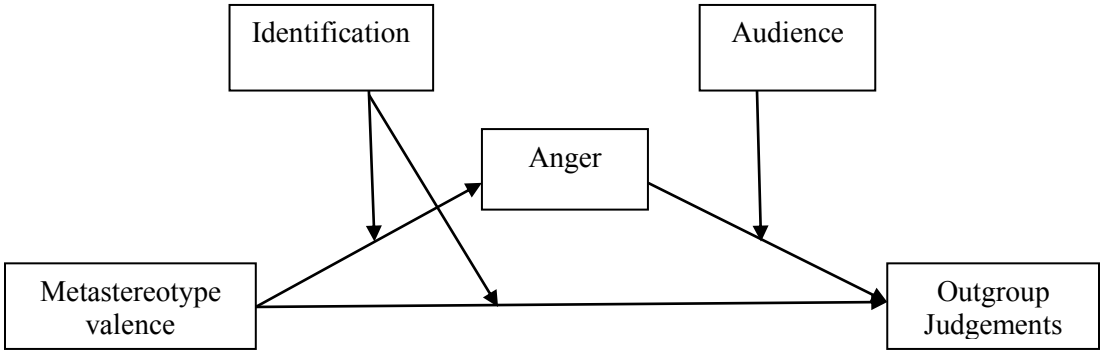
Figure 1a-b. Conceptual models of outgroup judgements following metastereotype activation

Figure 2a-c. Graphical depictions of the conditional indirect effects of metastereotype valence on outgroup judgement via anger at levels of identification (Study 1). Note: for Figures 2b-c, charted are simple slopes depicting the values of the outcome (outgroup attitude and evaluation) given values of the mediator (anger) for specific indirect effects of the independent variable (metastereotype valence) at ±1SD of the moderator (identification).

Figure 3a-d. Graphical depictions of the conditional indirect effects of metastereotype valence on outgroup judgement via anger at levels of identification (Study 2). Note: For Figures 3b and 3c-d, charted are simple slopes depicting the values of the outcome (outgroup evaluation) given values of the mediator (anger) for specific indirect effects of the independent variable (metastereotype valence) at ±1SD of the moderator (identification) (b) when audience is ingroup or outgroup (c-d).

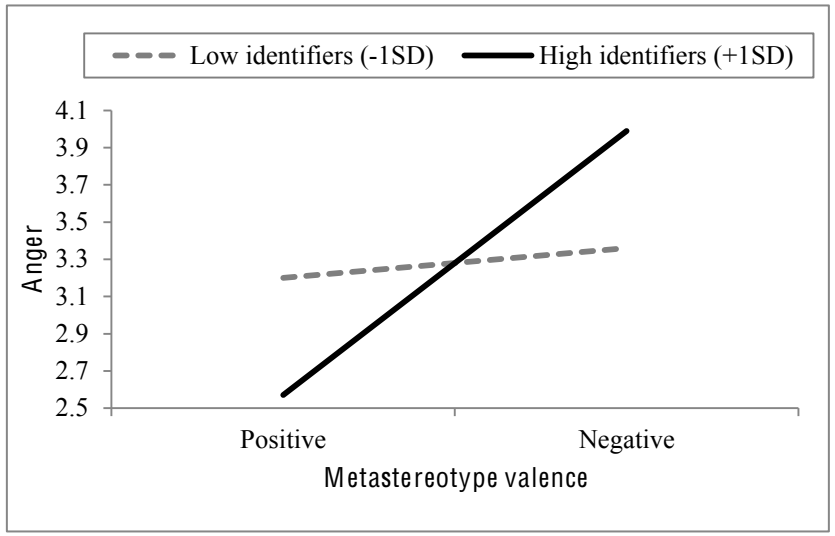


(a) Studies 1 & 2.

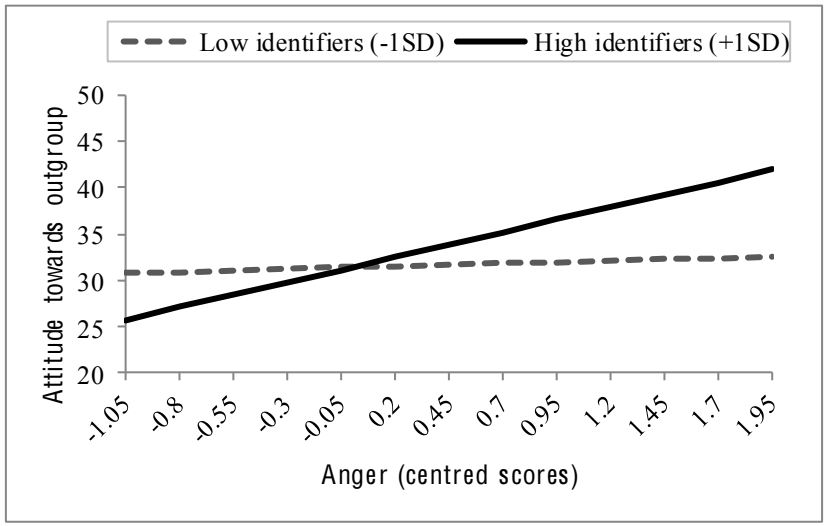


(b) Study 2.

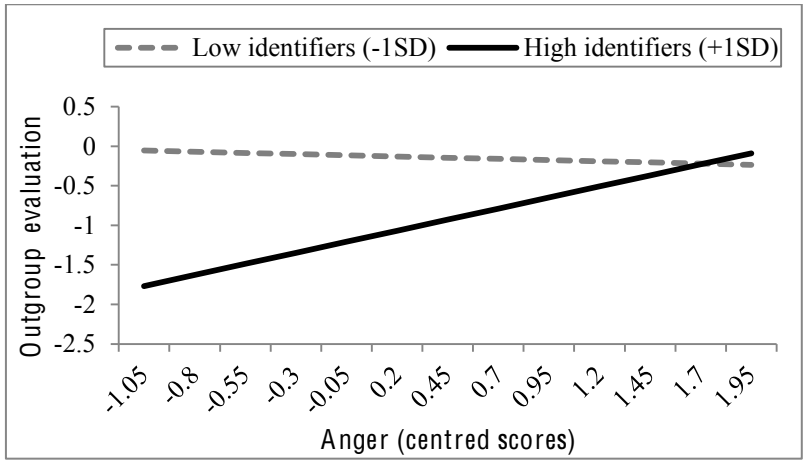
Study 1


Low identifiers (-1SD)
High identifiers (+1SD)
Anger
4.1
3.9
3.7
3.5
3.3
3.1
2.9
2.7
2.5
Positive
Negative
Metastereotype valence

(a)

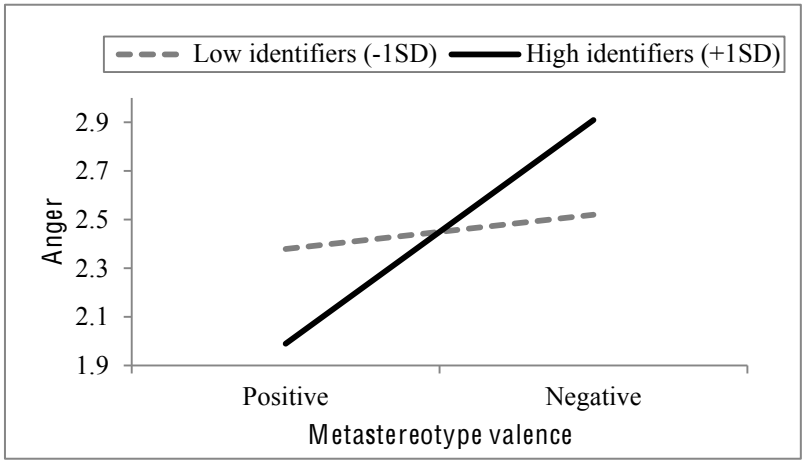

Low identifiers (-1SD)
High identifiers (+1SD)
Attitude towards outgroup
50
45
40
35
30
25
20
-1.05
-0.8
-0.55
-0.3
-0.05
0.2
0.45
0.7
0.95
1.2
1.45
1.7
1.95
Anger (centred scores)

(b)

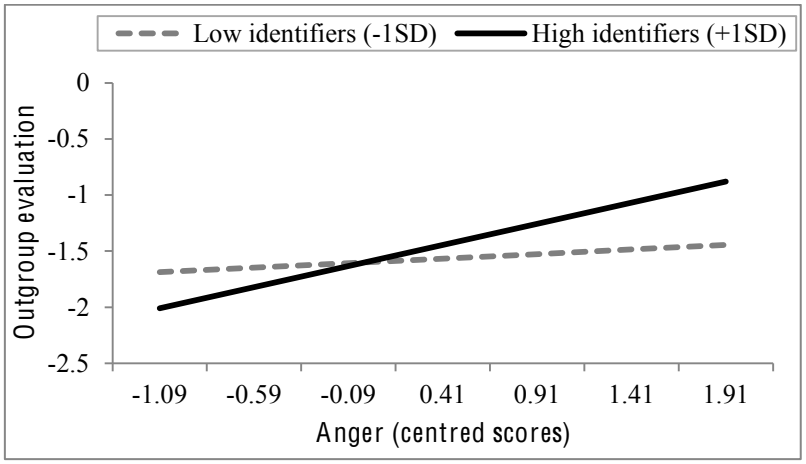

Low identifiers (-1SD)
High identifiers (+1SD)
Outgroup evaluation
0.5
0
-0.5
-1
-1.5
-2
-2.5
-1.05
-0.8
-0.55
-0.3
-0.05
0.2
0.45
0.7
0.95
1.2
1.45
1.7
1.95
Anger (centred scores)

(c)

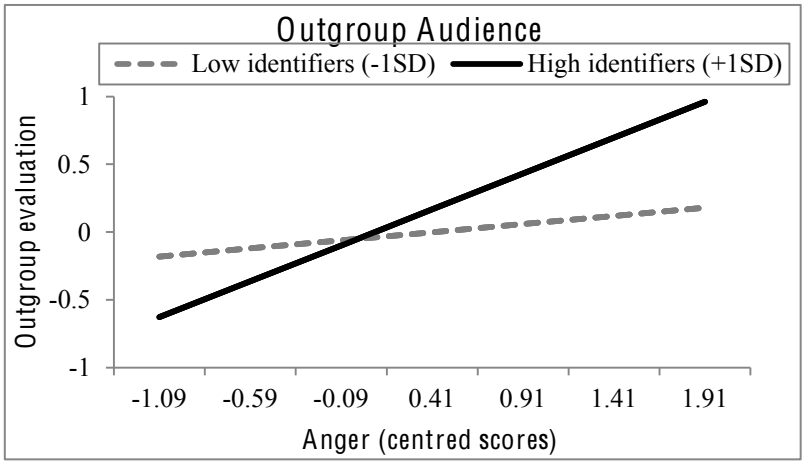
Study 2


Low identifiers (-1SD)
High identifiers (+1SD)
Anger
2.9
2.7
2.5
2.3
2.1
1.9
Positive
Negative
Metastereotype valence

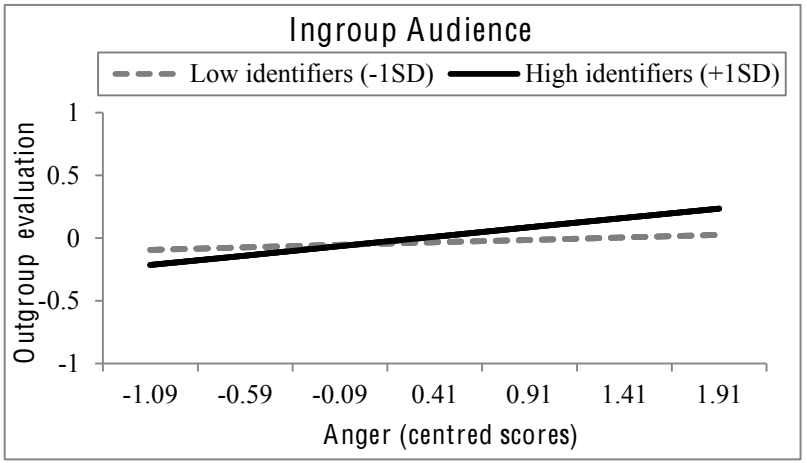
(a)


Low identifiers (-1SD)
High identifiers (+1SD)
Outgroup evaluation
0
-0.5
-1
-1.5
-2
-2.5
-1.09
-0.59
-0.09
0.41
0.91
1.41
1.91
Anger (centred scores)

(b)


Outgroup Audience
Low identifiers (-1SD)
High identifiers (+1SD)
Outgroup evaluation
1
0.5
0
-0.5
-1
-1.09
-0.59
-0.09
0.41
0.91
1.41
1.91
Anger (centred scores)

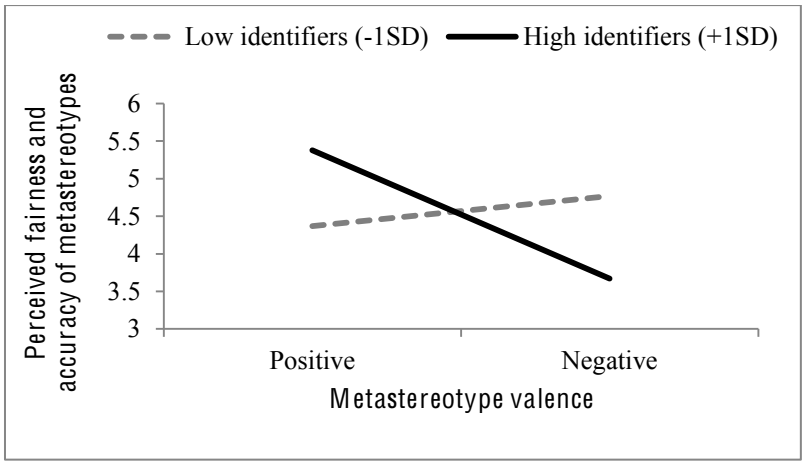
(c)


Ingroup Audience
Low identifiers (-1SD)
High identifiers (+1SD)
Outgroup evaluation
1
0.5
0
-0.5
-1
-1.09
-0.59
-0.09
0.41
0.91
1.41
1.91
Anger (centred scores)

(d)

Appendix A

The effect of focusing on either positive or negative metastereotypes* on perceived fairness and accuracy of an outgroup's (junior doctors) impressions of the ingroup (psychology students) among high and low identifiers**



* Effect of metastereotype valence on perceived fairness and accuracy of metastereotypes was significant, $B = -.33$, $SE = .16$, $p = .045$: Metastereotypes were perceived to be less accurate and fair among those who activated negative metastereotypes ($M = 4.19$, $SD = 1.79$; $n = 48$) compared to those who activated positive metastereotypes ($M = 4.85$, $SD = 1.55$; $n = 52$).

**Effect of identification on perceived fairness and accuracy of metastereotypes was not significant ($p = .887$).

Notes

[i] It is worth pointing out that group members generally reported more positive attitudes and less negative evaluation of the outgroup when the audience was outgroup ($M_{attitude}$ = 55.75, SD = 13.94; $M_{evaluation}$ = -1.95, SD = 2.39) compared to when the audience was ingroup ($M_{attitude}$ = 48.50; SD = 16.88; $M_{evaluation}$ = -0.63, SD = 1.86) ps < .05. This suggests that beyond the processes outlined in the current paper, members of low status groups are generally positively oriented towards the higher status outgroup (see Ellemers et al., 1999; and also Sachdev & Bourhis, 1987) and particularly before an outgroup audience which we believe is consistent with an anticipatory reciprocity account. However, our moderated mediation analyses revealed the opposite pattern which we believe is more consistent with a direct reciprocity account, provided group members have strong emotional ties with the ingroup and are sufficiently angered by negative metastereotypes.

[ii] Although outgroup evaluation of group members across the two studies were generally positive (scores were all significantly lower than the scales' midpoint [zero i.e., neutral]: $t_{study1}(77) = 3.826$, $p < .001$ and $t_{study2}(79) = 5.167$, $p < .001$; see Table 1 for means and SDs), attitudes towards the outgroup across both studies did not differ significantly from the scales' mid-point of 50% (or neutral: $t_{study1}(77) = .575$, $p = .567$ and $t_{study2}(79) = 1.202$, $p = .233$; see Table 1 for means and SDs). This suggests that group members' attitudes towards their higher-status counterparts across the two studies were generally neutral, which might also explain their generally positive evaluations of them. Thus, our results may be an under-estimate of the effect of metastereotype valence on outgroup judgements and attitudes towards a higher status outgroup for intergroup contexts that are burdened with intractable conflicts.