



Mispredicting Affective and Behavioral Responses to Racism

Kerry Kawakami, *et al.*
Science **323**, 276 (2009);
DOI: 10.1126/science.1164951

The following resources related to this article are available online at www.sciencemag.org (this information is current as of February 17, 2009):

Updated information and services, including high-resolution figures, can be found in the online version of this article at:

<http://www.sciencemag.org/cgi/content/full/323/5911/276>

Supporting Online Material can be found at:

<http://www.sciencemag.org/cgi/content/full/323/5911/276/DC1>

A list of selected additional articles on the Science Web sites **related to this article** can be found at:

<http://www.sciencemag.org/cgi/content/full/323/5911/276#related-content>

This article **cites 17 articles**, 3 of which can be accessed for free:

<http://www.sciencemag.org/cgi/content/full/323/5911/276#otherarticles>

This article appears in the following **subject collections**:

Psychology

<http://www.sciencemag.org/cgi/collection/psychology>

Information about obtaining **reprints** of this article or about obtaining **permission to reproduce this article** in whole or in part can be found at:

<http://www.sciencemag.org/about/permissions.dtl>

Mispredicting Affective and Behavioral Responses to Racism

Kerry Kawakami,^{1*} Elizabeth Dunn,² Francine Karmali,¹ John F. Dovidio³

Contemporary race relations are marked by an apparent paradox: Overt prejudice is strongly condemned, yet acts of blatant racism still frequently occur. We propose that one reason for this inconsistency is that people misunderstand how they would feel and behave after witnessing racism. The present research demonstrates that although people predicted that they would be very upset by a racist act, when people actually experienced this event they showed relatively little emotional distress. Furthermore, people overestimated the degree to which a racist comment would provoke social rejection of the racist. These findings suggest that racism may persevere in part because people who anticipate feeling upset and believe that they will take action may actually respond with indifference when faced with an act of racism.

Contemporary race relations are marked by an apparent paradox. On one hand, racism is strongly condemned (1–3), and being labeled a “racist” has become a powerful stigma of its own (4). On the other hand, acts of blatant racism against blacks still occur with alarming regularity. A recent survey (5) found that 67% of blacks indicated that they often face discrimination and prejudice when applying for a job, and 50% reported that they experienced racism when engaging in such common activities as shopping or dining out. For many blacks, derogatory racial comments are a common occurrence, and almost one-third of whites report encountering anti-black slurs in the workplace (6). Why would whites exhibit such overt racism if this behavior was sure to provoke anger and social rejection from others of their own race?

We suggest that social deterrents to racism may be weaker than public rhetoric implies. First, even if people are upset by an act of racism, they may not penalize individuals for violating egalitarian social norms because enforcing such norms can be costly (7–9). Confronting a racist or even confronting someone who does not rebuke racists can consume cognitive and emotional energy. Second, people may be less upset and less likely to take action in response to racism than they themselves would anticipate. This possibility is supported by research demonstrating that people often make inaccurate forecasts related to their emotional responses (10, 11), exhibiting a robust proclivity to overestimate how upset they would feel in bad situations (12–14). This research has focused on affective, and not behavioral, predictions. The primary goal of the present research is to investigate discrepancies between how people imagine they would feel and behave and how they actually feel and behave upon hearing a racist comment.

¹Department of Psychology, York University, 4700 Keele Street, Toronto, Ontario, Canada, M3J 1P3. ²Department of Psychology, University of British Columbia, 2136 West Mall, Vancouver, British Columbia, Canada, V6T 1Z4. ³Department of Psychology, Yale University, 2 Hillhouse Avenue, Box 208205, New Haven, CT 06520–8205, USA.

*To whom correspondence should be addressed. E-mail: kawakami@yorku.ca

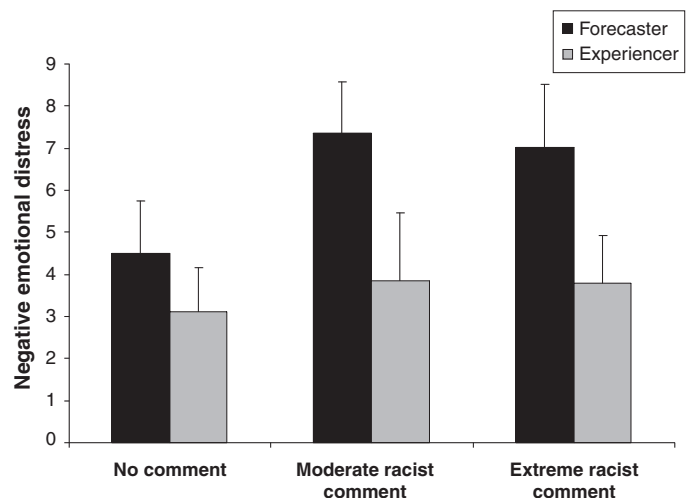
According to aversive racism theory, even individuals who embrace egalitarian beliefs may continue to harbor nonconscious negative feelings toward blacks (15, 16). Recent research demonstrates that, whereas egalitarian beliefs typically guide thoughtful, deliberative responses, lingering negative feelings toward blacks often emerge in the context of more spontaneous responses (1, 3, 17–19). When contemplating their own responses to hypothetical situations, people tend to adopt a relatively deliberative mindset (10, 20), suggesting that people are likely to draw on their conscious egalitarian values in imagining how they would respond to an act of racism (21). Yet, when faced with actual racism, people’s spontaneous feelings and behavior may reveal latent bias toward blacks. In accordance with this framework, we hypothesized that people who imagined hearing a racist comment would expect to be more upset and would overestimate the degree to which they would reject the racist compared with people who actually heard the comment.

In an initial study investigating participants’ actual and anticipated responses to an anti-black

slur, we assigned 120 participants who self-identified their race/ethnicity (e.g., black, Asian, Pakistani) to the role of “experiencer” or “forecaster” and exposed them to an incident involving no racial slur, a moderate racial slur, or an extreme racial slur. Because our goal was to examine how people who do not belong to the target group respond to racial slurs, black participants were not included in this study (22). Upon entering the laboratory, the experimenter introduced the experiencers to two male confederates—one black and one white—who posed as fellow participants, and then the experimenter exited the room. Shortly thereafter, the black confederate left the room, ostensibly to retrieve his cell phone, and gently bumped the white confederate’s knee on his way out. In the control condition, this incident passed without comment. In the moderate slur condition, once the black confederate had left the room, the white confederate remarked, “Typical, I hate it when black people do that.” In the extreme racial slur condition, the white confederate stated, “clumsy ‘N word.’” Within minutes, the black confederate returned, followed by the experimenter, who asked everyone to complete an initial survey, which included items assessing current affect. Next, the experimenter asked the real participant to select one of the confederates as a partner for a subsequent anagram task and to report their choice orally to the experimenter. Finally, all participants completed the anagram task in another room with the person they had selected. In the forecaster condition, participants were presented with a detailed description of the events that experiencers actually encountered. Forecasters were asked to predict in writing how they would feel if they were in the experimenter’s position and to predict which confederate they would choose as a partner.

As shown in Fig. 1, forecasters in the extreme and moderate racist comment conditions anticipated being more upset than forecasters in the no comment condition. Experiencers, however,

Fig. 1. Differences in emotional distress [on a scale from 1 (low distress) to 9 (high distress)] as a function of role (forecasters versus experiencers) and comment (extreme racist versus moderate racist versus no comment). Error bars represent SE with $n = 19$ to 21 participants in each condition. The predicted two-way interaction was significant ($F_{2,117} = 7.55, P < 0.001$). Forecasters were influenced by the type of comment ($F_{2,57} = 26.62, P < 0.001$), but experiencers were not ($F_{2,57} = 1.86, P = 0.16$). Simple effects analyses demonstrated that forecasters in the extreme and moderate racist comment conditions anticipated being more upset than in the no comment condition [$t(38 \text{ and } 37) = 5.68$ and $7.31, s < 0.001$].



reported little distress regardless of the type of comment. Likewise, as shown in Fig. 2, role and racist comment conditions influenced the choice of task partner (22). Across the two racist comment conditions, a significant minority of forecasters predicted choosing the white (17%) over the black confederate, whereas in the no comment condition, forecasters showed a nonsignificant preference for the white (68%) over the black confederate. Experiencers were somewhat more likely to choose the white (63%) over the black confederate across the two racist comment conditions, but they did not differ in their choice of the white (53%) versus black confederate in the no comment condition. Additional analyses further demonstrated that, whereas experiencers were significantly more likely to choose the white confederate than forecasters predicted in the racist comment conditions, experiencers' and forecasters' choices did not differ in the absence of a racist comment. In sum, consistent with our hypotheses, forecasters substantially mispredicted the extent to which a racist comment would provoke distress and social rejection.

As expected, distress was unrelated to partner choice in the no comment condition [correlation coefficient $r(36) = -0.24$, $P = 0.14$]. However, participants who felt or expected to feel more distress were less likely to choose or predict choosing the white confederate in the moderate and extreme racist comment conditions [correlation coefficients $r_s(38$ and $40) > -0.40$, and $P_s < 0.01$, respectively]. Furthermore, when role, distress, and their interaction were entered into a logistic regression predicting partner choice in the racist comment conditions, the interaction did not approach significance, logistic regression coefficient $B(1, N = 82$ participants) $= -0.33$, $P = 0.47$, suggesting that affect predicted partner choice in similar ways in both the forecaster and experiencer conditions.

We used standard mediational analysis procedures to examine whether differences in forecasted and experienced affect could statistically explain the observed differences in forecasted and experienced partner choice (23). Specifically, when role and distress were entered into a logistic

regression predicting partner choice in the racist comment conditions, the effect of role was eliminated, whereas distress continued to predict partner choice (22). Although these analyses do not prove causality, the results suggest that people may erroneously believe that they would reject a racist in part because they overestimate the emotional distress that a racist comment would evoke.

One potential alternative interpretation for our partner choice findings is that experiencers' responses may have been driven by a motivation to avoid the black confederate because of concerns about how the black person might respond or feelings of guilt. However, because the black confederate was unaware of the comment and because no differences in partner choice were found between the no comment and racist comment conditions, this explanation does not readily account for the observed results. Furthermore, additional analyses revealed that feelings of guilt and embarrassment did not mediate the participants' partner choice and that participants who felt greater general distress after the comment were more, not less, likely to choose the black confederate (22).

Even though the results from experiment 1 directly supported our hypotheses, the fact that experiencers did not respond negatively to the racist slur is counterintuitive. Consistent with many other studies in the affective forecasting literature (24), forecasters received a full description of the events that transpired, yet they were not presented with the events in the same vivid way as experiencers. To remedy this situation, a second study included a forecaster-video condition in which participants were presented with a video showing a precise enactment of the experimenter condition from the experiencers' visual perspective.

In this study, 76 participants assigned to the experiencer, forecaster-text, or forecaster-video conditions were exposed to the moderate slur utilized in experiment 1. As predicted, after a racist comment, participants in both the forecaster-text and forecaster-video conditions anticipated feeling more emotional distress than experiencers reported [$t(51) = 10.54$, $P < 0.001$, and $t(46) = 6.99$, $P <$

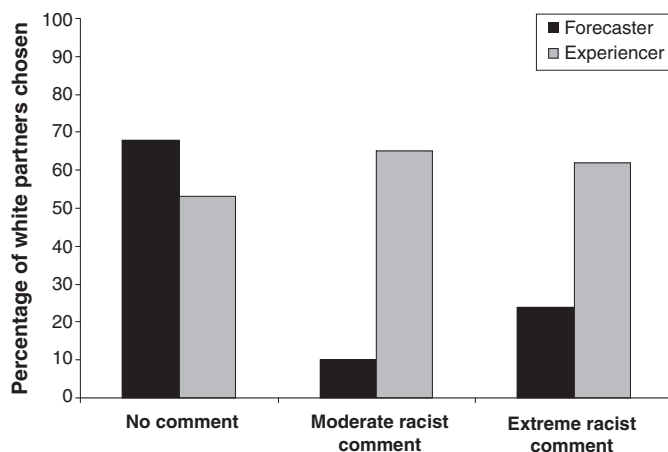
0.001 , respectively] (22). In addition, whereas a minority of participants predicted that they would choose the white partner in both the forecaster-text (25%) and forecaster-video (17%) conditions, most experiencers actually preferred the white (71%) over the black confederate [$\chi^2(2, N = 73) = 17.80$, $P < 0.001$]. Replicating experiment 1, mediational analyses suggested that experiencers were less likely to reject the white partner than forecasters anticipated because experiencers were less upset after hearing a racist comment than forecasters imagined.

Another possible difference between forecaster and experiencer conditions is that forecasters may not have perceived the racist situation to have been as real as experiencers who actually encountered the event. Our paradigm, however, mirrors standard affective forecasting procedures that have shown similar forms of misprediction, regardless of whether participants are presented with real or hypothetical events (14, 20, 25). Furthermore, this distinction does not explain why, in the present research, forecasters were more distressed and influenced by the event than experiencers. Conceptually one would assume that the more "real" one perceives the situation, the more impact it will have. Still, to address this issue empirically, we presented forecasters ($N = 40$) with the same moderate slur video used in experiment 2. For half of the participants, the video was described as a real situation with actual students; for the other half, the video was described as a hypothetical situation with actors. Regardless of whether the situation was described as real or hypothetical, forecasters anticipated feeling highly distressed and only a minority predicted that they would choose the white confederate as a partner (22). These findings replicate previous results and suggest that differences between forecasters and experiencers cannot readily be explained by the belief that the situation is real or hypothetical.

Taken together, our findings reveal that people's predictions regarding emotional distress and behavior in response to a racial slur differ drastically from their actual reactions. Whereas participants who imagined themselves in the situation anticipated being very upset and distancing themselves from a person who made a racist comment, those who experienced this event did not differ from control participants who were not exposed to a racist comment. Remarkably, this pattern of results emerged even when the comment included a racial slur widely regarded as one of the most offensive words in the English language (26).

Although previous experimental research has provided some evidence that targets of prejudice may overestimate the anger they would exhibit in response to experiencing harassment (27, 28), the present research sheds light on anticipated and actual responses by individuals who are not part of the target group. Despite an impressive history of social psychological research on intergroup relations (2), theorists are just beginning to understand how lay people react to prejudice toward other groups. Investigating responses by majority

Fig. 2. Percentage of participants who choose the white racist partner as a function of role (forecasters versus experiencers) and comment (extreme racist versus moderate racist versus no comment), with $n = 19$ to 21 participants in each condition. A significant interaction was found between role and comment conditions on choice of task partner [logistic regression coefficient $B(1, N = 120) = 3.48$, $P < 0.01$].



and other groups to overt prejudice against blacks may be critical to understanding the continued existence of racism. Our research suggests that, although people anticipate feeling upset and taking action upon witnessing a racist act against an out-group, they actually respond with indifference. The present findings also suggest a potential link between affective and behavioral responses to racism (29) and complement current theorizing on the role of emotion in prejudice and discrimination (2, 30).

Because of the socially sensitive nature of investigations related to reactions to racism, an alternative explanation for the current findings involves social evaluative concerns and demand characteristics. Participants in the role of forecaster might have readily recognized the social demands dictated by widespread egalitarian norms and responded in ways that they believed were socially or contextually acceptable rather than according to their true inclinations. However, both experiencers and forecasters were assured of the anonymity of their affective responses (which then predicted partner choice), and because partner selection was made publicly by experiencers but privately by forecasters, social evaluative concerns about appearing racist should have made experiencers more likely than forecasters to reject the white partner. Furthermore, additional analyses related to study 3 (22) showed that forecasters' responses were unrelated to individual differences in social evaluative concerns.

It is also important to note that our results dovetail with previous research on less socially sensitive issues that show that people commonly overlook their own ability to reconstrue bad situations in the best possible light (14). In the present context, upon hearing a racist comment, participants may have actively reconstrued it as a joke or harmless remark to stem the tide of negative emotions. In addition, we posit that participants may have mispredicted their emotional responses to witnessing a racist comment because of their own ambivalent racial attitudes. Recent

research suggests that, although forecasters may have relied on their conscious egalitarian attitudes when predicting their future emotions, the actual emotions of experiencers may have been shaped more by nonconscious negative attitudes (1, 10, 20).

Besides providing a conceptual contribution, the present studies also have immediate practical relevance. In particular, despite current egalitarian cultural norms and apparent good intentions, one reason why racism and discrimination remain so prevalent in society may be that people do not respond to overt acts of racism in the way that they anticipate: They fail to censure others who transgress these egalitarian norms. These findings provide important information on actual responses to racism that can help create personal awareness and inform interventions, thereby helping people to be as egalitarian as they think they will be.

References and Notes

- J. F. Dovidio, K. Kawakami, N. Smoak, S. L. Gaertner, in *Implicit Measures of Attitudes*, R. Petty, R. Fazio, P. Brinol, Eds. (Psychology Press, New York, 2009), pp. 165–192.
- S. T. Fiske, in *The Handbook of Social Psychology*, vols. 1 and 2, D. T. Gilbert, S. T. Fiske, G. Lindzey, Eds. (McGraw-Hill, New York, 1998), pp. 357–411.
- K. Kawakami, K. L. Dion, J. F. Dovidio, *Pers. Soc. Psychol. Bull.* **24**, 407 (1998).
- S. R. Sommers, M. I. Norton, *Group Process. Intergroup Relat.* **9**, 117 (2006).
- "Blacks See Growing Values Gap Between Poor and Middle Class: Optimism About Black Progress Declines," (Pew Research Centre, Washington, DC, 2007).
- "One in Three Reports Sexual Remarks in the Workplace," (Novations, Boston, MA, 2007).
- R. Axelrod, *Am. Polit. Sci. Rev.* **80**, 1095 (1986).
- T. Kameda, M. Takezawa, R. Hastie, *Pers. Soc. Psychol. Rev.* **7**, 2 (2003).
- T. Yamagishi, *J. Pers. Soc. Psychol.* **51**, 110 (1986).
- E. W. Dunn, N. D. Forrin, C. E. Ashton-James, in *The Handbook of Imagination and Mental Simulation*, K. D. Markman, W. M. P. Klein, J. A. Suhr, Eds. (Psychology Press, New York, in press).
- D. T. Gilbert, *Stumbling on Happiness* (Alfred A. Knopf, New York, 2006), pp. xviii, 277.
- E. W. Dunn, T. D. Wilson, D. T. Gilbert, *Pers. Soc. Psychol. Bull.* **29**, 1421 (2003).
- D. T. Gilbert, E. Driver-Linn, T. D. Wilson, in *The Wisdom in Feeling: Psychological Processes in Emotional Intelligence*, L. F. Barrett, P. Salovey, Eds. (Guilford, New York, 2002), pp. 114–143.
- D. T. Gilbert, E. C. Pines, T. D. Wilson, S. J. Blumberg, T. P. Wheatley, *J. Pers. Soc. Psychol.* **75**, 617 (1998).
- J. F. Dovidio, S. L. Gaertner, in *Advances in Experimental Social Psychology*, vol. 36, M. P. Zanna, Ed. (Elsevier, San Diego, CA, 2004), pp. 1–52.
- S. L. Gaertner, J. F. Dovidio, in *Prejudice, Discrimination, and Racism*, J. F. Dovidio, S. L. Gaertner, Eds. (Academic, Orlando, FL, 1986), pp. 61–89.
- P. G. Devine, *J. Pers. Soc. Psychol.* **56**, 5 (1989).
- K. Kawakami, J. F. Dovidio, J. Moll, S. Hermsen, A. Russin, *J. Pers. Soc. Psychol.* **78**, 871 (2000).
- K. Kawakami, C. E. Phillips, J. R. Steele, J. F. Dovidio, *J. Pers. Soc. Psychol.* **92**, 957 (2007).
- E. W. Dunn, C. Ashton-James, *J. Exp. Soc. Psychol.* **44**, 692 (2008).
- E. Pronin, in *Advances in Experimental Social Psychology*, M. P. Zanna, Ed. (Elsevier, San Diego, CA, in press).
- Materials and methods are available as supporting material on Science Online.
- R. M. Baron, D. A. Kenny, *J. Pers. Soc. Psychol.* **51**, 1173 (1986).
- T. D. Wilson, D. T. Gilbert, in *Advances in Experimental Social Psychology*, M. Zanna, Ed. (Elsevier, San Diego, CA, 2003), p. 345.
- T. D. Wilson, T. Wheatley, J. M. Meyers, D. T. Gilbert, D. Axsom, *J. Pers. Soc. Psychol.* **78**, 821 (2000).
- S. Pinker, *The Stuff of Thought: Language as a Window into Human Nature* (Viking, New York, 2007).
- J. K. Swim, L. L. Hyers, *J. Exp. Soc. Psychol.* **35**, 68 (1999).
- J. A. Woodzicka, M. LaFrance, *J. Soc. Issues* **57**, 15 (2001).
- P. G. Devine, M. J. Monteith, in *Affect, Cognition, and Stereotyping: Interactive Processes in Group Perception*, D. M. Mackie, D. L. Hamilton, Eds. (Academic, San Diego, CA, 1993), pp. 317–344.
- D. M. Mackie, E. R. Smith, *From Prejudice to Intergroup Emotions: Differentiated Reactions to Social Groups* (Psychology Press, New York, 2002).
- This research was supported by Social Science and Humanities Council of Canada grants to K.K. and E.D.

Supporting Online Material

www.sciencemag.org/cgi/content/full/323/5911/276/DC1
SOM Text
References

21 August 2008; accepted 4 November 2008
10.1126/science.1164951