



Contents lists available at SciVerse ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Reports

The feedback withholding bias: Minority students do not receive critical feedback from evaluators concerned about appearing racist

Alyssa Croft*, Toni Schmader

University of British Columbia, Canada

ARTICLE INFO

Article history:

Received 6 October 2011

Revised 12 April 2012

Available online xxxxx

Keywords:

Feedback

Prejudice

Teaching

Minority

Learning

Motivation

ABSTRACT

How can we learn from our mistakes if we're unaware they exist? The present research tested the hypothesis that minority students receive less critical feedback on their written work from evaluators who are primarily externally motivated to inhibit their racial biases. Participants highlighted instances of good/bad writing in essays purportedly written by a White or a minority student. Results of two experiments showed that although participants provided equivalent amounts of positive feedback to both authors, they provided less negative feedback and gave higher grades to minority authors to the extent that they were externally but not internally motivated to respond without prejudice. This finding reveals that stigmatized students sometimes fail to receive the critical feedback necessary to identify areas needing improvement, particularly when evaluators are concerned about appearing prejudiced. The implications for educational equality are discussed.

© 2012 Elsevier Inc. All rights reserved.

Introduction

The feedback people receive can have a profound effect on what they learn (Walberg, 1984), making the accuracy of that feedback essential. The present research tested the hypothesis that minority students might not always receive ample critical feedback on their work and tested possible reasons for this *feedback withholding bias*.

At first glance, we might expect evaluators to be overly negative in their feedback to minority students. When negative stereotypes are activated, they represent hypotheses about students' abilities that can lead to less favorable perceptions of ambiguous performance, particularly when evaluators are under time pressure or lack the ability to monitor or control their biases (Darley & Gross, 1983; Jussim, Eccles, & Madon, 1996; Kruglanski & Freund, 1983). Such research leads to an intuitive prediction that majority group evaluators might provide negatively biased feedback to minority compared to majority students; however, there are reasons to expect that minority students sometimes receive overly positive feedback.

In contrast to the above studies in which evaluators believe their evaluations will remain anonymous, other research suggests that when evaluators believe their feedback will be communicated to students, they provide *more* praise to minority than White students (Harber, 1998, 2004; Harber, Stafford, & Kennedy, 2010). Majority-group evaluators write overly positive summaries of essays written by minority students (Harber, 1998) and are reluctant to notify minority

students when their academic workload might be too onerous to handle (Crosby & Monin, 2007). Furthermore, when evaluators set a lower standard of success for stigmatized students, they perceive the mediocre work of minority students in a more positive light than work of the same caliber completed by White students (Biernat & Manis, 1994).

The above research points to a positivity bias in the approach evaluators take when directly advising stigmatized students, but there are gaps in what we know about this phenomenon. First, the above studies have measured gestalt appraisals rather than flagging specific errors and ambiguities for revision. Does this optimistic appraisal imply that evaluators try harder to find the positive in students' work, or do they refrain from pointing out the negative, which could impair later learning? Secondly, we do not fully understand what motivates this bias. Does it stem from a well-intentioned yet patronizing attempt to protect disadvantaged students from feedback that could be demotivating or from a self-interested concern with avoiding any appearance of prejudice?

Research has demonstrated the ways in which overly negative feedback can lead to mistrust and disengagement among minority students (Cohen, Steele, & Ross, 1999) but, on the other hand, the deliberate withholding of criticism is likely to come at a cost to learning. For example, being a target of a negative stereotype cues a motivation to detect, correct and prevent errors as a means to disconfirm that stereotype (Forbes, Schmader, & Allen, 2008; Jamieson & Harkins, 2007; Keller & Bless, 2008). Ironically, the very feedback that minority students might most be searching for and motivated to learn from could be systematically withheld from them. Thus, the first goal of the current research was to identify whether evaluators seek to overemphasize

* Corresponding author at: 2136 West Mall, Department of Psychology, University of British Columbia, Vancouver, B.C., Canada V6T 1Z4. Fax: +1 604 822 6923.

E-mail address: acroft@psych.ubc.ca (A. Croft).

the positive aspects of minority student work (*an inflation bias*), and/or if they refrain from addressing errors (*a feedback withholding bias*).

We expected to see evidence of a feedback withholding bias for two reasons. First, evaluators might intuit that negative feedback would be demotivating for students from disadvantaged educational backgrounds. Taking this *other-focused* but patronizing perspective, evaluators seek to protect vulnerable students by rewarding positive effort rather than penalizing mistakes. Second, evaluators might underreport negative feedback out of a *self-focused* concern with avoiding the appearance of bias (Shelton, Richeson, & Vorauer, 2006). If evaluators believe that any criticism they provide could be interpreted as racial bias, they might be reluctant to highlight the negative and instead overemphasize the positive in their feedback (Cohen & Steele, 2002). Supporting this idea, evaluators provide feedback that is less positively biased if they are first affirmed in their egalitarian values and are held accountable for the feedback they give (Harber et al., 2010; Ruscher, Wallace, Walker, & Bell, 2010). However, past research has neither identified individual differences that make evaluators more or less likely to show these biases nor has it linked concerns with appearing prejudiced to withholding negative feedback specifically.

We hypothesized that concerns about appearing racist should be most salient to those who are motivated primarily by extrinsic reasons to regulate their biases, operationalized as those low in internal motivation (IMS) but high in external motivation (EMS) to respond without prejudice in race-relevant contexts (Plant & Devine, 1998, 2009). These individuals adhere to social norms to refrain from revealing biases, but have not internalized egalitarian goals (Butz & Plant, 2009). Individuals with this *compliant motivation* endorse negative biases in private, but report less prejudice in public (Butz & Plant, 2009; see also Dunton & Fazio, 1997 for a similar model). This can lead them to feel their personal freedoms are constrained, causing anger and backlash against minority groups (Plant & Devine, 2001). We predicted the largest feedback withholding bias from evaluators with a compliant motivation.

We carried out two experiments in which non-stigmatized undergraduates evaluated equally mediocre essays, ostensibly written by either a White or minority author (Study 1: Aboriginal Canadian; Study 2: Black). We expected to replicate an overall positivity bias in the final grade assigned to minority student writing consistent with an overpraising effect found in prior research (as in Harber, 1998, 2004), however, we also hypothesized an underlying withholding of negative feedback when we examined the nuances evaluators choose to address. In addition, we examined the roles of other-focused and self-focused motivations in predicting this effect.

Study 1

Method

Participants

Fifty-nine White, Canadian-born undergraduate students participated for research credit or payment. The study was run in groups with a maximum of five per group. Three participants were excluded from analyses because they expressed suspicion during a funnel debriefing that we were examining racial biases. Three additional participants from a single session were excluded because one participant openly questioned the cover story at the outset of the study. Lastly, one person failed to follow instructions on the highlighting task (i.e., wrote comments to the author in the margins) and was thus excluded from analyses (final $N = 52$).

Procedure

The cover story for the study involved an ostensible collaboration with the school board to create a mentoring program for high school students interested in post-secondary education. As part of this program,

participants were asked to first read and evaluate essays of five local high school students and provide feedback via video conferencing and email. Participants then signed a bogus consent form agreeing to engage in face-to-face interactions with the authors. In actuality, these procedures were designed to create a strong belief that participants would be communicating their feedback directly to the students.

The essays were written or adapted to be equivalent in length, believable as essays written by high school students, and were always presented in the same order. They covered historical events, places, or people (e.g., history of Alcatraz, Agrippina, or Hypatia and Alexander the Great). Attached to each essay was a profile sheet about the student (including ethnicity), presumably provided so that evaluators could know the authors a bit more, as is the case with their teachers. We attempted to create a representative sample of student profiles given the city in which the study took place. Specifically, the first and last essays were always presented as being written by female White and Asian authors, respectively. The two target profiles (identifying the authors as an Aboriginal male and a White male) were counterbalanced in the 2nd, 3rd, or 4th position (the remaining profile that occupied one of these middle positions was always an Asian male). Thus, every participant evaluated one essay purportedly written by a White author and one essay purportedly written by an Aboriginal author.

Initial pilot testing confirmed that the two target profiles themselves (detached from the essays) did not lead to significantly different expectations of academic competence ($M_{minority} = 4.00$, $M_{white} = 3.91$, $F < 1$, on a 5-point scale) and that the two target essays alone (detached from the profiles) were of similar clarity ($M_1 = 3.65$, $M_2 = 3.82$, $M_3 = 3.56$), $F < 1$, and perceived author grade level ($M_1 = 10.75$, $M_2 = 10.88$, $M_3 = 11.13$), $F < 1$. The three filler essays were pilot tested to be of higher, similar and lower quality than the target essays with the strongest essay appearing first and the weakest essay last. This provided a meaningful range in essay quality and presented the target essays as only moderately good.

Participants used highlighters to identify aspects of the essays they wished to highlight for being well-written (yellow = positive feedback) or needing to be revised (blue = negative feedback), and also completed an evaluation sheet for each essay. Measures of participants' motivations to respond without prejudice and to adopt a patronizing stance toward giving feedback were included in an ostensibly unrelated questionnaire completed prior to debriefing.

Outcome measures

Negative and positive feedback. Feedback was operationalized as the total number of centimeters of blue (negative) and yellow (positive) highlighting on each essay. The *feedback withholding bias* was calculated as the difference in negative feedback to a White vs. Aboriginal author (where higher numbers indicate that the minority student received less negative feedback than a White peer). Similarly, *feedback inflation* was calculated as the difference in positive feedback to the Aboriginal vs. White author (where higher scores indicate relative inflation of positive feedback to an Aboriginal author).

Global essay evaluations. Participants graded each essay on a scale from 0 to 100. The *grade bias* was calculated as the difference between the Aboriginal author's grade and the White author's grade such that higher numbers represent an inflated grade for the Aboriginal author.

Predictor variables

Motivation to respond without prejudice. Ratings of participants' internal (IMS) and external (EMS) motivations to respond without prejudice were given on a 1 (strongly disagree) to 7 (strongly agree) Likert scale (Plant & Devine, 1998). The internal motivation ($\alpha = .83$, e.g., *Being nonprejudiced toward people of other ethnicities is important to my self-concept*), and

external motivation scales ($\alpha = .89$, e.g., *I attempt to act in nonprejudiced ways toward people of other ethnicities because of pressure from others*) each contain five items.

Patronizing motivation. Participants reported their agreement with six items ($\alpha = .85$) measuring patronizing orientation towards minority students on a 1 (strongly disagree) to 7 (strongly agree) Likert scale. These items were created for the purpose of this research (e.g., *I feel sorry for minority students who struggle to do well academically*). Initial analyses revealed that a self-reported patronizing motivation did not significantly predict any of the outcome variables in either study, p 's $> .50$, and thus it was discarded as a potential explanation for observed bias.

Results and discussion

Preliminary analyses

Although our pilot data suggested that the three essays used as target essays in the study were of equivalent quality, initial analyses revealed unanticipated differences both in the negative feedback provided and grade assigned based on essay topic alone. Specifically, the second essay (about Alcatraz) received a higher grade, $F(1,49) = 31.00$, $p < .001$, and was given less negative feedback, $F(1,49) = 10.21$, $p = .002$, than the other two essays (about historical figures). Because a nearly equal number of participants were run in each essay order, any effect of essay topic was unconfounded with the ethnicity of the presumed author, which was counterbalanced. Thus, this unanticipated variation in the perceived quality of the essay topics themselves adds some noise to the design, but does not bear on the hypotheses being tested and when we controlled for it in our primary analyses, results were unchanged.

Testing mean differences

Our next set of analyses compared mean differences in positive and negative feedback and grades given to a White versus Aboriginal author. A 2 (highlighted feedback: positive, negative) \times 2 (author: White, Aboriginal) completely within-subjects ANOVA on the type of highlighting given yielded only a marginal main effect of feedback; participants generally gave more positive ($M = 61.05$) than negative feedback ($M = 47.28$), $F(1, 50) = 2.96$, $p = .09$, $\eta_p^2 = .06$. The interaction was not significant, $F(1, 50) = .02$, $p > .80$, $\eta_p^2 < .001$. A paired samples t -test of grades awarded to the Aboriginal and White authors revealed that participants awarded both authors similar grades of about 74%, $t(51) < 1$. Thus, participants in Study 1 did not display overall biases in feedback or grades awarded to an Aboriginal student. However, we expected these biases to be predicted by having a constrained motivation to respond without prejudice (i.e., high EMS/low IMS). Therefore, outcome variables operationalized as differences in feedback and grades given to a minority vs. White author were analyzed with a series of hierarchical regression analyses in which the predictor variables, IMS and EMS were entered as continuous, mean centered variables in Step 1 followed by their interaction in Step 2.¹

Feedback withholding bias

Analysis of negative feedback withholding revealed the expected interaction between IMS and EMS, $\Delta R^2 = .10$, $F(1, 48) = 5.64$, $p = .022$ (see Fig. 1). Neither main effect was significant, p 's $> .30$. Simple slope analyses (estimated at ± 1 SD of IMS and EMS) revealed that participants with a more compliant motivation (low IMS/high EMS) withheld a greater amount of negative feedback from an Aboriginal author than those low in IMS/low in EMS, $\beta = .60$, $p = .015$. On the

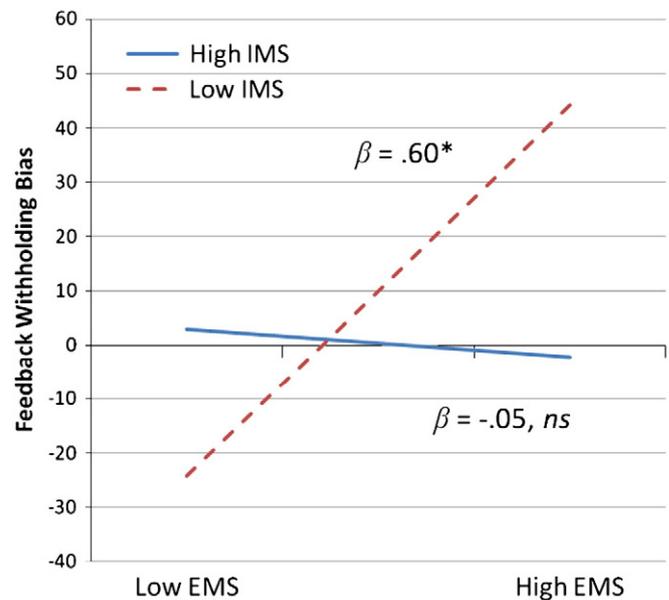


Fig. 1. Study 1: Interaction between IMS and EMS (estimated at ± 1 SD from the mean) predicting the feedback withholding bias (i.e., the difference in negative feedback given to a White author compared to an Aboriginal author).

other hand, at high levels of IMS, EMS was unrelated to the relative amount of negative feedback given to an Aboriginal author, $\beta = -.05$, $p > .75$, and scores approximating zero indicated similar negative feedback for both authors. These results indicate that those who lack an internalized goal to be non-biased, while at the same time being motivated to appear nonbiased, were more likely to inhibit negative feedback to an Aboriginal (vs. a White) author.

Feedback inflation

The same moderated regression analysis predicting positive feedback inflation yielded no significant main or interactive effects of IMS or EMS, all p 's $> .19$. As such, there was no evidence that participants sought to highlight more positive aspects of minority student writing either overall or as a function of their motivations to respond without prejudice. However, because participants gave more positive than negative feedback overall, elevated levels of positive feedback could have been masking effects. Study 2 employed a slight change of instructions to address this possible concern.

Grade bias

Analysis of the difference in grades awarded to an Aboriginal vs. White author yielded a significant interaction between IMS and EMS, $\Delta R^2 = .11$, $F(1, 48) = 5.83$, $p = .020$ (see Fig. 2). Neither main effect was significant, p 's $> .37$. Simple slopes again revealed that participants with a more compliant motivation (low IMS/high EMS) gave higher grades to an Aboriginal than a White author as compared to participants low in IMS and low in EMS, $\beta = .60$, $p = .016$. EMS was unrelated to grade biases from participants high in IMS and again grade bias scores approximated zero among those participants who have internalized egalitarian goals, $\beta = -.08$, $p > .65$.

Finally, a multiple regression analysis predicting grade bias from positive and negative feedback biases simultaneously revealed that although providing overly positive feedback indeed predicts grade inflation, $\beta = .29$, $p = .017$, withholding negative feedback has a unique predictive effect on grade inflation for an Aboriginal as compared to a White author, $\beta = .48$, $p < .001$.

Summary

This study examined potential biases in the feedback provided to minority students. Although there were no overall biases observed

¹ When analyses are run separately for each author, the IMS \times EMS interaction is significant for negative feedback, $\beta = .50$, $p = .01$, and grade, $\beta = -.40$, $p < .05$, to an Aboriginal (but not a White) author. There was also a main effect of EMS when giving negative feedback to an Aboriginal author, $\beta = -.37$, $p < .05$.

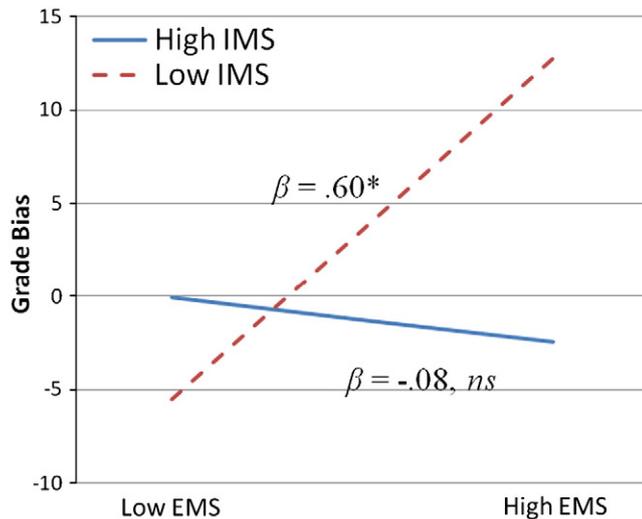


Fig. 2. Study 1: Interaction between IMS and EMS (estimated at ± 1 SD from the mean) predicting the grade inflation bias (i.e., the difference in the grade assigned to an Aboriginal author compared to a White author).

across the sample, participants most at risk of providing biased feedback were identified. Specifically, participants who tended to regulate their biases due to external pressures, and not due to their own internal egalitarian standards, were most likely to award a higher grade to an essay written by an Aboriginal (vs. White) author as well as withhold more negative feedback from that student. Interestingly, motivations to respond without prejudice did not predict biases in the positive feedback participants gave to minority students and had no significant effect on feedback provided to a White author.

In Study 2, we sought to replicate and strengthen these effects by examining Blacks as a target group that might more strongly trigger global concerns of racial bias. Because Aboriginal Canadians are a relatively invisible minority in North America (Fryberg & Stephens, 2010), we reasoned that people might be somewhat less apt to monitor and control their biases against this group unless they have a strongly compliant motivation toward biased responding. Perhaps it is for this reason that, in Study 1, we did not see evidence of a “bending over backwards effect”, wherein non-stigmatized participants tend to make overly positive trait ratings of stigmatized targets (e.g., Blacks and the handicapped; Biernat, Vescio, & Theno, 1996; Carver, Glass, & Katz, 1978; Olson & Fazio, 2004). Alternatively, norms against holding biases towards Blacks are more culturally salient. For example, in television programming, Blacks are the only minority group that is overrepresented compared to their actual proportion in the American population (Mastro & Greenberg, 2000). Such findings suggest that members of socially advantaged groups might be particularly conscious of wanting to inhibit any appearance of being biased toward Blacks. For this reason, we expected the feedback withholding bias to be stronger in Study 2.

Study 2

Method

Participants

Sixty-seven undergraduate participants (74% Asian, 26% White) received either research credit or payment. Two participants were unable to complete the study due to computer malfunctioning and three others gave feedback (in centimeters of highlighting) that exceeded three standard deviations from the mean of feedback given; these five participants were excluded from analyses (final $N = 62$).

Procedure

The cover story, measures and procedures were nearly identical to Study 1, with a few exceptions. First, the minority target student was identified as Black rather than Aboriginal. Second, to eliminate the essay effect in Study 1 we removed the problematic essay and asked participants to evaluate only four essays. Finally, to encourage greater discretion in providing feedback, participants were encouraged to only highlight areas they thought were very well written (with yellow) or greatly in need of improvement (with blue), and to do nothing if a section seemed fine as written.

Results and discussion

As in Study 1, we first compared mean differences in both highlighted feedback and grades given to a White versus Black author. Initial analyses revealed that the topics of the two target essays had no bearing on feedback or grades given, thus the procedural change we made from Study 1 was effective. A 2 (highlighted feedback: positive, negative) \times 2 (author: White, Black) completely within-subjects ANOVA on the type of highlighting given yielded a significant interaction, $F(1, 61) = 6.83, p = .011, \eta_p^2 = .10$. Main effects were not significant, p 's $> .27$. Simple effects revealed evidence of an overall feedback withholding bias such that participants provided a Black author with significantly less negative feedback ($M = 34.98$) than a White author ($M = 46.53$), $p = .023$. There was no significant difference between author ethnicities in the amount of positive feedback given, $p > .41$. As in Study 1, however, a paired sample t -test revealed no difference in grade given to a Black vs. White author, $p > .54$.² Once again, to examine the effect of motivations to respond without prejudice, we conducted the same hierarchical regression analyses used in Study 1.³

Feedback withholding bias

The regression predicting the feedback withholding bias yielded the expected $\text{IMS} \times \text{EMS}$ interaction, $\Delta R^2 = .10, F(1, 58) = 7.96, p = .005$ (see Fig. 3), which qualified a significant main effect of EMS, $\beta = .40, p = .001$. Simple slope analyses reflected the same patterns as Study 1 wherein participants with a more compliant motivation (low IMS/high EMS) demonstrated a stronger feedback withholding bias than those low in both IMS and EMS, $\beta = .997, p < .001$. At high levels of IMS, EMS was unrelated to the degree of feedback withholding bias evaluators showed, $\beta = .05, p > .80$. As in Study 1, those who had not internalized egalitarian values but felt externally motivated to inhibit bias were most likely to deny negative feedback to a minority student compared to his/her White peer.

Examination of the simple slopes at high and low levels of EMS revealed that evaluators high in EMS but low in IMS withheld significantly more negative feedback from a Black student (vs. a White student) compared to evaluators high in both EMS and IMS, $\beta = -.39, p < .05$. On the other hand, evaluators who reported low levels of both IMS and EMS provided significantly more negative feedback to a Black student than a White student compared to evaluators with higher levels of IMS, $\beta = .55, p < .05$. This suggests that people who are unconcerned with hiding their biased behavior in order to conform to norms of political correctness might be overly punitive when evaluating work by Black students.

² Analyses are unchanged when order is included, excepting a theoretically uninteresting feedback \times order interaction, $p = .05$: participants who saw the Black before the White author gave more negative than positive feedback; participants who saw the White author first provided equal amounts.

³ When we analyzed feedback given to each author separately, we found additive main effects of IMS, $\beta = .24, p = .05$, and EMS, $\beta = -.24, p = .05$, predicting negative feedback to a Black author. Although the interaction was not significant, these main effects highlight the greatest bias exhibited by participants who are both high in EMS and low in IMS. No other effects reached significance, all p 's $> .05$, except for higher IMS predicting more negative feedback to a White author, $p < .05$.

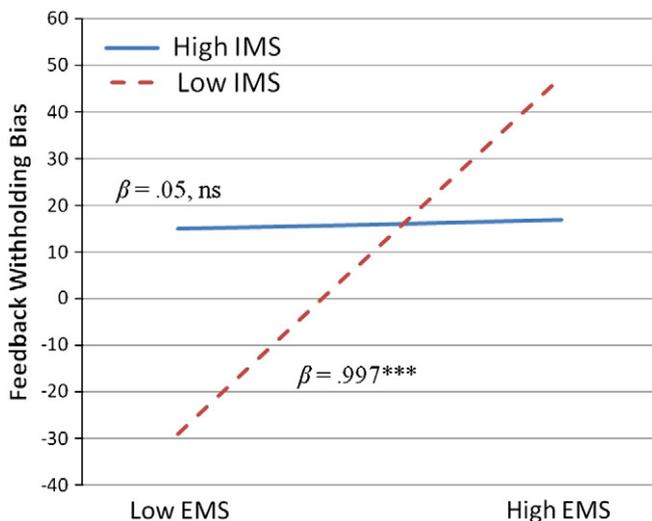


Fig. 3. Study 2: The interaction between IMS and EMS (estimated at ± 1 SD from the mean) predicting the feedback withholding bias (i.e., the difference between negative feedback to a White author compared to a Black author).

Feedback inflation

We found no significant main or interactive effects of these motivation variables predicting feedback inflation, all p 's $> .18$. Thus, in spite of our instructions to encourage more judicious use of positive feedback, Study 2 again showed no evidence of positive feedback inflation.

Grade bias

As in Study 1, the IMS by EMS interaction was a significant predictor of grade bias, $\Delta R^2 = .11$, $F(1,58) = 7.58$, $p = .008$ (see Fig. 4). This interaction qualified a main effect of EMS, $\beta = .27$, $p = .039$ but there was no main effect of IMS, $p > .97$. Simple slope analyses yielded similar significant patterns: at low levels of IMS, higher EMS predicted giving a higher grade to a Black than a White author, $\beta = .88$, $p = .001$. But at high levels of IMS, EMS was unrelated to grades bias, $p > .60$. Additionally, tests of the simple slopes at high and low levels of EMS revealed that at high levels of EMS, those low in IMS exhibited more

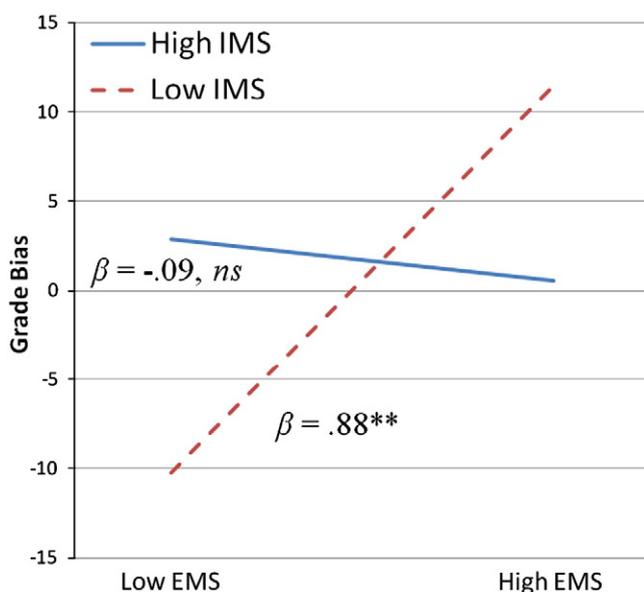


Fig. 4. Study 2: Interaction between IMS and EMS (estimated at ± 1 SD from the mean) predicting the grade inflation bias (i.e., the difference in the grade assigned to a Black author compared to a White author).

grade inflation (i.e., gave a higher grade to a Black than White author) compared to those high in IMS, $\beta = -.44$, $p < .05$. In contrast, at low levels of EMS, IMS predicted the opposite bias (i.e., giving a lower grade to a Black than a White author), $\beta = .53$, $p < .05$, once again indicating that evaluators who do not care to act according to norms of egalitarian behavior might be wrongfully penalizing Black students.

Finally, a simultaneous regression predicting grade bias from the two feedback biases showed that withholding negative feedback was a significant predictor of grade inflation for a Black student, $\beta = .36$, $p = .003$, but unlike Study 1, providing overly positive feedback was not, $\beta = .15$, $p > .20$.

General discussion

If students are to develop their ability to monitor and evaluate their own performance, they need to receive accurate feedback on their work. The present set of studies suggests that this might not always happen for minority students. In Study 2, all evaluators gave significantly less negative feedback to an essay written by a Black student than an essay of the same caliber written by a White student. Across both studies, this feedback withholding bias was most evident for participants who have not internalized egalitarian goals but feel pressure from society to conform to politically correct standards of non-biased behavior (i.e., low internal but high external motivation to respond without prejudice; Plant & Devine, 1998). Specifically, the regression model predicts that an evaluator who is one standard deviation below the mean on IMS and above the mean on EMS would provide about 40 fewer centimeters of critical feedback and a grade that is about twelve percentage points higher to a minority student than to a White student. Taken together, these studies provide evidence that minority students might not always be getting the accurate feedback they need to improve their writing.

Prior research on evaluative biases has tended to focus on the written, gestalt evaluations provided to minority students. Similar to that research, we also found evidence that evaluators concerned with appearing prejudiced provide a higher grade to a Black than to a White student, which on its own could be interpreted in light of shifting standards (Biernat, Collins, Katzarska-Miller, & Thompson, 2009). However, the fact that motivations to respond without prejudice are such strong predictors of the biases we observed suggests that impression management concerns contribute to these effects over and above any tendency to perceive the minority student's essay as being better written.

We acknowledge that because measures of IMS and EMS were collected after participants evaluated the essays, we cannot rule out the possibility that participants' evaluations of the essays influenced their responses on these scales. However, recent experimental work reveals that White evaluators provide more helpful feedback to minority students if their egalitarian values are first affirmed (Harber et al., 2010; Ruscher et al., 2010), potentially buffering against the threat of being seen as racist (Bergsieker, Shelton, & Richeson, 2010). Thus, it is perhaps more theoretically plausible that having a strong concern about appearing prejudiced leads people to exhibit a positivity bias in their evaluations of minority students, a bias that includes an underreporting of constructive criticism. Furthermore, we found no support for the hypothesis that providing biased feedback is related to evaluators' patronizing attempts to protect minority students' academic engagement from the sting of criticism. Taken together, the accumulating evidence suggests that overpraising and the feedback withholding bias are predicted by self-interested impression management concerns.

Our results might appear to contradict past studies showing a positivity bias in feedback to a minority student, given that we saw no evidence that participants provided more positive highlighting to minority students (Harber, 1998, 2004). It is useful to note, however, that differences in the methodology used across studies might point to separate constructs rooted in the same overarching phenomenon.

Previous work on positivity biases (Harber, 1998, 2004) focused on coding participants' written summary evaluations to a minority student. The overall grades provided by participants in our studies seem to be more comparable to the subjective summary-type statements that Harber examined. If this is the case, then we do, in fact, see evidence for a similar positivity bias in the current research based on the grade inflation indicators.

What is not evident from prior work is whether the inflation of global evaluations is driven by a failure to point out negative feedback or an emphasis on seeking out and highlighting positive feedback. Our method was designed to extend Harber's prior research by teasing these two apart (i.e., highlighting sections needing improvement vs. recognizing particularly good writing). Note, this goes beyond the coding of simple writing mechanics that Harber (1998) also measured but which revealed no systemic bias. A great deal of feedback falls between the very concrete level of correcting typographical errors or punctuation and more subjective global written summaries. Our research clearly shows that minority students are more likely to experience an underreporting of the information that would allow them to improve their writing rather than an over-reporting of the positive aspects of their work. In this way, our findings are in line with recent work by Harber et al. (2010) showing that non-affirmed White participants recommend that minority students spend fewer hours improving their writing than White students.

The feedback withholding bias could have serious implications for minority student learning and subsequent performance. For example, rewarding substandard work can communicate that little more is expected from a student and prevent them from honing their skills or mastering challenging subjects (Brophy, 1981; Massey, Scott, & Dornbusch, 1975; Mueller & Dweck, 1998). In addition, because academically engaged minority students are particularly vigilant to detect and correct errors they make during an intellectual task (Forbes et al., 2008; Jamieson & Harkins, 2007), they are likely to be especially motivated to learn from the negative feedback they are not consistently receiving. As a result, minority students might find it difficult to decipher when feedback is accurate and have trouble calibrating their abilities, contributing to an overall mistrust in academic institutions and uncertainty about their true skill level (Aronson & Inzlicht, 2004; Schmader, Major, & Gramzow, 2001). One caveat, however, is that criticism must be delivered in conjunction with high expectations for achievement in order to maintain students' motivation (Cohen et al., 1999). This consideration is particularly relevant to evaluators who are unmotivated to behave in an egalitarian manner and thus provide overly punitive evaluations of minority student work. Our hope is that sharing these disquieting findings will shed more light on the importance of providing accurate feedback to all students and will spur additional research geared towards ensuring candid, constructive feedback to stigmatized and nonstigmatized students alike.

References

- Aronson, J., & Inzlicht, M. (2004). The ups and downs of attributional ambiguity: Stereotype vulnerability and the academic self-knowledge of African American college students. *Psychological Science, 15*, 829–836.
- Bergsieker, H. B., Shelton, J. N., & Richeson, J. A. (2010). To be liked versus respected: Divergent goals in interracial interactions. *Journal of Personality and Social Psychology, 99*, 248–264.
- Biernat, M., Collins, E. C., Katzarska-Miller, I., & Thompson, E. (2009). Race-based shifting standards and racial discrimination. *Personality and Social Psychology Bulletin, 35*, 16–28.
- Biernat, M., & Manis, M. (1994). Shifting standards and stereotype-based judgements. *Journal of Personality and Social Psychology, 66*, 5–20.
- Biernat, M., Vescio, T. K., & Theno, S. A. (1996). Violating American values: A "value congruence" approach to understanding outgroup attitudes. *Journal of Experimental Social Psychology, 32*, 387–410.
- Brophy, J. E. (1981). Teacher praise: A functional analysis. *Review of Educational Research, 51*, 5–32.
- Butz, D. A., & Plant, E. A. (2009). Prejudice control and interracial relations: The role of motivation to respond without prejudice. *Journal of Personality, 77*(5), 1311–1341. <http://dx.doi.org/10.1111/j.1467-6494.2009.00583.x>
- Carver, C. S., Glass, D. C., & Katz, I. (1978). Favorable evaluations of Blacks and the handicapped: Positive prejudice, unconscious denial, or social desirability? *Journal of Applied Social Psychology, 8*, 97–106.
- Cohen, G. L., & Steele, C. M. (2002). A barrier of mistrust: How stereotypes affect cross-race mentoring. In J. Aronson (Ed.), *Improving academic achievement: Impact of psychological factors on education* (pp. 305–331). San Diego, CA: Academic Press.
- Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin, 25*, 1302–1318.
- Crosby, J., & Monin, B. (2007). Failure to warn: How student race affects warnings of potential academic difficulty. *Journal of Experimental Social Psychology, 43*, 663–670.
- Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology, 44*, 20–33.
- Dunton, B. C., & Fazio, R. H. (1997). An individual difference measure of motivation to control prejudiced reactions. *Personality and Social Psychology Bulletin, 23*, 316–326.
- Forbes, C., Schmader, T., & Allen, J. (2008). The role of devaluing and discounting in performance monitoring: a neurophysiological study of minorities under threat. *Social Cognitive and Affective Neuroscience, 3*, 253–261.
- Fryberg, S. A., & Stephens, N. M. (2010). When the world is colorblind, American Indians are invisible: A diversity science approach. *Psychological Inquiry, 21*(2), 115–119.
- Harber, K. D. (1998). Feedback to minorities: Evidence of a positive bias. *Journal of Personality and Social Psychology, 74*, 623–628.
- Harber, K. D. (2004). The positive feedback bias as a response to out-group unfriendliness. *Journal of Applied Social Psychology, 34*, 2272–2297.
- Harber, K. D., Stafford, R., & Kennedy, K. A. (2010). The positive feedback bias as a response to self-image threat. *The British Journal of Social Psychology, 49*, 207–218.
- Jamieson, J. P., & Harkins, S. G. (2007). Mere effort and stereotype threat performance effects. *Journal of Personality and Social Psychology, 93*, 544–564.
- Jussim, L., Eccles, J., & Madon, S. (1996). Social perception, social stereotypes, and teacher expectations: Accuracy and the quest for the powerful self-fulfilling prophecy. *Advances in Experimental Social Psychology, 28*, 281–388.
- Keller, J., & Bless, H. (2008). When positive and negative expectancies disrupt performance: Regulatory focus as a catalyst. *European Journal of Social Psychology, 38*, 187–212.
- Kruglanski, A. W., & Freund, T. (1983). Freezing and unfreezing of lay-inferences: Effects on impression primacy, ethnic stereotyping, and numerical anchoring. *Journal of Experimental Social Psychology, 19*, 448–468.
- Massey, G., Scott, V., & Dornbusch, S. (1975). Racism without racists: Institutional racism in urban schools. *Black Scholar, 7*, 10–19.
- Mastro, D., & Greenberg, B. (2000). The portrayal of racial minorities on prime time television. *Journal of Broadcasting & Electronic Media, 44*, 690–703.
- Mueller, C. M., & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of Personality and Social Psychology, 75*, 33–52.
- Olson, M. A., & Fazio, R. H. (2004). Trait inferences as a function of automatically-activated racial attitudes and motivation to control prejudiced reactions. *Basic and Applied Social Psychology, 26*, 1–12.
- Plant, E. A., & Devine, P. G. (1998). Internal and external motivation to respond without prejudice. *Journal of Personality and Social Psychology, 75*, 811–832.
- Plant, E. A., & Devine, P. G. (2001). Responses to other-imposed pro-black pressure: Acceptance or backlash? *Journal of Experimental Social Psychology, 37*, 486–501.
- Plant, E. A., & Devine, P. (2009). The active control of prejudice: Unpacking the intentions guiding control efforts. *Journal of Personality and Social Psychology, 96*, 640–652.
- Ruscher, J. B., Wallace, D. L., Walker, K. M., & Bell, L. H. (2010). Constructive feedback in cross-race interactions. *Group Processes & Intergroup Relations, 13*, 603–619.
- Schmader, T., Major, B., & Gramzow, R. H. (2001). Coping with ethnic stereotypes in the academic domain: Perceived injustice and psychological disengagement. *Journal of Social Issues, 57*, 93–111. <http://dx.doi.org/10.1111/0022-4537.00203>
- Shelton, N., Richeson, J., & Vorauer, J. (2006). Threatened identities and interethnic interactions. *European Review of Social Psychology, 17*, 321–358.
- Walberg, H. G. (1984). Improving the productivity of America's schools. *Education Leadership, 41*, 19–27.