

When Does Anticipating Group-Based Shame Lead to Lower Ingroup Favoritism?  
The Role of Status and Status Stability

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### Abstract

In two studies we examined whether and when anticipated group-based shame leads to less ingroup favoritism on the part of members of high-status groups in stable hierarchies. In Study 1 (N = 195) we measured anticipated group-based shame and found that it only negatively predicted ingroup favoritism in stable high-status groups. When anticipated group-based shame was low, members of such groups exhibited the highest levels of ingroup favoritism. However, these groups displayed the lowest levels of ingroup favoritism when shame was high. In Study 2 (N = 159) we manipulated anticipated group-based shame using a bogus-pipeline method. Members of stable high-status groups were less likely to discriminate against a low-status group in the high than in the low anticipated group-based shame condition. This may explain discrepancies in previous research regarding the amount of ingroup favoritism exhibited by (stable) high-status groups: Shame only leads to less discrimination when identity was secure.

*Keyword:* status, stability, group-based guilt, group-based shame, anticipated emotions

## When Does Anticipating Group-Based Shame Lead to Lower Ingroup Favoritism?

### The Role of Status and Status Stability

Previous research has found inconsistent results regarding the amount of ingroup favoritism exhibited by high-status groups in stable hierarchies. Some researchers suggest that stable high-status groups use their superior position in a social hierarchy to justify discrimination, resulting in ingroup bias (Jost & Banaji, 1994; Sachdev & Bourhis, 1987, 1991; Turner & Brown, 1978). Others suggest that stable high-status groups do not need to discriminate against a low-status group because they already possess a secure prestigious position in the social hierarchy, resulting in egalitarian behavior (Doosje, Ellemers, & Spears, 1995) or even outgroup bias (“noblesse oblige”; Leach, Snider & Iyer, 2002). We argue that the amount of ingroup favoritism exhibited by stable high-status groups can depend on the extent to which ingroup members anticipate experiencing group-based shame for ingroup favoritism, and that this can account for these inconsistent findings.

Anticipated group-based shame may inhibit immoral ingroup actions, such as ingroup favoritism (Shepherd, Spears, & Manstead, 2012) and is likely to be elicited when a proposed ingroup transgression is believed to be illegitimate (Shepherd, Spears, & Manstead, in press). In the current paper we extend this research by testing the effects of social status and status stability on this inhibition. We argue that anticipated group-based shame is more likely to moderate ingroup favoritism in *stable* high-status groups than in unstable high-status groups or in low-status groups. Because their prestigious position is secure, stable high-status groups can exhibit egalitarian behavior without aversive consequences. Such groups are therefore likely to exhibit egalitarian behavior when they anticipate group-based shame for ingroup bias. However, members of unstable high-status groups or of low-status groups may be reluctant to undertake egalitarian behavior when they anticipate group-based shame because

this conflicts with them defending or improving their position in the social hierarchy. We tested these hypotheses in two studies.

### *Anticipated Group-Based Shame and Guilt*

People may experience guilt and shame for the actions or attributes of their group in the absence of any direct personal involvement when they appraise these actions or attributes as illegitimate (Branscombe, Doojse, & McGarty, 2003; Doosje, Branscombe, Spears, & Manstead, 1998; Lickel, Schmader, & Spanovic, 2007). The interpretation of this illegitimate action or attribute determines whether group-based shame or guilt is elicited. Although there is some debate regarding whether shame stems from actions that imply a more global (e.g., Lewis, 1971; Tangney & Dearing, 2002) or a more specific lapse of one's identity and reputation (e.g., Gausel & Leach, 2011; Gausel, Leach, Vignoles, & Brown, 2012), there appears to be consensus that the focus is on one's identity rather than the behavior (Allpress, Barlow, Brown, & Louis, 2010; Ferguson, Brugman, White, & Eyre, 2007; Lickel, Schmader, Curtis, Scarnier, & Ames, 2005). Guilt, on the other hand, is likely to be evoked when people focus on an illegitimate ingroup action (Harth, Kessler, & Leach, 2008; Leach, Iyer, & Pedersen, 2006).

Previous research has focused on directly experienced group-based guilt and shame. However, recent research shows that people may *anticipate* these group-based emotions when they appraise a *future* ingroup action as illegitimate (Shepherd et al., 2012, in press). For example, we have found that people anticipate these emotions in relation to possible future instances of ingroup favoritism (Shepherd et al., 2012), and that British people may anticipate these emotions for proposals to use military force against Iran's nuclear weapons program (Shepherd et al., in press). In line with previous literature (e.g., Baumeister, Vohs, DeWall, & Zhang, 2007; Damasio, 1994; Haidt, 2001), we argue that these anticipated *group-based* emotions serve the social function of promoting moral *intergroup* behavior by

signaling the aversive consequences of a future ingroup transgression. Group-based shame is closely associated with social identity (Iyer, Schmader, & Lickel, 2007; Lickel et al., 2005; Schmader & Lickel, 2006). Its anticipated counterpart is therefore likely to signal that a proposed ingroup action (such as a military intervention in Iran) is likely to damage social identity. Because group members are motivated to protect social identity (Tajfel & Turner, 1979, 1986), they are likely to inhibit the emotion-eliciting action. Anticipated group-based shame may, therefore, be regarded as an emotional warning signal designed to prevent group members from performing actions that would damage their social identity. Because anticipated group-based guilt is less closely associated with social identity (Lickel et al., 2007), it is less likely to inhibit future ingroup transgressions. In line with this, we have found that that anticipated group-based shame (but not guilt) positively predicted collective action against a proposed ingroup transgression (Shepherd et al., in press) and negatively predicted ingroup favoritism (Shepherd et al., 2012). In the present studies we extend this research by assessing the role of status and status stability in moderating the relationship between anticipated group-based shame and ingroup favoritism. Moreover, we also extend the intergroup literature by assessing whether the amount of ingroup favoritism exhibited by members of stable high-status groups is dependent on the extent to which they anticipate group-based shame for this action.

#### *Status, Stability and Anticipated Group-Based Shame*

As noted above, anticipated group-based shame increases egalitarian behavior and deters transgressions. This anticipated emotion therefore serves the social function of promoting behavior relating to the harm/fairness dimension of morality. Recent research has found that when faced with a threat to the ingroup, group members are more concerned about the ingroup loyalty than harm/fairness moral dimension (Leidner & Castano, 2012). The prosocial effect of anticipated group-based shame may only be present in non-threatening

circumstances because in threatening circumstances ingroup loyalty concerns may override the effects of this emotion. Because the ingroup's status in a social hierarchy and the stability of this hierarchy may pose a threat to the ingroup (Tajfel & Turner, 1979, 1986), the inhibitory effect of anticipated group-based shame on ingroup favoritism is likely to be dependent on these factors.

### *Stable High-Status Groups*

Ingroup favoritism is moderated by a group's position in a status hierarchy and the stability of this hierarchy (Bettencourt, Dorr, Charlton, & Hume, 2001; Mullen, Brown, & Smith, 1992; Scheepers, Spears, Doosje, & Manstead, 2006). As mentioned above, there is some debate regarding the amount of ingroup favoritism exhibited by high-status groups in stable hierarchies. Such groups already possess a secure, prestigious position, and therefore do not need to discriminate against low-status groups for either identity-based or instrumental reasons (Scheepers et al., 2006). Because of their security, stable high-status groups can treat low-status outgroups fairly (or even generously) without losing their advantageous position in the social hierarchy (Leach et al., 2002; Nadler, Harpaz-Gorodeisky, & Ben-David, 2009; Spears, Greenwood, de Lemus, & Sweetman, 2010), leading some researchers to argue that such groups should display egalitarian behavior (Doosje et al., 1995). However, others suggest that these groups may use their superiority to justify ingroup favoritism, resulting in ingroup bias (Jost & Banaji, 1994; Sachdev & Bourhis, 1987, 1991; Turner & Brown, 1978).

Jetten and colleagues (Jetten, Spears, Hogg, & Manstead, 2000) provided a way of resolving this issue by suggesting that the amount of ingroup favoritism exhibited by stable high-status groups is moderated by the perceived legitimacy of this behavior. Such groups should display strong ingroup bias when they can use their superior position to legitimize ingroup favoritism, but engage in egalitarian behavior when ingroup favoritism is perceived as illegitimate. As noted earlier, perceiving a future ingroup action as illegitimate is likely to

evoke anticipated group-based guilt and shame (Shepherd et al., in press), and anticipated group-based shame negatively predicts ingroup favoritism (Shepherd et al., 2012). Extending the work of Jetten and colleagues, we propose that the amount of ingroup favoritism exhibited by stable high-status groups will be moderated by the predicted emotional consequences of the perceived legitimacy appraisal, and more specifically by anticipated group-based shame. When ingroup bias is perceived as illegitimate, stable high-status groups are likely to anticipate group-based shame if group members were to discriminate against the outgroup. Because this group can exhibit egalitarian behavior (or outgroup favoritism) without losing its prestigious position, members are likely to inhibit ingroup favoritism in order to avoid anticipated group-based shame and the implied social identity threat. When ingroup favoritism is believed to be legitimate, on the other hand, shame is unlikely to be invoked in the first place.

#### *Low-Status and Unstable High-Status Groups*

Low-status groups are motivated to improve their position in the social hierarchy because their inferior status threatens their social identity (Tajfel & Turner, 1979, 1986). When the hierarchy is unstable low-status groups may seek to strengthen the ingroup in order to improve their chances of social change (Ellemers, van Knippenberg, & Wilke, 1990; Ellemers, Wilke, & van Knippenberg, 1993) and are therefore likely to exhibit ingroup bias when they believe that enhanced resources would facilitate social change (Scheepers et al., 2006). Social identity theory (Tajfel & Turner, 1979, 1986) suggests that in stable hierarchies low-status groups cannot alter their position and are therefore likely to refrain from ingroup bias. Similarly, system justification theory (Jost & Banaji, 1994; Jost & Burgess, 2000) suggests that such groups are likely to distribute resources in accordance with the social hierarchy, resulting in outgroup favoritism. However, recent research has found that stable low-status groups can also exhibit extreme forms of ingroup favoritism in an attempt to

destabilize the social hierarchy (Scheepers et al., 2006; Spears, Scheepers, van Zomeren, Tausch, & Gooch, 2012).

Unstable high-status groups, on the other hand, have an insecure prestige position. Members of this group may want to secure this position by engaging in ingroup bias (Tajfel & Turner, 1979, 1986). However, use of this strategy may be counter-productive because it could provoke retaliation from the low-status group (van Knippenberg, 1984). In line with this, research has found that unstable high-status groups are more likely to exhibit ingroup bias than fairness, but that the level of ingroup favoritism is lower (and sometimes less antagonistic) than that observed in other groups (Scheepers et al., 2006). A moderate level of ingroup bias may help unstable high-status groups to secure their position without prompting status-threatening retaliation.

Low-status or unstable high-status groups may feel threatened by their position in the social hierarchy, leading these groups to focus on moral issues relating to ingroup loyalty rather than harm/fairness. Moreover, the desire to change the ingroup's current undesirable position to a secure high-status position may motivate members of low-status and unstable high-status groups to participate in behaviors that would aid this transformation, such as ingroup bias (see Spears, Jetten, & Doosje, 2001). Because the ingroup's position can be enhanced through ingroup bias, any strategies implemented to avoid group-based shame are likely to fall short of preventing status-improving discrimination. When these group members anticipate group-based shame they may simply legitimize ingroup favoritism in order to obtain a secure prestigious position without experiencing this aversive emotion (e.g., 'we deserve to be equal with them'; or 'our high-status justifies ingroup favoritism'). As a result of this legitimization, anticipated group-based shame is less likely to moderate ingroup favoritism in these groups.



Thus far, we have described ingroup favoritism as a generic construct. However, previous researchers have drawn a distinction between subtle forms of ingroup bias – such as *absolute* ingroup bias – and more extreme forms, such as *relative* ingroup bias (Brewer, 1996; Jetten, Spears, & Manstead, 1996; Scheepers et al., 2006). Absolute ingroup bias refers to the desire to gain the maximum amount of resources for one’s group (or maximizing ingroup profit) and is regarded as a form of resource building. Relative ingroup bias, on the other hand, reflects the desire to allocate relatively more resources to the ingroup than the outgroup, even if this results in one’s group gaining fewer absolute resources overall. Here people are willing to sacrifice some ingroup profit in order to gain relatively more resources than the rival outgroup, making this a harsher strategy. We consider both forms of ingroup favoritism in the present research.

### Study 1

In Study 1 we assess whether anticipated group-based shame moderated the amount of ingroup favoritism exhibited by stable high-status groups. In the high-status condition the ingroup (Great Britain) is compared to an outgroup (Germany) with respect to an Olympic sport that favors Britain (sailing). In the low-status condition these groups are compared with respect to an Olympic sport favoring Germany (equestrianism). Stability is manipulated by informing participants that experts believe that the relative position of these countries in the Olympic medals table is *unlikely to change* (stable condition) or *could change* (unstable condition) in the coming years. We measure the extent to which participants anticipate experiencing group-based guilt and shame if the ingroup were to discriminate against the outgroup. Absolute and relative ingroup bias are assessed by a resource allocation measure.

### Method

#### *Participants and Design*

A total of 212 British undergraduate students (31 men, 180 women, 1 undisclosed)

participated in this online study in exchange for course credit or £2 (approximately \$3.25). Participants were aged between 18 and 49 years ( $M = 20.21$ ,  $SD = 3.86$ ; two participants did not report their age). A 2 (ingroup status: high vs. low) by 2 (stability: stable vs. unstable) by continuous moderating variable (anticipated group-based guilt *or* shame) design was used. Participants were randomly assigned to one of the four conditions formed by the two manipulated factors. The dependent variables were absolute and relative ingroup bias. Relative ingroup bias was measured using the pull score of maximum differentiation (MD) on maximum ingroup profit (MIP) and maximum joint profit (MJP), and absolute ingroup bias was assessed using the pull score of FAV (MD and MIP) on parity (P) from the Tajfel reward matrices (Tajfel, Flament, Billig, & Bundy, 1971).

### *Materials and Procedure*

Participants were told that the researchers were interested in the attitudes of British and German people towards issues related to the London 2012 Olympic Games. They were led to believe that a parallel study was being conducted in Germany. This was done to strengthen participants' beliefs that both the ingroup and outgroup would be allocating the resources at the end of the study. In the low-status condition participants were shown a table summarizing the number of medals won by various nations in international equestrian events during the past 3 years. Germany was shown as having won the most medals and Great Britain had won the fewest (of the 5 nations presented). In the high-status condition participants were shown the total number of medals won by various nations in international sailing events during the past 3 years. The only difference between this table and that of the low-status condition was that the positions of Great Britain and Germany were reversed. The medals table was followed by a paragraph describing the stability of each country's position in the table. Participants were told that because of the number of promising junior competitors, the relative positions of the two countries either was unlikely to change (stable

conditions) or could change (unstable conditions) in the foreseeable future. These manipulations were followed by comprehension questions (e.g. 'Where did Great Britain come in the medals table presented on the previous page?').

Next, participants read a paragraph describing proposed discriminatory actions by the ingroup. This stated that at the 2012 London Olympics some British people were planning to give Germans a hostile reception and to disrupt German competitors during the events. Participants then rated the extent to which they anticipated experiencing group-based guilt and shame if their group were to act in this way. Participants were asked: 'If British people were to abuse Germany in the ways described above, to what extent would you feel [emotion word]?' The anticipated group-based guilt and shame items were adapted from previous research (Lickel et al., 2005). The anticipated group-based guilt items were 'guilty,' 'remorse,' and 'regret' ( $\alpha = .77$ ). The anticipated group-based shame items were 'ashamed,' 'humiliated,' and 'embarrassed' ( $\alpha = .80$ ). All items were rated on a 7-point scale (0 = *not at all*, 6 = *extremely*).

These scales were followed by the ingroup favoritism measures. Participants were asked to distribute spectator passes for equestrian (low-status) or sailing (high-status) events at the 2012 Olympic Games, under the pretext that a greater number of passes would boost the chances of British success due to greater support among the spectators. Participants were presented with the 'Tajfel matrices' outlined by Bourhis, Sachdev, & Gagnon (1994)<sup>1</sup> and asked to select the option, on each matrix, that best represented how they would like to distribute these passes. The values in the matrices were multiplied by 100 in order to make the number of passes seem realistic. The matrices permit the calculation of 'pull scores.' Pull scores can range from -12 to 12. Positive FAV on P values indicate a preference for ingroup favoritism over parity, whereas negative values demonstrate outgroup favoritism. Similarly, positive MD on MIP and MJP values demonstrate maximum differentiation in favor of the

ingroup over maximum ingroup and joint profit (relative ingroup bias). Negative values reflect differentiation in favor of the outgroup. On both measures, values of zero reflect equal distribution of resources between the two groups. Once participants had completed all of the matrices they were thanked and debriefed.

## Results

### *Anticipated Group-Based Guilt and Shame*

Seventeen participants were deleted from the dataset prior to further analysis because they answered two or more comprehension questions incorrectly. Confirmatory factor analysis was used to determine whether anticipated group-based guilt and shame were separate constructs. This analysis was conducted using AMOS 19 (Arbuckle, 2010). Missing values were estimated using maximum likelihood (Arbuckle & Worthe, 1999). The hypothesized two-factor model fitted the data reasonably well:  $\chi^2(8) = 29.42, p < .001$ , comparative fit index (CFI) = .95, normed fit index (NFI) = .93, and root-mean-squared error approximation (RMSEA) = .12. Subsequent analysis revealed that there was a high correlation between the errors for the 'ashamed' and 'embarrassed' items and that model fit would be improved by allowing these errors to be correlated:  $\chi^2(7) = 8.37, p = .301$ , CFI = 1.00, NFI = .98, and RMSEA = .03. We compared the hypothesized model against a single factor solution in order to test our original hypothesis. The single factor solution did not fit the data well:  $\chi^2(9) = 89.51, p < .001$ , CFI = .81, NFI = .80, and RMSEA = .22. Most importantly, the two-factor solution fitted the data significantly better than a single factor solution:  $\chi^2(1) = 60.09, p < .001$ . We therefore analysed these anticipated emotions as separate constructs. To correct for negative skew, a square-root transformation was applied to the shame scale prior to further analysis.

Because the continuous moderators (anticipated group-based guilt and shame) were measured after the status and stability manipulations, we conducted two 2 (status: high vs.

low) x 2 (stability: unstable vs. stable) ANCOVAs (one for each anticipated emotion) to ensure that these variables did not differ between experimental conditions. In each analysis, the anticipated emotion that was not the dependent variable was entered into the model as a covariate in order to assess the role played by ‘shame-free’ guilt or ‘guilt-free’ shame (see Tangney, Wagner, Fletcher, & Gramzow, 1992). Although there was a tendency to anticipate group-based guilt to a greater extent in the stable ( $M = 3.61, SD = 1.29$ ) than the unstable condition ( $M = 3.16, SD = 1.51$ ), this difference was not significant,  $F(1, 190) = 1.60, p = .208, \eta^2_p = .01$ . There was no significant difference between the extent to which participants anticipated group-based guilt in the high-status ( $M = 3.28, SD = 1.44$ ) and low-status conditions ( $M = 3.49, SD = 1.39$ ),  $F(1, 190) = 0.01, p = .922, \eta^2_p < .01$ . Moreover, the status by stability interaction did not have a significant effect on anticipated group-based guilt,  $F(1, 190) = 0.33, p = .565, \eta^2_p < .01$ . Similarly, although (transformed) anticipated group-based shame was slightly greater in the stable ( $M = 2.14, SD = 0.35$ ) than the unstable condition ( $M = 2.03, SD = 0.38$ ), this difference was not significant,  $F(1, 190) = 1.31, p = .253, \eta^2_p = .01$ . A non-significant difference was found between the high-status ( $M = 2.04, SD = 0.36$ ) and low-status conditions ( $M = 2.13, SD = 0.37$ ),  $F(1, 190) = 2.21, p = .139, \eta^2_p = .01$ . The interaction between status and stability did not have a significant effect on anticipated group-based shame,  $F(1, 190) = 0.22, p = .640, \eta^2_p < .01$ .

### *Ingroup Favoritism*

Two 2 (status: low vs. high) x 2 (stability: unstable vs. stable) x continuous moderating variable (guilt or shame, centered) ANCOVAs were conducted on each of the two pull scores (FAV on P, and MD on MIP and MJP), one for each anticipated emotion. Each of the dichotomous variables was dummy coded (0 = low status/unstable and 1 = high status/stable). Pull scores were calculated using the procedure described by Bourhis and colleagues (1994). The emotion variable that was not used as a continuous moderator was

entered as a covariate in order to assess the role played by ‘shame-free’ guilt or ‘guilt-free’ shame.

*Absolute ingroup bias.* The pull score of FAV on P represents absolute ingroup bias. Scores ranged from -11 to 12, with a mean of 0.76 ( $SD = 2.47$ ). The mean was significantly different from zero,  $t(194) = 4.29, p < .001$ , indicating that overall participants engaged in ingroup favoritism. Neither status nor stability had a significant main effect on absolute ingroup bias ( $ps > .10$ ). Similarly, anticipated group-based guilt ( $M = 3.39, SD = 1.42$ ) and shame ( $M = 4.43, SD = 1.19$  pre-transformation;  $M = 2.09, SD = 0.37$  post-transformation) did not predict absolute ingroup bias ( $ps > .10$ ). The interaction between status and shame did have a significant effect on absolute ingroup bias,  $F(1, 178) = 4.15, p = .043, \eta^2_p = .02$ . This was qualified by a significant interaction between status, stability, and shame,  $F(1, 178) = 5.68, p = .018, \eta^2_p = .03$ .<sup>2</sup> In contrast to shame, guilt and its interactions with status and stability did not significantly influence absolute ingroup bias ( $ps > .10$ ).

Consistent with predictions, simple slopes analysis established that anticipated group-based shame negatively predicted absolute ingroup bias in the stable high-status condition,  $b = -1.17, \beta = -.48, t(186) = 2.74, p = .007$ , but not in any of the other conditions ( $ps > .10$ ; see Figure 1). Furthermore, when anticipated group-based shame was low ( $M -1SD$ ), absolute ingroup bias was greater in the stable high-status condition ( $M = 2.12, SE = 0.55$ ) than in the stable low-status condition ( $M = 0.35, SE = 0.61$ ),  $F(1, 178) = 4.81, p = .030, \eta^2_p = .03$ , or in the unstable high-status condition ( $M = 0.74, SE = 0.48$ ),  $F(1, 178) = 3.82, p = .052, \eta^2_p = .02$ . When anticipated group-based shame was high ( $M +1SD$ ), on the other hand, absolute ingroup bias was lower in the stable high-status condition ( $M = -0.25, SE = 0.57$ ) than the stable low-status condition ( $M = 1.26, SE = 0.45$ ),  $F(1, 178) = 4.58, p = .034, \eta^2_p = .03$ . When anticipated group-based shame was high, absolute ingroup bias also tended to be lower in the stable high-status condition than in the unstable high-status condition ( $M = 1.00, SE = 0.58$ ),

although this difference was not significant,  $F(1, 178) = 2.48, p = .117, \eta^2_p = .01$ . In summary, stable high-status groups exhibited the highest level of absolute ingroup bias when anticipated group-based shame was low, but egalitarian behavior when this anticipated emotion was high.

*Relative ingroup bias.* The MD on MIP and MJP pull score was used as an index of relative ingroup bias. Pull scores ranged from -7 to 12, with a mean of 1.09 ( $SD = 2.97$ ). This was significantly different from zero,  $t(193) = 5.13, p < .001$ , indicating that overall participants engaged in ingroup bias. There were no significant main effects or interactions on this measure, either for anticipated shame or for anticipated guilt ( $ps > .10$ ).

### Discussion

We hypothesized that anticipated group-based shame would moderate the amount of ingroup favoritism exhibited by high-status groups in stable hierarchies. Consistent with this prediction, anticipated group-based shame only predicted absolute ingroup bias in the stable high-status condition. When anticipated-group based shame was low, members of stable high-status groups exhibited more absolute ingroup bias than did members of stable low-status or unstable high-status groups. However, when anticipated group-based shame was high, stable high-status groups were less likely than stable low-status groups to discriminate against the outgroup. We argue that these effects occurred because anticipated group-based shame signals the potential social identity threat posed by ingroup bias. When the ingroup is not threatened (i.e., stable high-status), group members are concerned about moral principles relating to harm/fairness (Leidner & Castano, 2012) and are therefore likely to inhibit ingroup bias when this emotional warning signal is present. However, when the ingroup is threatened (i.e., low-status or unstable high-status), group members are more concerned about moral principles relating to ingroup loyalty, preventing anticipated group-based shame from inhibiting harmful actions (such as ingroup favouritism) that may be used to strengthen and

improve the ingroup's position in the social hierarchy. By contrast, the main effect of anticipated group-based guilt and its interactions with status and stability did not significantly influence ingroup favoritism. We argue that anticipated group-based shame was more likely than guilt to affect ingroup favoritism because shame is more closely related to social identity (Johns, Schmader, & Lickel, 2005; Lickel et al., 2005).

There was no support for our hypothesis on the relative ingroup bias measure (MD on MIP and MJP). This may have been due to the type of resource that was allocated, the nature of the ingroup transgression, or the rival outgroup. In Study 2 we changed the intergroup context to provide a second test of our hypotheses on these two forms of ingroup bias. Specifically, we used an inter-university situation in which the resource to be allocated and the potential ingroup transgression were also different. This allowed us to examine the use of relative ingroup bias in another context.

A possible limitation of Study 1 is that the Olympic sport varied between the low and high-status conditions. It may be the case that the effects were due to this variation, rather than the status manipulation. In Study 2 we therefore manipulated status without altering the sports activity in order to be sure that any effects of the status manipulation would not be due to extraneous factors.

### Study 2

Three factors were manipulated in Study 2: status, stability, and anticipated group-based shame. The status and stability manipulations were similar to those used in Study 1. Anticipated group-based shame was manipulated using a bogus-pipeline method (for a similar procedure, see Doosje et al., 1995, and Ellemers, Spears, & Doosje, 1997). Participants were given (false) feedback about their emotional state. The bogus-pipeline method was used because participants are more likely to believe that feedback combining self-report and physiological measures is valid. We did not manipulate anticipated group-



based guilt because this variable did not predict ingroup favoritism in Study 1. We did, however, measure this emotion in Study 2 in order to be able to check that any effects of the shame manipulation were not due to guilt. The dependent variables were again absolute (FAV on P) and relative (MD on MIP and MJP) ingroup bias. Participants were asked to allocate grants between the ingroup (Cardiff University) and an outgroup (University of Bristol).

## Method

### *Participants and Design*

A total of 159 Cardiff University students (11 men and 148 women) participated in this study in exchange for course credit or £4 (approximately \$6.50). Participants were aged between 18 and 47 years ( $M = 20.08$ ,  $SD = 3.09$ ). A 2 (status: high vs. low) x 2 (stability: stable vs. unstable) x 2 (anticipated group-based shame: high vs. low) between participants design was used. Participants were randomly assigned to experimental conditions. The dependent variables were absolute and relative ingroup bias.

### *Materials and Procedure*

Participants were told that the research concerned attitudes of students at different universities and that the study was being conducted at Cardiff University and at the University of Bristol. This information was included to strengthen participants' beliefs that members of the ingroup and outgroup would be involved in allocating resources. All participants read a newspaper article stating that sports clubs at Cardiff University were arranging an inter-university sports tournament and that the organizers were currently debating whether or not to invite the University of Bristol to participate. The article stated that there was no legitimate reason for *not* inviting the University of Bristol, and that this omission would have aversive consequences for the outgroup by reducing the number of chances that Bristol had to improve their national ranking.

After reading the article participants were told that the researchers wanted to know how they would feel if Cardiff University were to discriminate against the University of Bristol in this way. Participants were told that this could be accurately assessed using a measure that combines galvanic skin response readings with self-report items. An electrode was then attached to the participant's non-dominant hand. Participants then completed the anticipated emotions measures. Participants were asked: 'If Cardiff University were to discriminate against the University of Bristol in this way, to what extent would you feel [emotion word]?' We added an extra item to the measures of anticipated group-based shame and guilt used in Study 1 ('disgraced' and 'sorry,' respectively; pre-manipulation guilt  $\alpha = .83$  and pre-manipulation shame  $\alpha = .83$ ). All items were rated on an 11-point scale (0 = *not at all*, 10 = *extremely intensely*). Participants were next told that, according to the skin conductance and questionnaire results, they were unlikely (low shame condition) or likely (high shame condition) to feel ashamed if students from their university were to discriminate against the University of Bristol. As a manipulation check, participants then completed the anticipated group-based shame and guilt scales, ostensibly for the purposes of a reliability check (post-manipulation guilt  $\alpha = .92$  and post-manipulation shame  $\alpha = .94$ ). To ensure that this did not weaken the manipulation, we informed participant that the measures were shown to be reliable.

The status of the ingroup was manipulated by presenting participants with a league table displaying the aggregated number of points won at sporting events in the previous year by universities in the south-west of the UK. In the high-status condition Cardiff University was at the top of this table and the University of Bristol was last (out of ten). In the low-status condition the positions of the two university teams were reversed. Participants were then told that, based on performances earlier in the year, the positions of the two universities in the league table was either unlikely to change (stable condition) or could change (unstable

condition) in the future. This manipulation was followed by the ingroup favoritism measures. Participants were asked to distribute funding for sports equipment that could potentially improve the performance of their university sports teams and thereby their performance in inter-university league tables. The matrices used to assess absolute and relative ingroup bias were identical to those used in Study 1. Once these measures had been completed, the participant was thanked and debriefed.

## Results

### *Anticipated Group-based Guilt and Shame*

Confirmatory factor analysis was conducted to determine whether anticipated group-based shame and guilt were separate constructs, as proposed. A separate analysis was conducted for the pre-and post-manipulation measures. These analyses were conducted using AMOS 19 (Arbuckle, 2010). For the pre-manipulation anticipated group-based emotions, the two-factor solution fitted the data adequately:  $\chi^2(9) = 32.92$ ,  $p = .025$ , CFI = .98, NFI = .94, RMSEA = .07. The fact that the chi-squared value was significant is likely due to the large number of participants and the complexity of the model (Kline, 1998). Under these conditions a better test is whether the chi-squared value divided by the degrees of freedom falls below 3 (Carmines & McIver, 1981). The model met this criterion (1.73), suggesting a good fit to the data. Although the single-factor solution for the pre-manipulation emotions also fitted the data adequately,  $\chi^2(20) = 44.93$ ,  $p = .001$ ,  $\chi^2/df = 2.25$ , CFI = .96, NFI = .93, and RMSEA = .09, the two-factor solution provided a significantly better fit:  $\chi^2(1) = 44.93$ ,  $p = .001$ . For the post-manipulation emotion measures, the hypothesized two-factor model fitted the data well:  $\chi^2(19) = 42.77$ ,  $p = .001$ ,  $\chi^2/df = 2.25$ , CFI = .98, NFI = .96, and RMSEA = .09. The single-factor solution for the post-manipulation emotions did not fit the data well:  $\chi^2(20) = 149.21$ ,  $p < .001$ ,  $\chi^2/df = 7.46$ , CFI = .89, NFI = .88, and RMSEA = .20. Importantly, the two-factor solution provided a significantly better fit than a single-factor

solution did:  $\chi^2(1) = 106.44, p < .001$ . We therefore concluded that anticipated group-based guilt and shame were separate constructs.

*Shame manipulation check.* Two 2 (shame: low vs. high) ANOVAs were conducted on the post-manipulation anticipated group-based shame and guilt measures, one for each emotion. Post-manipulation anticipated group-based shame was greater in the high ( $M = 5.15, SD = 2.55$ ) than in the low shame condition ( $M = 4.00, SD = 2.45$ ),  $F(1, 157) = 8.39, p = .004, \eta^2_p = .05$ . There was no difference in post-manipulation anticipated group-based guilt between the high ( $M = 4.68, SD = 2.38$ ) and low ( $M = 4.28, SD = 2.34$ ) shame conditions,  $F(1, 157) = 1.14, p = .287, \eta^2_p < .01$ .<sup>3</sup> We concluded that the manipulation was successful.

### *Ingroup Favoritism*

All participants answered the majority of the comprehension questions correctly. The pull scores of FAV on P and MD on MIP and MJP were again calculated using the procedure outlined by Bourhis and colleagues (1994). A 2 (shame: low vs. high) x 2 (status: low vs. high) x 2 (stability: stable vs. unstable) ANCOVA was conducted on the absolute (FAV on P) and relative (MD on MIP and MJP) ingroup bias measures. Pre-manipulation anticipated group-based shame was entered as a covariate to control for pre-existing differences between the low and high shame conditions (see Footnote 3). Moreover, we included pre-manipulation anticipated group-based guilt in the analyses to ensure that any effects were not due to this variable.

*Absolute ingroup bias.* Pull scores ranged from -11 to 12, with a mean of 1.47 ( $SD = 3.59$ ). This was significantly greater than zero,  $t(158) = 5.15, p < .001$ , indicating that overall participants engaged in ingroup favoritism. Absolute ingroup bias was greater in the low-status ( $M = 2.23, SD = 3.64$ ) than in the high-status conditions ( $M = 0.70, SD = 3.39$ ),  $F(1, 149) = 6.13, p = .014, \eta^2_p = .04$ . Pre-manipulation anticipated group-based shame and guilt did not predict absolute ingroup bias,  $F(1, 149) = 2.54, p = .113, \eta^2_p = .02$  and  $F(1, 149) =$

1.23,  $p = .268$ ,  $\eta^2_p = .01$ , respectively. All other main effects and interactions were non-significant ( $ps > .10$ ).

*Relative ingroup bias.* Pull scores ranged from -11 to 10, with a mean of 1.04 ( $SD = 3.23$ ). This was significantly greater than zero,  $t(157) = 4.04$ ,  $p < .001$ , indicating that overall participants engaged in ingroup favoritism. Relative ingroup bias was greater in the low-status ( $M = 1.81$ ,  $SD = 3.02$ ) than the high-status condition ( $M = 0.24$ ,  $SD = 3.27$ ),  $F(1, 148) = 9.34$ ,  $p = .003$ ,  $\eta^2_p = .06$ . The shame and stability manipulations did not significantly affect relative ingroup bias,  $F(1, 148) = 1.66$ ,  $p = .200$ ,  $\eta^2_p = .01$  for shame, and  $F(1, 148) = 0.59$ ,  $p = .445$ ,  $\eta^2_p < .01$  for stability. Pre-manipulation anticipated group-based shame and guilt did not predict relative ingroup bias,  $F(1, 148) = 0.33$ ,  $p = .567$ ,  $\eta^2_p < .01$  for shame and  $F(1, 148) = 0.13$ ,  $p = .724$ ,  $\eta^2_p < .01$  for guilt. The interaction between status and stability had a significant effect on relative ingroup bias,  $F(1, 148) = 6.94$ ,  $p = .009$ ,  $\eta^2_p = .05$ . This interaction was qualified by a marginally significant three-way interaction between shame, status, and stability,  $F(1, 148) = 3.01$ ,  $p = .085$ ,  $\eta^2_p = .02$ .

Further analysis revealed that the two-way interaction between shame and status was near-significant in the stable hierarchy condition,  $F(1, 74) = 3.65$ ,  $p = .060$ ,  $\eta^2_p = .05$ , but not in the unstable hierarchy condition,  $F(1, 72) = 0.25$ ,  $p = .622$ ,  $\eta^2_p < .01$ . As shown in Figure 2, members of stable high-status groups engaged in a small amount of relative ingroup bias in the low anticipated group-based shame condition ( $M = 0.28$ ,  $SE = 0.68$ ). However, in the high anticipated group-based shame condition this group exhibited *outgroup* favoritism (or negative relative ingroup bias;  $M = -1.43$ ,  $SE = 0.71$ ). This difference was marginally significant,  $F(1, 148) = 2.98$ ,  $p = .087$ ,  $\eta^2_p = .02$ .<sup>4</sup> Relative ingroup bias did not differ between the low and high anticipated group-based shame conditions in the unstable high-status condition, or in either of the low-status conditions ( $ps > .10$ ). In summary, anticipated group-based shame only moderated relative ingroup bias in the stable high-status group condition.

Further analysis revealed that in the stable and high shame conditions, relative ingroup bias was greater for low-status ( $M = 2.72$ ,  $SE = 0.68$ ) than for high-status groups,  $F(1, 148) = 17.94$ ,  $p < .001$ ,  $\eta^2_p = .11$ . Furthermore, in the high shame and high status conditions, relative ingroup bias was greater in unstable ( $M = 0.83$ ,  $SE = 0.71$ ) than in stable hierarchies,  $F(1, 148) = 5.05$ ,  $p = .026$ ,  $\eta^2_p = .03$ . Thus in the high anticipated group-based shame condition, members of stable high-status groups displayed the least relative ingroup bias. It was also the case that in the low shame and low status condition, relative ingroup bias was greater in the stable than in the unstable hierarchies ( $M = 0.67$ ,  $SE = 0.71$ ),  $F(1, 148) = 4.48$ ,  $p = .036$ ,  $\eta^2_p = .03$ .

### *Power*

It has been argued that higher-order interactions are often underpowered, making it difficult to find significant results for such interactions (McClelland & Judd, 1993). We therefore performed power analysis to determine whether the three-way interaction (shame x status x stability) on relative ingroup bias (MD on MIP and MJP) was underpowered and whether this would account for the marginally significant result. This analysis was conducted using G-Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). The effect size for this three-way interaction was small ( $f^2 = 0.02$ ), indicating that this study was indeed underpowered (the power for finding a significant effect at an alpha level of .05 is .39 compared to Cohen's (1988) recommendation of .80) despite the reasonable sample size by experimental standards ( $N = 159$ ). In short this factor, while not removing the caution interpreting marginal effects, may also help to account for this.

### Discussion

As hypothesized, we found that stable high-status groups exhibited less relative ingroup bias in the high than the low anticipated group-based shame condition. Furthermore, in the high anticipated group-based shame condition, stable high-status groups exhibited less

relative ingroup bias than any of the other conditions. Based on Study 1, we also hypothesized that when anticipated group-based shame was low, members of stable high-status groups would exhibit high levels of ingroup favoritism. However, we did not find this high level of ingroup favoritism in Study 2. This may reflect the fact that the mean level of anticipated group-based shame in the low shame condition (4.00) was nearer the midpoint of the scale (5.00) than the low end of the continuum, perhaps reflecting the fact that it is easier to find differences in measured shame than it is to manipulate it. This moderate level of anticipated group-based shame may have inhibited the stable high-status group from discriminating against the low-status group.

Interestingly, we also found that in the high shame condition, members of stable low-status groups exhibited more relative ingroup bias than members of unstable low-status groups. There is some evidence from other research that stable low-status groups are likely to exhibit non-normative actions (such as relative ingroup bias) in an attempt to destabilize the social hierarchy (Spears et al., 2012). This non-normative action may have been more likely when anticipated group-based shame was high rather than low.

In Study 1 we found our hypothesized effects on the *absolute* ingroup bias measure, whereas in Study 2 we found these effects on the *relative* ingroup bias measure. Possible reasons for this discrepancy include the fact that the outgroup used in Study 2 (Bristol students) is arguably a closer rival to the ingroup than was the case in Study 1 (Germans), and the fact that identification is likely to be higher in university than national groups because students choose to go to a particular university. Both factors are likely to increase relative ingroup bias.

### General Discussion

In two studies we found that anticipated group-based shame moderated ingroup favoritism on the part of stable high-status groups. In Study 1 we found that stable high-status

groups exhibited high levels of ingroup favoritism when anticipated group-based shame was low. We argued that this is because ingroup favoritism is free of consequences under such circumstances. In both studies we found that when anticipated group-based shame was high, members of stable high-status groups exhibited the lowest levels of ingroup favoritism. In Study 2 members of this group even displayed outgroup favoritism. In these circumstances the desire to avoid group-based shame motivates stable high-status groups to inhibit the general tendency to engage in ingroup favoritism. In both studies we found that anticipated group-based shame only moderated ingroup favoritism in stable high-status groups. In line with other researchers (Leach et al., 2002; Nadler et al., 2009; Spears et al., 2010), we argue that because of their security, stable high-status groups are able to engage in egalitarian behavior (and even outgroup favoritism) without risking the loss of their prestigious position. Their low-status and unstable high-status counterparts, on the other hand, are motivated to obtain a better or more secure position in the social hierarchy and this cannot be achieved through egalitarian behavior. These groups can therefore afford to legitimize ingroup favouritism, inhibiting anticipated group-based shame and its effect on ingroup bias.

Previous research has found inconsistent results regarding the amount of ingroup favoritism undertaken by members of high-status groups in stable hierarchies. Jetten and colleagues (2000) suggested that the extent of ingroup bias exhibited by stable high-status groups depends on the perceived legitimacy of this action. We extended this argument by proposing that the emotional consequence of perceived illegitimacy moderates this effect, and support for this proposal was found in two experiments.

Recent research has established that group members are motivated to possess and maintain a moral social identity (Ellemers, Pagliaro, Barreto, & Leach, 2008; Leach, Ellemers, & Barreto, 2007; Scheepers, Spears, Manstead, & Doosje, 2009). In previous work we have argued and shown that anticipated *group-based* emotions promote moral *intergroup*



behavior and that this self-regulatory system helps to maintain the ingroup's moral identity (Shepherd et al., 2012, in press). The present research extends this line of work by showing that this system is most likely to deter non-egalitarian behavior in stable high-status groups. When faced with a threat to their group, people are more likely to be concerned with defending their group. The desire to protect the ingroup may result in members seeking to legitimize actions (like ingroup favoritism) that help to address this threat. In keeping with recent developments in the moral psychology literature (e.g., Rai & Fiske, 2011), we argue that the perceived morality of an action is context dependent. In secure circumstances ingroup members may regard non-egalitarian behavior as immoral. However, when the ingroup is threatened, people are likely to be more concerned about moral issues relating to group loyalty (Leidner & Castano, 2012), resulting in the legitimization of non-egalitarian intergroup behavior. The self-regulatory system promoting moral intergroup behavior should therefore be most effective in non-threatening situations.

In this paper we have focused on emotions that moderate discrimination in stable high-status groups. It is also worth considering emotions that could moderate ingroup bias in unstable high-status groups and in low-status groups. Unstable high-status groups are likely to anticipate fear when they consider their unstable status and the lack of control that they have over this (Leach et al., 2002). When anticipating fear, group members are likely to undertake actions to remove the threat (Van Zomeren, Spears, & Leach, 2010). Unstable high-status groups may, therefore, engage in relatively moderate levels of ingroup bias in order to strengthen the group's position in the status hierarchy without evoking retaliation on the part of lower-status groups. Unstable low-status groups, on the other hand, may anticipate group-based pride as a result of improving their position in the social hierarchy. This is likely to increase the amount of ingroup bias exhibited by this group. As noted earlier, stable low-status groups are likely to exhibit high levels of ingroup bias when they anticipated group-

based shame for this action. This is because such groups are motivated to undertake the non-normative actions signaled by this anticipated emotion because they have ‘nothing to lose’ (Spears et al., 2012). Research has found that contempt positively predicts non-normative group actions (Tausch et al., 2011). The threat posed by stable low-status may lead such groups to feel contempt towards the higher-status groups. This contempt may also increase the amount of ingroup bias exhibited by stable low-status groups.

It is also important to consider the relationship between anticipated and experienced emotions. Although anticipated and experienced emotions are distinct, evoking a directly experienced emotion helps to increase the accuracy of its anticipated counterparts (Baumeister et al., 2007; Damasio, 1994). Baumeister et al. (2007) suggest that evoking aversive self-conscious emotions (such as guilt and shame) motivates people to determine the cause of this arousal. If attributed correctly, the transgression becomes associated with the aversive emotion, creating an anticipated emotion for this action. When agents are in a situation in which they risk repeating the transgression, the negative arousal associated with the action signals its aversive emotional consequences and the desire to avoid the aversive emotions motivates them to inhibit the behavior. The relationship between experiencing negative emotions and avoiding the emotion-eliciting behavior in the future is therefore likely to be mediated by anticipated emotions. Indeed, experiencing negative emotions after failing a test increases the likelihood that people will revise for a future test by increasing the extent to which they anticipate negative emotions in relation to future failure (Brown & McConnell, 2011). In the current context, directly experiencing group-based shame following a past instance of ingroup favoritism is likely to increase the likelihood of stable high-status group members anticipating this emotion as a result of undertaking similar action in the future. The desire to avoid this emotion and its aversive consequences should prevent the transgression from being repeated.

Both in the current research and in previous studies (Shepherd et al., 2012, in press) we have found that anticipated group-based shame is more likely than guilt to promote moral behavior. This could be regarded as inconsistent with the work of Tangney and colleagues (Dearing, Stuewig, & Tangney, 2005; Stuewig, Tangney, Heigel, Harty, & McCloskey, 2010; Tangney & Dearing, 2002; Tangney, Stuewig, & Mashek, 2007), which suggests that guilt is a more socially functional moral emotion than shame. However, it is worth noting that Tangney and colleagues' research focused on shame- and guilt-*proneness*, rather than the experience or anticipation of these emotions. Furthermore, recent research has found that guilt has a 'dark side' (Bastian, Jetten, & Fasoli, 2011; De Hooge, Nelissen, Breugelmans, & Zeelenberg, 2011; Nelissen & Zeelenberg, 2009), and that shame can promote prosocial behavior (De Hooge, Breugelmans, & Zeelenberg, 2008; De Hooge, Zeelenberg, & Breugelmans, 2010; Gausel & Leach, 2011; Gausel et al., 2012). Interestingly, Tibbetts (1997) found that criminal activity was positively related to shame-proneness, but negatively related to anticipated shame. We join De Hooge and colleagues (2008, 2010) in suggesting that shame can have a prosocial effect on behavior. Our research adds to this argument by showing that anticipated *group*-based shame promotes moral intergroup behavior, but that this effect is less likely to be observed in threatening situations.

It could be argued that the observed effects were caused by anticipated *interpersonal*, rather than group-based, emotions. However, we do not regard this as plausible because in both studies the anticipated emotions were felt towards an event for which participants were not personally responsible. The participants did not personally plan to discriminate against Germans at the 2012 Olympic Games in London (Study 1) or to exclude the University of Bristol from sports tournaments (Study 2). Because these events were relevant to social identity, rather than personal identity, it seems reasonable to suppose that anticipated group-based emotions were elicited.

In conclusion, in two studies we found that anticipated group-based shame moderated the amount of ingroup favoritism exhibited by members of high-status groups when the social hierarchy was stable. Members of these groups exhibited high levels of ingroup bias when anticipated group-based shame was low, but egalitarian behavior when shame was high. This may help to account for the discrepancies in previous research examining the amount of ingroup favoritism shown by stable high-status groups. When members of a stable high-status group do not anticipate group-based shame, their ingroup favoritism is consequence-free and therefore more likely. When members of such a group anticipate group-based shame, on the other hand, the desire to maintain a positive social identity appears to motivate them to inhibit the shame-evoking behavior. In unstable high-status groups and low-status groups, by contrast, the desire to gain a more secure or better status position leads group members to focus on enhancing ingroup resources; as a consequence, there is less concern with the lot of other groups, and anticipated group-based shame is too weak to constrain ingroup bias.

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## Footnotes

<sup>1</sup> We also measured symbolic discrimination by asking participants to distribute passes to the medals award ceremony. The order that the participant completed the symbolic and instrumental matrices was counterbalanced. Because we were primarily interested in the instrumental measures we do not discuss the symbolic measure further.

<sup>2</sup> This interaction was qualified by a marginally significant 4-way interaction of status, stability, counterbalancing and shame,  $F(1, 178) = 3.78, p = .054, \eta^2_p = .02$ . As predicted, anticipated group-based shame negatively predicted absolute ingroup bias in stable high-status groups regardless of the counterbalancing ( $b = -1.16, \beta = -.47, t(182) = 2.04, p = .042$  for instrumental first, and  $b = -1.24, \beta = -.50, t(182) = 2.07, p = .039$  for symbolic first). The significant 4-way interaction was due to a positive relationship between anticipated group-based shame and absolute ingroup bias in the stable low-status group when the symbolic matrices were completed first,  $b = 1.55, \beta = .63, t(182) = 2.61, p = .010$ . Because stable low-status groups have ‘nothing to lose’ they are motivated to undertake extreme actions that may destabilize the social hierarchy (Spears et al., 2012). Asking participants to distribute passes to the medals award ceremony before they were given the opportunity to change their position may have emphasized this threat, increasing the likelihood of the ‘nothing to lose’ strategy being implemented. The positive relationship between these variables was likely to be caused by anticipated group-based shame signaling the non-normative behaviors that this group wanted to undertake.

<sup>3</sup> People in the high shame condition experienced greater levels of anticipated group-based shame *prior* to the shame manipulation,  $F(1, 157) = 6.39, p = .012, \eta^2_p = .04$ . However, post-manipulation anticipated group-based shame was also greater in the high than the low shame condition when pre-manipulation guilt and shame were entered as covariates,  $F(1, 155) = 3.71, p = .056, \eta^2_p = .02$ . In this analysis, the difference in post-manipulation guilt

between the high and low shame conditions remained non-significant,  $F(1, 155) = 0.81$ ,  $p = .369$ ,  $\eta^2_p = .01$ .

<sup>4</sup> It should be noted that this was significant with a one-tailed test ( $p = .044$ ). Because of our directional hypothesis and because of the evidence found in Study 1, a one-tailed test could be regarded as legitimate.

## Figures

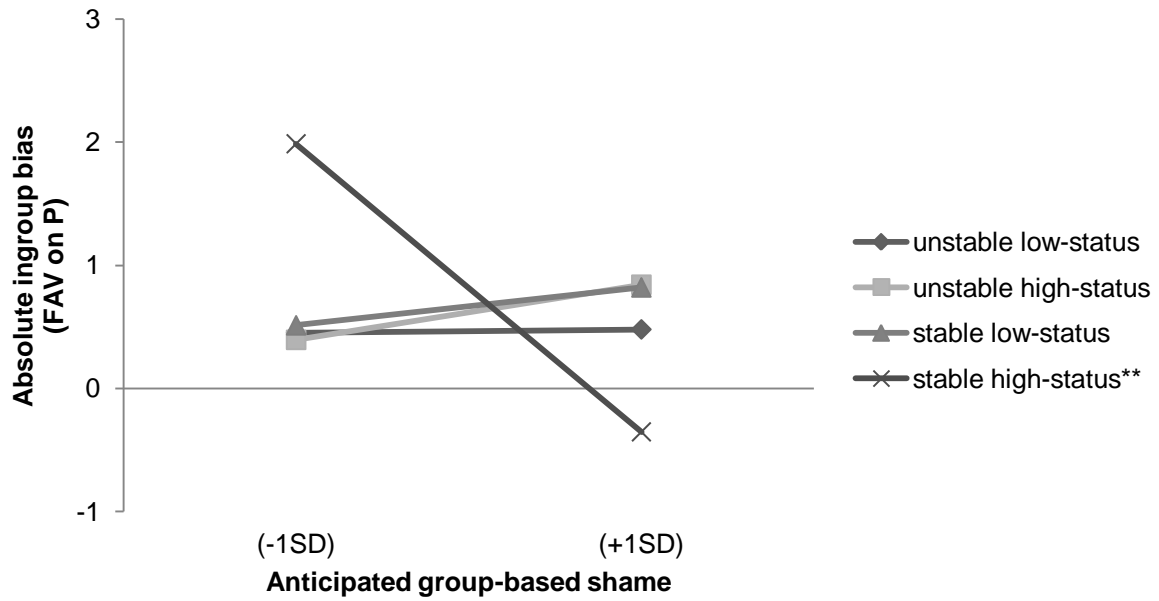


Figure 1 – Interaction between status, stability, and anticipated group-based shame on absolute ingroup bias (FAV on P) for Study 1. \*\* =  $p < .01$ .



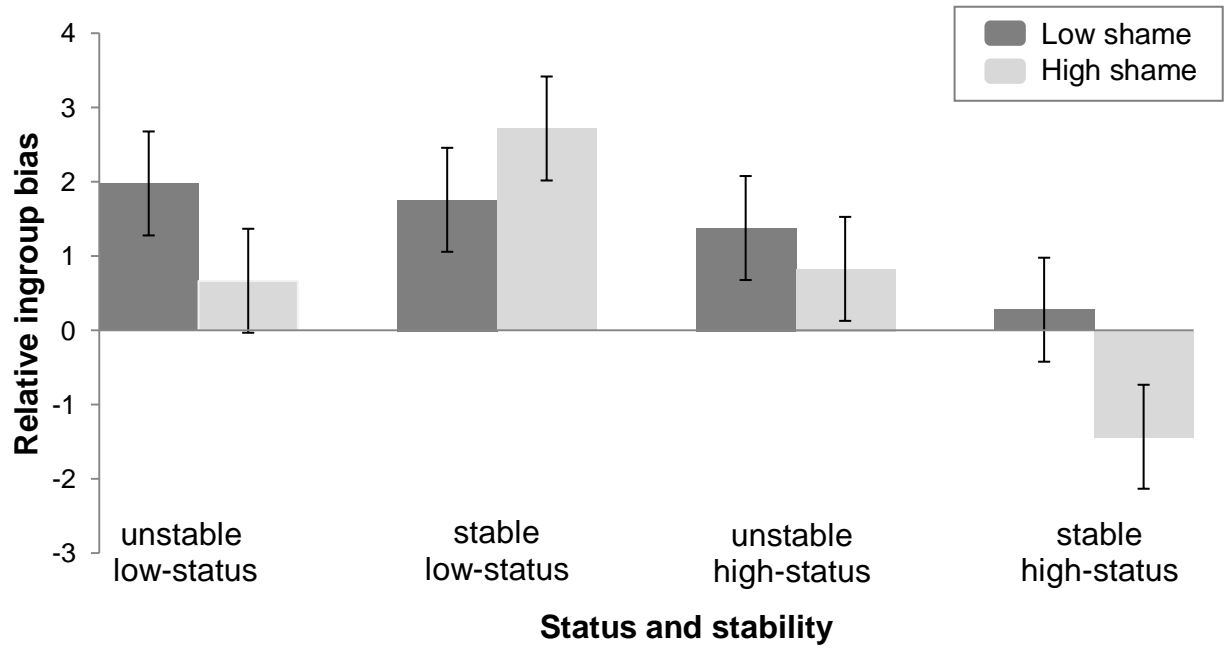


Figure 2 – Interaction of status, stability, and shame on relative ingroup bias (MD on MIP and MJP) for Study 2. Scores represent the estimated means. Error bars =  $\pm 1 SE$ .