Haters Are All the Same:
Perceptions of Group Homogeneity Following Positive vs. Negative Feedback

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Abstract

The more similar the members of a group are to one another, the less reliable their collective judgments are likely to be. One way for individuals to respond to negative feedback from a group may thus be to adjust their perceptions of the group's homogeneity, enabling them to dismiss the feedback as unreliable. We show that individuals appreciate this logic (Study 1) and that they put it to strategic use by regarding the members of a group as more homogenous when the group judges them negatively than when it judges them positively (Studies 2, 3, and 4). We underscore the self-protective nature of this tendency by showing that individuals adjust their perceptions of a group's homogeneity more when they themselves are the target of the group's judgment than when the group judges someone else (Study 4).

Keywords: homogeneity; motivated reasoning; attribution

Haters Are All the Same:

Perceptions of Group Homogeneity Following Positive vs. Negative Feedback

Everyday experience occasionally brings painful negative feedback. A grant proposal may be reviewed unfavorably, a job may be offered to another candidate, or one's entry in the *New Yorker* cartoon caption contest may be rejected yet again. Such feedback is easier to rationalize, all things considered, when it comes from an individual than when it comes from a unanimous group—a single grant reviewer, say, rather than an entire review panel (Gilbert, Pinel, Wilson, Blumberg, & Wheatley, 1998). Although one may readily conclude that a single evaluator is mistaken or biased, thereby discounting the evaluator's negative appraisal and maintaining one's positive self-views (Greenwald, 1980; Tesser, 1988, 2001), it is more difficult to do so for a unanimous group. Multiple judges bring diverse perspectives and group opinions are therefore difficult to dismiss as unreliable.

Or are they? One strategy for discounting negative evaluations from a unanimous group may be to view the group members as relatively homogenous, transforming them into the functional equivalent of an individual. Viewing the members of a group as similar to one another—as all “*that kind of person*”—can serve to lower the diagnostic value of the group's appraisal (Kelley, 1967), helping one preserve positive self-views in the face of negative feedback. As Goethals and Nelson (1973) have noted, the diversity of a group whose members ascribe to a particular view calls to mind the navigational principle of triangulation: “As in the navigational analogue, the greater the difference in perspectives converging on a judgment, the more confidently that judgment can be held”

(p. 122)—and, conversely, the more homogenous those perspectives, the more readily that judgment may be dismissed.

We propose that individuals appreciate and make strategic use of this logic, adjusting their perceptions of group homogeneity to alter the putative diagnosticity of the group's judgment in an effort to manage the emotional consequences of feedback they receive. A number of investigations have shown that perceptions of group homogeneity are indeed malleable and are sensitive to various contextual and motivational influences (e.g., Lee & Ottati, 1995; Pickett & Brewer, 2001; Rothgerber, 1997). Adding to this past research, we propose that individuals who are judged negatively by a group may tend to regard the members of the group as relatively homogenous, calling into question the reliability of their negative appraisal, whereas those who are judged positively may tend to regard the members of the group as a relatively diverse assortment of individuals whose varied perspectives render their positive appraisal highly reliable.

We report four studies that put this idea to the test. First, we show that individuals do indeed grasp the attributional logic inherent in our hypothesis (Study 1). We then show that they employ this logic strategically: those whose application for a prestigious campus position is rejected by a committee (Study 2) or who are told by a collection of computer systems that they have a poor sense of humor (Studies 3 and 4) regard the group that evaluated them as more homogenous than do those whose application is approved or who are told that they have an excellent sense of humor. Finally, we underscore the self-protective nature of these judgments by showing that participants adjust their perceptions of a group's homogeneity when they themselves are

the target of the group's judgment more than when the group judges someone else (Study 4).

Study 1

As an initial investigation, we sought to determine whether individuals would grasp the attributional logic inherent in our hypothesis—whether participants who imagined receiving unanimous positive or negative feedback from a group would feel that that feedback was of greater diagnostic value when it came from a relatively diverse group than when it came from a relatively homogenous group, and whether the diversity of the group would be related to differences in participants' stated satisfaction over the feedback.

Method

Participants ($N = 200$; M age = 31.4) were recruited via Amazon's Mechanical Turk (MTurk) and completed the study online in exchange for \$0.30. Participation in this and all other MTurk studies reported here was restricted to individuals residing within the United States.

Participants were presented with a hypothetical scenario in which they were asked to imagine that they were an aspiring filmmaker and that they had entered their work into a film contest. They were asked to imagine that all four members of a selection committee had voted "no" and that their film had been rejected (negative feedback condition) or that all four had voted "yes" and that their film had been declared a winner (positive feedback condition).

Participants were then asked to consider each of two alternative possibilities: that the members of the committee were "all very similar to one another" (homogenous) or

“all very different from one another” (diverse). (The order in which these possibilities were presented was counterbalanced across participants.) Those in the negative feedback condition were asked to indicate which of the two possibilities would make it easier for them to “dismiss or ‘write off’” the committee’s negative feedback, and in which case the committee’s decision would make them most unhappy. Those in the positive feedback condition were asked to indicate which of the two possibilities would make it easier for them to “take the selection committee’s positive feedback to heart,” and in which case the committee’s decision would make them most happy.¹

Results and discussion

A majority of participants in the negative feedback condition (81 out of 98; 83%) indicated that they could more easily dismiss the feedback if it came from a homogenous committee than if it came from a diverse committee. In contrast, a majority of participants in the positive feedback condition (95 out of 102; 93%) indicated that they could more easily take the positive feedback to heart if it came from a diverse committee than if it came from a homogenous committee. Consistent with these responses, a majority of participants in the negative feedback condition (81 out of 98; 83%) indicated that they would be most unhappy, and a majority of participants in the positive feedback condition (89 out of 102; 87%) indicated that they would be most happy, if their feedback came from a diverse committee (all $ps < .001$).

As expected, then, participants in both conditions harbored the intuition that the diagnostic value of the group’s feedback would be diminished (i.e., negative feedback would be more easily dismissed and positive feedback less easily taken to heart) when the

group was relatively homogenous (Goethals & Nelson, 1973), and also expected group homogeneity to moderate their emotional response to the feedback.

Study 2

The results of Study 1 show that individuals appreciate the implications of group homogeneity when it comes to group feedback—i.e., that they grasp the attributional logic that underlies our hypothesis. The purpose of the remaining studies was to test our hypothesis that individuals invoke this logic strategically in an effort to manage the emotional consequences of positive vs. negative feedback. In Study 2, we took advantage of a naturally occurring instance of group feedback at Williams College and asked students who had been evaluated favorably or unfavorably by a selection committee for a coveted campus position to rate the degree of diversity among the members of that committee. We expected those who had been rated unfavorably to regard the committee members as relatively homogenous and those who had been rated favorably to regard them as relatively diverse.

Method

We contacted all members of the incoming junior class at Williams College (N = 537) by email during the summer prior to their junior year and invited them to complete an online questionnaire in exchange for entry into a lottery for one of three \$30 restaurant gift certificates. A total of 231 individuals (43%; M age = 19.9) completed the questionnaire.

Participants were asked if they had applied to be a Junior Advisor (JA) and, if so, whether they had been accepted for the position. JAs at Williams live among first-year students, providing them with academic and social guidance. Each spring, 50 juniors are

selected for the coveted position by a committee of 25 students on the basis of an interview conducted by two current JAs. A total of 74 participants in our sample indicated that they had applied for the position; 31 had been accepted and 43 had been rejected. (Data from the remaining 157 individuals who had not applied are not presented here.)

Participants were asked to indicate how they had felt when they first learned the committee's decision, from 1 (very unhappy) to 7 (very happy)² and were then reminded that "some committees are made up of very similar people and so really represent only one perspective," whereas other committees are "made up of people who differ greatly from one another so that the committee represents many different perspectives."³ They were then asked to rate the JA selection committee on two scales—the degree to which the committee was diverse, from 1 (not diverse) to 7 (very diverse), and the degree to which the committee represented multiple viewpoints, from 1 (only one viewpoint) to 7 (many diverse viewpoints). Finally, they rated the degree to which the two individuals who had interviewed them were different from one another, from 1 (very similar to each other) to 7 (very different from each other).⁴

Results and discussion

Participants who were selected to be a JA reported that they were significantly happier with the committee's decision ($M = 6.52$) than were those who were rejected ($M = 2.40$), $t(72) = 14.28$, $p < .001$.⁵ As expected, this feedback was associated with differences in the perceived homogeneity of the selection committee. As can be seen in Table 1, those who were selected to be a JA regarded the selection committee as more diverse, felt that its members represented a wider assortment of viewpoints, and felt that

their two interviewers were more different from one another than did those who were rejected.

These results provide support for our hypothesis using a naturally occurring instance of group feedback. As predicted, participants who were selected for a prestigious campus position regarded the committee that selected them as more diverse than did those who applied but were not selected. Study 3 was designed to serve as a conceptual replication of this finding and to address a number of shortcomings in Study 2. First, our sample in Study 2 was limited by the number of students who chose to apply to the program and who then opted to complete our questionnaire. In Study 3, we chose to collect data on MTurk in order to increase our sample size. Second, the primary finding in Study 2 was correlational (after all, we did not assign participants to receive positive vs. negative feedback, the selection committee did) and is therefore open to a number of alternative interpretations. (For example, perhaps students who tended to think in relatively simplistic terms were most likely to be rejected by the selection committee, and, by virtue of their simplistic outlook, tended to regard the committee members in relatively simple, monochromatic terms—i.e., as all alike.) In Study 3, we avoided such issues by assigning participants randomly to receive positive or negative feedback.

Finally, note that the results of Study 2 bear some similarity to the “outgroup homogeneity bias,” people’s tendency to perceive greater diversity among the members of groups to which they belong than among the members of groups to which they do not belong (e.g., Linville, Fischer, & Salovey, 1989; Ostrom & Sedikides, 1992; Park & Rothbart, 1982; Quattrone & Jones, 1980), which raises the possibility of an alternative

interpretation. Specifically, it could be argued that participants in Study 2 who were rejected regarded the members of the selection committee as homogenous not to ease the pain of negative feedback by reducing its diagnosticity, as we have maintained, but because they regarded the committee as an outgroup—that is, as representative of a group to which, by virtue of having been rejected, they themselves did not belong. Although the two phenomena are logically distinct (after all, not all groups that judge one negatively are outgroups, nor are all outgroups certain to judge one negatively), the fact that the negative feedback in Study 2 took the form of exclusion makes it difficult to know whether participants' judgments of homogeneity in that study were driven by the negativity of the feedback or by the experience of exclusion. We eliminate this issue in Study 3 by testing the effect of negative feedback that does not entail exclusion.

Study 3

Participants received unanimous positive or negative feedback about their sense of humor that was said to have come from a “committee” of three computer systems. (We opted to tell participants that their feedback came from computers rather than live individuals so that we could plausibly provide them with instantaneous feedback, enabling us to administer the study in a single, online session; see the General Discussion for a discussion of the ecological validity of this procedure.) After receiving their feedback, participants made judgments about the degree to which they felt that the three computer systems were similar to or different from one another. We expected participants who received negative feedback to regard the computer systems as more similar to one another in terms of judging humor than would those who received positive feedback.

Method

Participants (N = 100; M age = 33.5) were recruited via MTurk and completed the study online in exchange for \$0.80. They were told that the purpose of the study was to investigate the use of artificial intelligence computer models for making personality assessments, such as judgments about individuals' sense of humor. To support this cover story, participants indicated their agreement with two statements about their sense of humor and two statements about their experience with artificial intelligence systems.

Participants were then asked to evaluate a series of jokes and cartoons, including "one-liner" jokes (e.g., "Change is inevitable...except from vending machines"), puns (e.g., "The girl said she knew me from the vegetarian restaurant but I never met herbivore"), and *New Yorker*-style cartoons (e.g., a scene in which the "Where's Waldo?" character sits forlornly at a bar and remarks, "Nobody ever asks 'How's Waldo?'"). They were reminded that different people can have different opinions about what is funny and were encouraged to make their assessments in a way that expressed their own personal sense of humor.

Next, participants were informed that we had created three computer models of humor, each said to have been based upon a specific individual known to have a good sense of humor, and that we were now testing our models by having them make judgments about people. We explained that each computer model would independently examine their humor judgments and would place them into one of three categories: "excellent sense of humor," "average sense of humor," or "poor sense of humor." Participants were prevented from advancing to the next screen for several seconds while the models ostensibly processed their responses. In reality, participants' responses were

not evaluated and participants were randomly assigned to one of two conditions: positive feedback, in which all three models were said to have classified them as having an excellent sense of humor, or negative feedback, in which all three models were said to have classified them as having a poor sense of humor.

After receiving their feedback, participants indicated how they were feeling on three 1-to-5 bipolar scales (disappointed/pleased, unappreciated/appreciated, and upset/happy). To ensure that they had paid attention to their feedback, we asked participants to indicate whether (a) all three models gave them the same feedback, or (b) there was some disagreement among the models. All but two participants (one in each condition) answered this question correctly. (We opted to exclude the data from the participants who answered incorrectly although including them does not affect the results reported below.)

Participants were then informed that the three computer models had comprised a kind of “committee...whose job it was to judge your sense of humor,” and that some committees are naturally more diverse than others when it comes to the viewpoints they represent. They then indicated the extent to which they agreed with each of three statements (see Table 2) related to the degree of diversity among the three computer models, from 1 (strongly disagree) to 5 (strongly agree), and rated the models on a scale from 1 (very similar) to 5 (very different). Finally, participants were asked to guess at the relative frequency with which the computer models delivered “excellent” vs. “poor” feedback throughout the course of the study: whether (a) excellent was more common than poor, (b) poor was more common than excellent, or (c) the two were equally common (the order of these response options was counterbalanced across participants).

All participants then received a full debriefing. Because the procedure had included false feedback, we gave participants an opportunity to withdraw their consent and request that their data be destroyed (none did so).

Results and discussion

As can be seen in Table 2, participants who received negative feedback from the computer models about their sense of humor reported feeling significantly less pleased, appreciated, and happy than did those who received positive feedback. As Table 2 also reveals, participants who received negative feedback regarded the computer models as significantly more homogenous, on each of the four measures, than did those who received positive feedback.

The results of Study 3 thus provide a conceptual replication of Study 2. Individuals who received unanimous negative feedback from a group (in this case, a group of computers) regarded the group as more homogenous than did those who received unanimous positive feedback, presumably because homogeneity would serve to decrease the diagnosticity of the negative judgments, thereby reducing their sting. These results provide strong confirmation of our hypothesis, and do so in a paradigm in which participants were assigned randomly to receive positive vs. negative feedback (thus ruling out alternative interpretations of Study 2 based on its correlational design), and in which that feedback was not confounded with having been excluded from a group (thus ruling out the outgroup homogeneity bias as an alternative interpretation).

Finally, we wished to address one additional possible alternative interpretation of our results. It could be argued that participants regarded the three computer models as similar to one another after receiving negative feedback not because of the negativity of

the feedback per se, but because they regarded such feedback as especially rare or distinctive and felt that it thus required an entity-based attribution (Kelley, 1967). In other words, if participants regarded negative assessments as rare, it may have seemed to them that three judges who all arrived at such an assessment must have approached the issue from the same, distinctive viewpoint—and, presumably, were similar to one another. Although this explanation involves attributional logic similar to our hypothesis, it does not invoke the motivational processes that we have argued can drive individuals' perceptions of group homogeneity.

To rule out this interpretation of our results, we examined participants' guesses about the relative frequency with which the computer models delivered “excellent” vs. “poor” feedback throughout the course of our study. Contrary to the premise of the alternative interpretation, participants—especially those in the negative feedback condition—did not regard negative feedback as especially rare. In the negative feedback condition, 21 individuals thought negative feedback was more common than positive feedback, 29 thought negative and positive feedback were equally common, and only 1 (2% of participants in this condition) thought positive feedback was more common than negative feedback. (The analogous frequencies in the positive feedback condition were 4, 23, and 23, respectively.)

Study 4

The purpose of Study 4 was to provide a direct replication of the primary finding from Study 3 and to extend it by adding further support to our contention that individuals' assessments of group homogeneity following positive vs. negative feedback are motivated by their desire to manage the emotional consequences of such feedback.

We reasoned that if participants were indeed adjusting their perceptions of homogeneity strategically, then they would be more likely to do so when they themselves were the target of the group's feedback than when that feedback was directed at someone else (people typically have little vested interest in reaching favorable conclusions about unknown others, after all). Dunning (2015) has argued that self-other asymmetries of this type can help to demonstrate the influence of motivated reasoning.

We put our conjecture to the test in Study 4 by informing participants in one condition that they had been evaluated positively or negatively by each of three computer systems (replicating the design of Study 3), and telling participants in another condition that another individual, unknown to them, had received the evaluation. Because we predicted that the difference between the positive and negative feedback conditions seen in Study 3 would be replicated in the “self” condition but would be reduced or eliminated in the “other” condition—i.e., an attenuated interaction—we opted to double the number of subjects per cell in order to provide the same level of power as in the previous study (Simonsohn, 2014).

Method

Participants ($N = 403$; $M \text{ age} = 35.0$) were recruited via MTurk and completed the study online in exchange for \$0.80. The design was a 2 (feedback: positive vs. negative) $\times$ 2 (target of feedback: self vs. other) between-subject factorial. In the “self” condition, the procedure was identical to Study 3: participants rated some jokes and cartoons and then received unanimous positive or negative feedback from three computer models. In the “other” condition, in contrast, participants were told about an individual, “Person X,” who had ostensibly taken part in an earlier study in which he or she had evaluated some

jokes and cartoons and had then received unanimous positive or negative feedback about his or her sense of humor from three computer models. Participants in this condition viewed all the same jokes and cartoons (but did not make any judgments about them) and viewed all the same instructions about the computer models as participants in the self condition—i.e., all the materials that Person X had ostensibly seen.

Participants in each condition then rated how they themselves felt at that moment on the same three bipolar scales used in Study 3 and completed the same measures of perceived similarity of the computer models. As in Study 3, we asked participants to indicate whether the three models had agreed in their feedback or not. We excluded three participants—all in the other/negative condition—who answered this question incorrectly, although including them does not affect any of the results reported below. We gave participants in the self condition an opportunity after the debriefing to withdraw their consent and request that their data be destroyed (none did so).

Results and discussion

We collapsed across the three emotion measures ($\alpha = .95$) and subjected the resulting index to a 2 (feedback: positive vs. negative) $\times$ 2 (target of feedback: self vs. other) ANOVA (see Figure 1). This analysis revealed a main effect for positive vs. negative feedback, $F(1, 396) = 517.00, p < .001, \eta_p^2 = 0.57$, and, unexpectedly, a main effect for target, $F(1, 396) = 5.89, p = .016, \eta_p^2 = 0.02$. Participants who received or heard about negative feedback were less happy, on average, than were those who received or heard about positive feedback, and participants who received feedback themselves were somewhat happier, on average, than were those who heard about someone else's feedback. These main effects were qualified, however, by a significant

interaction, $F(1, 396) = 26.40, p < .001, \eta_p^2 = 0.06$. Not surprisingly, whether the feedback was positive or negative had a greater impact on participants when it was directed at them personally, $t(396) = 19.86, p < .001, d = 0.82$, than when it was directed at Person X, $t(396) = 12.35, p < .001, d = 0.65$.

Next, we collapsed across the four measures of perceived homogeneity (reverse-scoring two of the items such that higher scores on the index corresponded to greater perceived diversity; $\alpha = .78$) and subjected the resulting index to the same 2×2 analysis (see Figure 2). This analysis revealed a main effect for positive vs. negative feedback, $F(1, 396) = 19.87, p < .001, \eta_p^2 = 0.05$, as well as a main effect for target, $F(1, 396) = 4.35, p = .038, \eta_p^2 = 0.01$. Participants who received or heard about negative feedback viewed the computer models as more homogenous, on average, than did those who received or heard about positive feedback, and participants who received feedback themselves viewed the computer models as more homogenous, on average, than did those who heard about someone else's feedback. Once again, however, these main effects were qualified by a significant interaction, $F(1, 396) = 4.23, p = .04, \eta_p^2 = 0.01$. Planned contrasts revealed that the feedback had a significant impact on participants' assessments of the homogeneity of the computer models when it was directed at them personally, $t(396) = 4.64, p < .001, d = 0.68$ (i.e., a direct replication of our finding in Study 3), but only a marginal effect when it was directed at Person X, $t(396) = 1.68, p = .093, d = 0.23$. As expected, then, participants adjusted their perceptions of group homogeneity more when they were the target of the group's feedback than when the feedback was directed at someone else, a finding that lends credence to our contention that participants'

perceptions of homogeneity were motivated by a desire to manage the emotional consequences of the feedback they received.

Finally, Study 4 allowed us to address the issue of where the “action” is in the phenomenon we have demonstrated—in other words, whether the difference we have observed between the judgments of those who received positive feedback and those who received negative feedback reflects a tendency for individuals who are judged positively by groups to see them as especially diverse, a tendency for individuals who are judged negatively by groups to see them as especially homogenous, or both. As can be seen in Figure 2, the judgments of participants who received positive feedback from the computer models were identical to the judgments of participants who merely heard about someone else receiving positive feedback, $t < 1$, $d = 0$, but participants who received negative feedback regarded the three models as significantly more similar to one another than did those who were told that Person X had been judged negatively, $t(396) = 2.92$, $p = .004$, $d = 0.41$. It appears, then, that participants did not adjust their assessments of the models’ similarity to augment their satisfaction over having been judged positively, but *did* make adjustments to their assessments of the models to lessen their dissatisfaction over having been judged negatively. This finding is in keeping with existing research showing that the “negative” side of self-protective biases is typically more pronounced than the positive side (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Rozin & Royzman, 2001; Taylor, 1991), and, as such, underscores once more the self-protective nature of the phenomenon we have demonstrated.

General Discussion

We have shown that individuals who are judged negatively by a group tend to regard the members of that group as more homogenous than do those who are judged positively. This tendency transforms the group into the functional equivalent of an individual, allowing those who have been judged negatively to dismiss the feedback they have received as unreliable. We demonstrated that individuals are able to grasp the attributional logic that this maneuver requires (Study 1), and that they employ it strategically: those whose application for a prestigious campus position was rejected (Study 2) or who were told by a collection of computer systems that they have a poor sense of humor (Studies 3 and 4) regarded the group that evaluated them as more homogenous than did those whose application was approved or who were told that they have an excellent sense of humor. Finally, we underscored the self-protective nature of such judgments by showing that participants adjusted their perceptions of a group's homogeneity when they themselves were the target of the group's judgment more than when the group judged someone else (Study 4).

Some readers may question the ecological validity of using computer systems rather than live individuals as the (ostensible) judges in Studies 3 and 4. On its face, it may seem that having computers serve as the source of evaluation—a procedure we adopted so that we could plausibly provide participants with instantaneous feedback—might feel like a contrived experience to some participants. However, a number of considerations help to attenuate this concern. First, most of our participants were probably aware that computer algorithms are commonly used for making complex and nuanced judgments of individuals—constructing consumer profiles of online shoppers on the basis of their Google search history, say, or unmasking would-be terrorists based on

their travel patterns and known associates—such that our procedure may not have seemed especially unrealistic or unusual. In other words, our procedure in Studies 3 and 4 has direct analogues in everyday life and thus captures a class of experience that participants are likely to have found intuitive. Second, recall that we informed participants that the computer models used in our studies were based on real human beings. Thus, even if receiving feedback from a collection of computers might ordinarily have seemed unusual to some participants, we believe our procedure served as a reasonable and realistic proxy for the experience of receiving feedback from a committee of individuals. Finally, note that Study 2, in which real decisions were made by real individuals in a naturally occurring setting, provides evidence for our hypothesis using a study design with indisputable ecological validity.

As noted earlier, the pattern of results we have documented here bears some resemblance to the outgroup homogeneity bias, people's tendency to perceive greater diversity among the members of groups to which they belong than among the members of groups to which they do not belong (e.g., Linville, Fischer, & Salovey, 1989; Ostrom & Sedikides, 1992; Park & Rothbart, 1982; Quattrone & Jones, 1980). The two phenomena are especially similar—and, indeed, may be especially difficult to disentangle—when the positive vs. negative feedback that individuals receive is tantamount to social inclusion vs. exclusion, as it was in Study 2. However, the results of Studies 3 and 4, in which the negative feedback that participants received did not entail exclusion from a group, demonstrate that the two phenomena are not synonymous, and attest to our contention that one reason individuals regard groups that judge them negatively as homogenous is so that they may dismiss the feedback as unreliable.

Our results dovetail with a number of past investigations in documenting the influence of motivational factors on perceptions of group homogeneity (e.g., Lee & Ottati, 1995; Pickett & Brewer, 2001; Rothgerber, 1997). An important task for future research is to isolate and distinguish among such influences. Consider, for example, research by Goethals, Allison, and Frost (1979), who showed that individuals believe their political allies to be a more diverse group than their political foes, and located the origin of this tendency in individuals' motivation to regard their own views as reasonable and correct (Festinger, 1954; Goethals & Darley, 1977). Perceiving those with whom one agrees to be relatively diverse and those with whom one disagrees to be relatively homogeneous allows one to conclude that one's own opinions are "entity caused" (Kelley, 1967) and thus do not stem from any particular personal characteristics or values—whereas the opinions of those with whom one disagrees may well "represent a narrow and presumably biased point of view" (Goethals et al., 1979, p. 571). Our research shares with this past work the notion that judgments of group homogeneity have implications for the diagnosticity of the group's view, and that such judgments can be rendered in the service of individuals' motivations. Whereas Goethals and colleagues focus on individuals' epistemic motivation to regard their views as accurate, however, our research has emphasized a distinct motivation: individuals' affirmational motivation to protect themselves from negative feedback (Dunning, 2015).

Our research also goes beyond Goethals et al. (1979) in that it more convincingly distinguishes motivated perceptions of group diversity from the outgroup homogeneity bias, discussed above. In the domain of political attitudes, groups one agrees with are naturally perceived as ingroups while groups one disagrees with are often perceived as

outgroups. Thus, it can be difficult to determine whether perceiving one's political allies as more diverse than one's opponents reflects outgroup homogeneity or motivated perceptions of diversity. By contrast, in the domain of affirmation motivation that we studied, there may be less of a link between the favorability of feedback from a group and its ingroup-outgroup status. For example, a grade school student who is praised by her teachers likely does not feel any more of an ingroup relation to these adults than would a fellow student who received negative feedback. Nevertheless, our research suggests that individuals who receive criticism from a group of judges will be motivated to construe the judges as less diverse because it helps to diminish the reliability of their feedback. Thus, extending the study of motivated perceptions of group diversity from the domain of epistemic motivation examined by Goethals and colleagues (1979) to the domain of affirmational motivation that we have examined helps to show more definitively that diversity perceptions may be leveraged to support desired conclusions about a group's judgment.

Apart from such theoretical considerations, the phenomenon we have documented here may have implications for how individuals think about and relate to other people in everyday life. For example, regarding group members as homogenous may contribute to a tendency for people to blame their failures and disappointments on a monolithic "system" of gatekeepers. Often this tendency involves attributing a shared social identity to the gatekeepers, such as employees who view their managers collectively (and derisively) as "the suits" after a negative performance appraisal or performers who complain that the entertainment industry is controlled by a "gay mafia" following an unsuccessful audition (Sherry, 2007). Lumping group members together as

indistinguishable and interchangeable in this way may lead individuals not only to undervalue others' unique contributions and worth (Savitsky, Van Boven, Epley, & Wight, 2005) but, in extreme cases, to deny them basic human capacities such as emotion and thought (Harris & Fiske, 2006; Waytz, Epley, & Cacioppo, 2010). Such dehumanization, in turn, may facilitate aggression or other socially inappropriate behavior towards the members of groups that have judged one negatively (Haslam, 2006, Messick & Mackie, 1989; Quattrone, 1986; Vanbeselaere, 1991; Wilder, 1978, 1986). Future research should investigate perceived homogeneity as a mediating variable between a group's negative judgment of an individual and that individual's subsequent, retaliatory response.

Of course, diversity is only one of the features that may characterize groups in natural settings and influence the ease with which their unwelcome judgments may be dismissed. Accordingly, rather than adjust their perceptions of group members' diversity, individuals who are judged negatively by a group may sometimes take a different tack and convince themselves that the group lacks expertise, is uninformed, is ideologically biased against them, etc. (Greenwald, 1980; Tesser, 1998, 2001). We leave it to future research to specify the moderating variables that determine which strategy individuals will pursue in particular cases of negative feedback. In the meantime, the research we have presented here has shown that in at least some situations in which individuals are judged negatively by a group—when they receive harsh reviews from a grant review panel, perhaps, or when they get another thumbs down from the editors of the *New Yorker* cartoon caption contest—they may exploit a bit of attributional logic and conclude, to borrow a catchphrase from social media users, that “haters are all the same.”

References

- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323-370.
- Dunning, D. (2015). Motivated cognition in self and social thought. In M. Mikulincer, P. R. Shaver, E. Borgida, & J. A. Bargh (Eds.), *APA Handbook of Personality and Social Psychology, Vol. 1: Attitudes and Social Cognition* (pp. 777-803). Washington, DC: American Psychological Association.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117-140.
- Gilbert, D. T., Pinel, E. C., Wilson, T. D., Blumberg, S. J., & Wheatley, T. (1998). Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 75, 617-638.
- Goethals, G. R., & Darley, J. (1977). Social comparison theory: An attributional approach. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 259-278). Washington, DC: Hemisphere.
- Goethals, G. R., Allison, S. J., & Frost, M. (1979). Perceptions of the magnitude and diversity of social support. *Journal of Experimental Social Psychology*, 15, 570-581.
- Goethals, G. R., & Nelson, R. E. (1973). Similarity in the influence process: The belief-value distinction. *Journal of Personality and Social Psychology*, 25, 117-122.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, 35, 603-618.

- Harris, L. T., & Fiske, S. T. (2006). Dehumanizing the lowest of the low: Neuroimaging responses to extreme out-groups. *Psychological Science*, 17, 847-853.
- Haslam, N. (2006). Dehumanization: An integrative review. *Personality and Social Psychology Review*, 10, 252-264.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15, pp. 192-238). Lincoln: University of Nebraska Press.
- Lee, Y.-T., & Ottati, V. (1995). Perceived in-group homogeneity as a function of group membership salience and stereotype threat. *Personality and Social Psychology Bulletin*, 21, 549-569.
- Linville, P. W., Fischer, G. W., & Salovey, P. (1989). Perceived distributions of the characteristics of in-group and out-group members: Empirical evidence and a computer simulation. *Journal of Personality and Social Psychology*, 57, 165-188.
- Mannix, E., & Neale, M. A. (2005). What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science in the Public Interest*, 6, 31-55.
- Messick, D. M., & Mackie, D. M. (1989). Intergroup relations. *Annual Review of Psychology*, 40, 45-81.
- Ostrom, T. M., & Sedikides, C. (1992). Out-group homogeneity effects in natural and minimal groups. *Psychological Bulletin*, 112, 536-552.
- Park, B., & Rothbart, M. (1982). Perception of out-group homogeneity and level of social categorization. *Journal of Personality and Social Psychology*, 42, 1051-1068.
- Pickett, C. L., & Brewer, M. B. (2001). Assimilation and differentiation needs as

- motivational determinants of perceived in-group and out-group homogeneity. *Journal of Experimental Social Psychology*, 37, 341-348.
- Quattrone, G. A. (1986). On the perception of a group's variability. In S. Worchel & W. Austin (Eds.), *The psychology of intergroup relations* (pp. 25-48). Chicago: Nelson-Hall.
- Quattrone, G. A., & Jones, E. E. (1980). The perception of variability within in-groups and out-groups: Implications for the law of small numbers. *Journal of Personality and Social Psychology*, 38, 141-152.
- Rothgerber, H. (1997). External intergroup threat as an antecedent to perceptions of in-group and out-group homogeneity. *Journal of Personality and Social Psychology*, 73, 1206-1212.
- Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5, 296-320.
- Savitsky, K., Van Boven, L., Epley, N., & Wight, W. M. (2005). The unpacking effect in allocations of responsibility for group tasks. *Journal of Experimental Social Psychology*, 41, 447-457.
- Sherry, M. S. (2007). *Gay artists in modern American culture: An imagined conspiracy*. Chapel Hill: The University of North Carolina Press.
- Simonsohn, U. (2014, March 12). No-way interactions [web log post]. Retrieved from <http://datacolada.org/2014/03/12/17-no-way-interactions-2/>.
- Sommers, S. R. (2008). Beyond information exchange: New perspectives on the benefits of racial diversity for group performance. In E. A. Mannix, M. A. Neale, & K. W. Phillips (Eds.), *Research on Managing Groups and Teams (Vol. 11; pp. 195-220)*.

Elsevier Science Press: Oxford, UK.

- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilization-minimization hypothesis. *Psychological Bulletin*, 110, 67-85.
- Tesser, A. (2001). On the plasticity of self-defense. *Current Directions in Psychological Science*, 10, 66-69.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 181-227). New York: Academic Press.
- Vanbeselaere, N. (1991). The impact of in-group and out-group homogeneity/heterogeneity upon intergroup relations. *Basic and Applied Social Psychology*, 12, 291-301.
- Waytz, A., Epley, N., & Cacioppo, J. T. (2010). Social cognition unbound: Insights into anthropomorphism and dehumanization. *Current Directions in Psychological Science*, 19, 58-62.
- Wilder, D. A. (1978). Reduction of intergroup discrimination through individuation of the out-group. *Journal of Personality and Social Psychology*, 36, 1361-1374.
- Wilder, D. A. (1986). Social categorization: Implications for creation and reduction of intergroup bias. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 291-355). New York: Academic.
- Zhao, X., Lynch, J., G., Jr., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, 37, 197-206.

Table 1

Means (and standard deviations) of selected ($n = 31$) vs. rejected ($n = 43$) applicants' perceptions of diversity among the members of the Junior Advisor selection committee, Study 2.

	Selected	Rejected	<i>t</i>	<i>p</i>	<i>d</i>
Diversity of selection committee	4.29 (1.49)	3.33 (1.32)	2.94	.004	0.68
Viewpoints represented	4.71 (1.60)	3.72 (1.33)	2.90	.005	0.67
Interviewer difference	3.74 (1.21)	2.81 (1.28)	3.15	.002	0.75
Index of three measures ($\alpha = .78$)	4.25 (1.18)	3.29 (1.05)	3.68	<.001	0.87

Note: Scores on each measure could vary from 1 to 7. For all *t*-tests, $df = 72$.

Table 2

Means (and standard deviations) of participants' feelings following positive ($n = 49$) vs. negative ($n = 49$) feedback from three computer models, and their perceptions of diversity among the models, Study 3.

	Positive feedback	Negative feedback	<i>t</i>	<i>p</i>	<i>d</i>
Feelings following feedback ^a					
Disappointed/pleased	4.47 (0.82)	2.39 (1.02)	11.16	< .001	2.25
Unappreciated/appreciated	4.31 (0.94)	2.35 (0.95)	10.28	< .001	2.07
Upset/happy	4.47 (0.87)	2.53 (1.04)	10.00	< .001	2.02
Index of three measures ($\alpha = .96$)	4.44 (0.85)	2.42 (0.88)	11.37	< .001	2.33
Perceptions of diversity ^b					
“The three models agreed on how they judged me...the best way to explain this fact is that they are like a committee of very similar people that represents only one particular perspective on humor—i.e., just one narrow way of judging what is or isn't funny.”	3.14 (1.04)	3.76 (0.80)	3.26	.002	0.45

“When it comes to how they judge	2.98	3.53	2.83	.006	0.93
humor, the three models must be	(1.01)	(0.92)			
basically the same—if you’ve seen one,					
you’ve seen them all.”					
“The three models probably each	3.45	2.80	3.17	.002	0.72
represent different perspectives on	(0.96)	(1.08)			
humor that all happened to converge on					
the same judgment in my case. They all					
judged me the same way but may have					
done so for different reasons that made					
sense separately to each model.”					
Degree of difference among the models	2.65	1.90	3.53	<	0.72
	(1.42)	(1.08)		.001	
Index of four measures (first two items	2.99	2.35	4.26	<	0.85
reverse-scored; $\alpha = .79$)	(0.75)	(0.75)		.001	

Note: Scores on each measure could vary from 1 to 5. For all *t*-tests, *df* = 96.

^aHigher numbers on these bipolar scales indicate more positive feelings.

^bParticipants indicated their agreement with each of the first three of these items (higher numbers indicate greater agreement) and then rated the degree of diversity among the models on the fourth item. Higher numbers on the first two items indicate greater perceptions of homogeneity whereas higher numbers on second two items (and on the index of all four items) indicate greater perceptions of diversity.

Figure 1. Participants' emotional response to receiving positive vs. negative feedback or hearing about such feedback directed towards another individual, Study 4. Means refer to a composite of three measures (see text) and could vary from 1 to 5. Higher numbers indicate more positive feelings.

Figure 2. Participants' perceptions of diversity among three computer models as a function of positive vs. negative feedback and whether feedback was directed at participants themselves or another individual, Study 4. Means refer to a composite of four measures (two reverse-scored; see text) and could vary from 1 to 5. Higher numbers indicate greater perceptions of diversity.

Author Notes

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Footnotes

¹ We also asked participants to indicate their certainty in each of their responses from 0 (not at all certain) to 5 (extremely certain). On average, participants indicated a high level of certainty (overall $M = 4.3$) that did not differ significantly across conditions.

² In addition, we asked participants who had applied to be a JA and had been rejected to indicate the extent to which they had felt each of six emotional states (jealous, angry, alone, overlooked, unappreciated, and left out), from 1 (not at all) to 7 (very much). An index of these measures ($\alpha = .88$) had a mean of 3.52. Due to a procedural oversight, participants who had been accepted to be a JA did not complete comparable items.

³ Our language in these instructions conflates two varieties of diversity: demographic diversity (i.e., diversity in individuals' backgrounds and/or group memberships) and viewpoint diversity (i.e., diversity in individuals' perspectives and beliefs). To be clear, the attributional logic behind the effect we are hypothesizing hinges most directly on the latter form of diversity: viewing the members of a group as homogenous in terms of their perspectives and beliefs is arguably what can best decrease the diagnosticity of the group's negative feedback and allow it to be discounted. On the other hand, these two forms of diversity are commonly thought to be related, as when rationales for promoting institutional diversity are premised on the assumption that people from different backgrounds can be expected to contribute different viewpoints (Mannix & Neale, 2005; Sommers, 2008). Thus, we believe that invoking both types of diversity in our instructions probably seemed natural to most participants and that many of our participants regarded them as interchangeable.

⁴ After they completed the JA portion of the questionnaire, participants were presented with analogous items related to a second prestigious program open to juniors at Williams College: the Williams-Exeter Programme, a yearlong study abroad program at Oxford University. Selections for this program are made by a committee (in this case, a committee comprised of faculty members and college deans) in a manner that is similar to the JA selection process. Unfortunately, too few participants in our sample had applied for the Williams-Exeter Programme (22 indicated they had applied; 9 had been accepted and 13 had been rejected) to provide sufficient power to test our hypotheses (although we do note that all measures were in the predicted direction). The questionnaire also contained a number of additional, exploratory items related to participants' perceptions of the extent to which the members of the JA and Williams-Exeter selection committees were similar to them. These items are not relevant to the present investigation and are not discussed here. All of these data are available from the authors upon request.

⁵ Note that this measure (and analogous measures in Studies 3 and 4) was intended as a check of our feedback variable rather than as a measure of an intervening process or mechanism. Zhao, Lynch, and Chen (2010) advise that mediational analyses are inappropriate in cases like this, in which the potential mediator is not conceptually distinct from the independent variable.