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The motivation to express prejudice

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Abstract

Contemporary prejudice research focuses primarily on people who are motivated to respond without prejudice and the ways in which unintentional bias can cause these people to act inconsistent with this motivation. However, some real-world phenomena (e.g., hate speech, hate crimes) and experimental findings (e.g., Plant & Devine, 2001; 2009) suggest that some expressions of prejudice are intentional. These phenomena and findings are difficult to explain solely from the motivations to respond without prejudice. We argue that some people are motivated to express prejudice, and we develop the motivation to express prejudice (MP) scale to measure this motivation. In seven studies involving more than 6,000 participants, we demonstrate that, across scale versions targeted at Black people and gay men, the MP scale has good reliability and convergent, discriminant, and predictive validity. In normative climates that prohibit prejudice, the internal and external motivations to express prejudice are functionally non-independent, but they become more independent when normative climates permit more prejudice toward a target group. People high in the motivation to express prejudice are relatively likely to resist pressure to support programs promoting intergroup contact and vote for political candidates who support oppressive policies. The motivation to express prejudice predicted these outcomes even when controlling for attitudes and the motivations to respond without prejudice. This work encourages contemporary prejudice researchers to broaden the range of samples, target groups, and phenomena that they study, and more generally to consider the intentional aspects of negative intergroup behavior.

Over the past two decades, researchers interested in prejudice and stereotyping have focused intensely on people's motivations to respond without prejudice. This focus was spurred by the desire to understand a particular paradox: despite apparent nation-wide improvements in racial attitudes in the United States since the onset of the Civil Rights Movement (Schuman, Steeh, Bobo, & Krysan, 1997), pervasive disparities persist between White people and minority group members (e.g., Bertrand & Mullainathan, 2004; Bradford, Newkirk, & Holden, 2009; Steele, 1997). This societal paradox mirrors a personal paradox: even people whose beliefs are inconsistent with prejudice sometimes exhibit subtly biased behaviors towards outgroup members (e.g., McConnell & Leibold, 2001). Although these behaviors do not clearly reflect negative intentions, they nonetheless can have negative consequences for out-group members (Crosby, Bromley, & Saxe, 1980; Devine, 1989; Devine, Montith,

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Zuwerink, & Elliot, 1991). Thus, researchers have reasoned that one route to understanding the causes of lingering disparities is to understand how and why people act in ways that belie their intentions (e.g., Devine, Forscher, Austin, & Cox, 2012; Fiske, 1998).

The prevailing focus on the motivation to respond without prejudice and its relationship to unintentional discrimination contrasts with the focus of early prejudice researchers (Forscher & Devine, 2015). Early prejudice research was shaped indelibly by both the history of slavery in the United States and the horrific events of the Holocaust (Duckitt, 1992). In both cases, large-scale, organized, and popularly supported acts of overt oppression seemed driven by explicit, well-articulated intentions. Drawing on these two historical events, early prejudice researchers portrayed prejudice as resulting from processes that were presumed to be largely motivated and intentional (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Rokeach, 1973). This focus on intentional processes led early prejudice researchers to use methods well-suited to the study of overt, verbally expressed phenomena, such as questionnaires (e.g., Bogardus, 1925), interviews (e.g., Allport, 1954), and historical analyses (MacCrone, 1937).

As the legislative and normative upheavals of the Civil Rights Movement rendered overt forms of bias socially unacceptable, prejudice researchers modified their methods to study more subtle forms of behavior. Many researchers in the post-Civil Rights era still viewed these subtle behaviors as intentional (Crosby, Bromley, & Saxe, 1980; Gaertner & Dovidio, 1986; Kinder & Sears, 1981; McConahay, 1983), but they argued that prejudice had taken on a new “modern” form (McConahay, 1983) that was only expressed in situations where observers could not directly attribute the behavior to prejudice. Gradually, however, researchers began to accept the premise that the subtle behaviors may not reflect hidden negative intentions, but instead the influence of unintentionally activated processes that undermine non-prejudiced intentions (e.g., Agerström & Rooth, 2011; Devine, 1989; Dovidio, Kawakami, & Gaertner, 2002). In contemporary prejudice research, the interplay between values inconsistent with prejudice and subtle, unintentionally activated bias is a dominant focus (for a review, see Forscher & Devine, in press), whereas intentional forms of bias have been subordinated or simply assumed to be held in check by normative pressures.

Despite the contemporary focus on unintentional bias, overt discrimination (e.g., hate speech and hate crimes) persists, as illustrated by recent high-profile incidents such as racially-motivated shootings in Black churches (Horowitz, Corasaniti, & Shouthall, 2015) and the refusal of service to same-sex couples (Robinson & Brennan, 2015). Overt discrimination contributes to the adversity experienced by minority group members (U.S. Department of Justice, 2014). Because intentional bias is not central to contemporary theories of prejudice (but see Glaser, Dixit, & Green, 2002; Crandall & Eshleman, 2003), we believe that contemporary theories of prejudice are ill-equipped to explain overt (and likely intentional) discrimination.

Indeed, close examination of contemporary research on the motivation to respond without prejudice reveals patterns that are difficult to explain from the constructs typically invoked by contemporary prejudice researchers. For example, Plant and Devine (1998) have distinguished between the motivations to respond without prejudice because of internal

reasons (e.g., because one endorses values of equality) and external reasons (e.g., because one wishes to avoid normative sanctions for prejudiced behavior). The Internal Motivation Scale (IMS) and External Motivation Scale (EMS) measure these two constructs.

Accumulating evidence suggests that, compared to other motivational subgroups, people who lack values that impel them to treat people equally (i.e., are low in IMS) but who are motivated to maintain a nonprejudiced public image to others (i.e., are high in EMS) are the most negative towards out-group members, especially if these people are able to escape public censure for their behavior (Cox & Devine, 2014; Plant & Devine, 1998; 2001). Moreover, this negativity is expressed in ways that are difficult to explain solely in terms of attitudes or the motivations to respond without prejudice.

Consider an illustrative study by Plant and Devine (2009). Before an interaction with a Black partner, the participants were given the opportunity to spend as much or as little time as they wanted on a prejudice reduction program. Participants were randomly assigned to hear different descriptions of the program's effects. People low in IMS and high in EMS spent a relatively long time on the prejudice reduction program when it was described as decreasing forms of prejudice that would be detectable by their interaction partner. This pattern is consistent with the idea that this subgroup wishes to hide their prejudice from others. When the prejudice reduction program was described as both decreasing detectable prejudice *and* decreasing undetectable prejudice, however, people low in IMS and high in EMS spent a much shorter amount of time on it, even though the program would presumably help them meet their goal of appearing nonprejudiced to an external audience.

The difference in time spent on the prejudice reduction program when it was described as decreasing only detectable prejudice versus decreasing both detectable and undetectable prejudice suggests that reducing undetectable prejudice is undesirable to people low in IMS and high in EMS. Bolstering such an interpretation, in a situation where the prejudice reduction program was described as decreasing detectable prejudice and *increasing* undetectable prejudice, these people spent the greatest amount of time on the prejudice reduction program. This pattern suggests that, for these people, increasing prejudice is a desired outcome. Based on evidence from this and related studies (Cox & Devine, 2014; Plant & Devine, 1998; 2001), we argue that some people do not merely *lack* an internal motivation to respond without prejudice — rather, they *possess* a motivation to express prejudice.

Although some evidence suggests that people low in IMS and high in EMS might be especially likely to be motivated to express prejudice, we contend that a motivation to express prejudice (MP) is not identical to or interchangeable with IMS, EMS, or their combination. Although it is unlikely for someone to be high in both IMS and MP, low levels of IMS do not guarantee high levels of MP because viewing prejudice as unacceptable (i.e., being low in IMS) is not the same as feeling motivated or impelled to express prejudice (i.e., being high in MP). Likewise, it is logically and psychologically possible for a person to be either high or low in EMS and to also be either high or low in the motivation to express prejudice. The motivation to express prejudice should therefore be theoretically and empirically distinct from these constructs.

Although a departure from the dominant focus of contemporary prejudice research, our proposed distinction between the presence of a motivation to express prejudice and the absence of a motivation to respond without prejudice echoes influential distinctions in other areas of psychology. In the goal literature, the absence of an approach goal does not necessarily imply the presence of an avoidance goal (Elliot, 1999). In the affect literature, the absence of positive affect does not imply the presence of negative affect (Bradburn, 1969). Moreover, our proposal is consistent with classic prejudice research and the phenomena that spawned it. It is hard to imagine a complete psychological explanation of, for example, the Holocaust, using only constructs such as unintentional bias, attitudes, and the motivations to respond without prejudice. Modern phenomena such as hate speech, hate crimes, and large-scale, organized opposition to same-sex marriage also seem difficult to explain without a motivation to express prejudice.

Drawing upon real-world phenomena, laboratory evidence, and classic prejudice research, we propose that the motivation to express prejudice is a real, measurable, powerful construct that is distinct from attitudes and the motivations to respond without prejudice. In the present work, we develop the motivation to express prejudice scale and establish its convergent, discriminant, and predictive validity. Across the studies, we paid particular attention to establishing how our new measure is distinct from, and provides predictive utility beyond, both attitudes and the motivations to respond without prejudice.

In Studies 1 and 2, we developed scales measuring the motivation to express prejudice toward Black people and toward gay men and validated these scales through exploratory and confirmatory factor analyses. Linking our scale to prior work, Study 3 meta-analyzed data examining whether people low in IMS and high in EMS are highest in the motivation to express prejudice. Study 4 tested the convergent and discriminant validity of the scale and its test-retest reliability. Studies 5 and 6 tested the predictive validity of the scale by exploring whether the MP uniquely predicts two behaviors relevant to motivated prejudice: resistance to pressure to support an organization promoting intergroup contact (Study 5) and voting for politicians who support a legal ban of same-sex marriage (Study 6). Finally, Study 7 tested how normative climate was related to the properties of the MP scale.

Study 1: Scale development

In Study 1, we developed the initial motivation to express prejudice scale, conducted exploratory factor analyses to determine whether it was empirically distinct from the motivations to respond without prejudice, and examined its relationship with two different measures of attitudes. We developed and tested two versions of the MP scale, one for prejudice toward Black people and the other for prejudice toward gay men.

Method

Participants—Participants included 878 students (333 male, 545 female; 686 White, 134 Asian, 18 Black, 40 other; 10 gay, 866 nongay, 2 unreported) enrolled in Introductory Psychology. Unless otherwise noted, participants in all the present studies participated as part of a larger online survey that contained all the measures, presented in a randomized order within the larger online survey. For analyses involving the Black version of the scale,

the 18 Black participants were also excluded, leaving 857 participants available for analysis. For the gay version, we excluded 10 participants who identified themselves as gay, leaving 868 for analysis.

Motivation scales—Unless otherwise noted, in this and all following studies the motivation to express prejudice items were randomly intermixed with motivation to respond without prejudice items, for each target group. Plant and Devine's (1998) motivation to respond without prejudice scale is divided into internal (IMS) and external (EMS) subscales. Each subscale has 5 items, all of which are measured on a 1 (*strongly disagree*) to 9 (*strongly agree*) scale. The subscales are scored such that higher numbers indicate more motivation.

IMS and EMS assess whether participants feel the expression of prejudice is acceptable or unacceptable (e.g., “Because of my personal values, I believe that using stereotypes about Black people is wrong”). The motivation to express prejudice items, however, focus on whether the participants feel motivated or impelled to express prejudice (e.g., “My beliefs motivate me to express negative feelings about Black people”). Note that it is logically possible for a participant to disagree with a statement saying that using stereotypes about Blacks is wrong (i.e., to agree that the use of stereotypes is acceptable) and yet to also disagree with a statement saying that their beliefs motivate him or her to express negative feelings about Black people (i.e., to not feel motivated to express negative feelings about Black people).

For the MP scale, we developed 12 items, 7 measuring the internal motivation to express prejudice (IMP) and 5 measuring the external motivation to express prejudice (EMP). Following the precedent set by IMS and EMS, we reasoned that people could be motivated to express prejudice for either internal reasons (e.g., a personal belief that homosexuality is a sin) or external reasons (e.g., fear of backlash from one's community). IMP items emphasize personal, value-driven reasons to express prejudice (e.g., “Minimizing my contact with Black people is personally important to me.”), whereas EMP items emphasize external, social reasons to express prejudice (e.g., “I express negative thoughts about Black people to avoid negative reactions from others”). For both subscales, items covered a range of thoughts, feelings, and behaviors. Because “prejudice”, “racism”, and other similar terms are defined differently by different people (Sommers & Norton, 2006), we avoided using these terms in any of the items or the instructions. All items were administered with a 1 (*strongly disagree*) to 9 (*strongly agree*) scale, scored such that higher numbers indicate more motivation to express prejudice (see Appendix 1).

Attitudes measures—We measured attitudes using feelings thermometers and two larger attitudes scales, the Attitudes Towards Blacks scale (ATB; Brigham, 1993) and the Heterosexual Attitudes Toward Homosexuals scale (HATH; Larsen, Reed, Hoffman, 1980). The ATB has 20 items, each of which is measured on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. The HATH consists of 20 items and each item is measured on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. Both the ATB and HATH were scored such that higher scores indicate more positive attitudes. The feelings thermometer asks participants to rate

their feelings towards a variety of social groups using a “temperature” gauge, on which 0 degrees indicates “extremely unfavorable” and 100 degrees indicates “extremely favorable”.

Results and discussion

To determine whether the motivation to express prejudice items load on factors that are distinct from the motivation to respond without prejudice items, we conducted an exploratory factor analysis for each target group. The analyses replicate one another, so we report them simultaneously. Each factor analysis included all items from the Black or gay versions of the IMP, EMP, IMS, and EMS. A scree test from a principal components analysis suggested a three-factor solution, accounting for 61.3% of the variance in item responses for the Black version, and 63.9% of variance for the gay version. We therefore extracted three factors using an oblimin rotation, which allows factors to be correlated.

Table 1 presents the factor loadings. The three factor solution had good simple structure, with low cross-loadings between factors. Two IMP items (items 2 and 7) were eliminated from both versions because they did not load well on any of the three extracted factors. Replicating past work, the first two factors were the IMS and EMS, which were separate and uncorrelated. The remaining factor was made up of both IMP and EMP items. Later in the paper, we explore and discuss the possible meaning of this pattern. At present, we will conduct our analyses on MP indices formed by the average of all 10 MP items; for those interested all descriptive statistics for the separate IMP and EMP subcomponents are reported in our tables. Higher scores on MP indicate a greater motivation to express prejudice.

Reliabilities, descriptive statistics, and correlations for the motivation to express prejudice, the motivations to respond without prejudice, and our two attitudes scales are shown in Table 2. The overall mean response on the motivation to express prejudice scale was rather low, with 37.5% of participants scoring at the scale minimum for the Black version, and 34.2% for the gay version. Nevertheless, both versions of the scale had good reliability (Black $\alpha = .95$; gay $\alpha = .95$) and correlated in meaningful ways with IMS, EMS, and the two attitude scales. Higher scores on MP were unrelated to EMS (Black $r = .07$; gay $r = .09$), moderately negatively related to IMS (Black $r = -.57$, gay $r = -.68$), and moderately negatively related to attitudes (Black thermometer $r = -.37$, scale $r = -.60$; gay thermometer $r = -.52$, scale $r = -.70$).

Overall, Study 1 provides strong initial evidence that the motivation to express prejudice exists, and is independent from, but sensibly related to IMS, EMS, two measures of attitudes. We extended this initial evidence in Study 2 using confirmatory factor analysis.

Study 2: Confirmatory factor analysis

Method

Participants and procedure—Participants included 1142 students (488 male, 654 female; 918 White, 128 Asian, 15 Black, 81 other; 19 gay, 1123 nongay). Of these 1142 participants, 4 were excluded from the analyses because their responses indicated task inattention. For the Black scale analyses only, the 15 Black participants were also excluded,

leaving a total 1123 participants available for analysis. The gay scale analyses omitted the 19 gay participants, leaving 1119 participants for analysis. The procedure was identical to that in Study 1, with the exception that Study 2 relied only on the feelings thermometer as a measure of attitudes to decrease its total length. Although feelings thermometers consist of a single item, they have similar convergent validity, discriminant validity, and test-retest correlations as multi-item attitudes measures (Jaccard, Weber, & Lundmark, 1975).

Data analytic plan—We used confirmatory factor analysis to test a total of five alternative measurement models, each of which was designed to capture an alternative theory about the relationships between the various IMP, EMP, IMS and EMS items. The models were tested separately for the Black and gay scale versions.

Model 1 had a one-factor structure with all the items (IMP, EMP, IMS, and EMS) loaded on a single latent variable. This model posits that all the items tap a single intergroup motivation.

Model 2 had a two-factor structure in which all the externally worded items (EMS and EMP) loaded on the same latent variable all the internally worded items (IMS and IMP) loaded on the same latent variable. This model posits that there is no distinction between viewing prejudice as acceptable and feeling motivated to express prejudice and that the IMP and EMP subscales simply represent the low end of the continuums of the IMS and EMS, respectively.

Model 3 had an alternative two-factor structure in which all the motivation to express prejudice items (IMP and EMP) and the internal motivation to respond without prejudice items (IMS) loaded on the same latent variable and the EMS items loaded on their own latent variable. This model posits that the MP items simply measure the low end of the continuum of IMS.

Model 4 had a three-factor structure in which all the motivation to express prejudice items (IMP and EMP) load on the same latent variable and the IMS and EMS items each load on separate latent variables. This model is consistent with our exploratory factor analysis results, and posits that the IMP and EMP subscales measure a common latent construct, but that this construct is distinct from IMS and EMS.

Model 5 had a four-factor structure in which all four subscales load on separate latent variables. This model tests a theoretical model in which IMP and EMP are distinct from each other as well as IMS and EMS.

Results

Reliabilities, correlations, and other descriptive statistics are in Table 2 and are similar in every respect to those observed in Study 1. The results of the tests of Models 1–5 are in Table 3. Models 1, 2, and 3 had poor fit on all fit indices examined for both the Black and gay versions of the scales. For the Black versions, Model 4, the 3-factor model, had significantly better fit than Model 1, $\chi^2(3, N = 1123) = 2422.34, p < .001$ and Model 3, $\chi^2(2, N = 1123) = 1096.01, p < .001$. Although Model 4 could not be compared to Model 2 using

χ^2 , Model 4 had better fit than Model 2 on all other fit indices. Matching original expectations, Model 5, the four-factor model in which IMP, EMP, IMS, and EMS all load on separate latent variables, had better fit than model 4, $\chi^2(3, N = 1123) = 118.92, p < .001$. Similar to our results with the Black scale versions, although Model 4 for the gay scale versions had better fit than Model 3, $\chi^2(2, N = 1119) = 702.61, p < .001$, Model 5 had still better fit than Model 4, $\chi^2(3, N = 1119) = 583.98, p < .001$.

Despite the good fit of Model 5 for both versions of the scale, the estimated correlations between the external and internal motivation to express prejudice latent variables were high (Black version $r = .92$; gay version $r = .85$). This pattern suggests that although separating IMP and EMP results in a factor structure with better fit, the internal and external factors of the motivation to express prejudice are not entirely independent — at least in our college samples.

For both Black people and gay men, Model 5, the four-factor model, still had unsatisfactory values on some indicators of global fit. However, exploratory analyses suggested that this lack of global fit was due to localized problems in the theorized relationship between one of the EMS items and the factor measuring IMS, rather than due to problems with the MP portion of our measurement models. After these localized problems were corrected, global fit on all indicators improved to acceptable levels.¹ In addition to good global fit, our final models for the Black people (gay male) scale versions had good local fit; only 24 (18 for gay male version) of the 210 observed correlation residuals had absolute values greater than .10, and only 6 (4 for gay male) had absolute values greater than .15.

Discussion

For both the Black and gay men scale versions, models where MP items measured different latent variables than IMS and EMS items had better fit than three alternative measurement models. These results strongly support the argument that the motivation to express prejudice is a distinct construct from the motivations to respond without prejudice. We also found that a model that posits that EMP is distinct from IMP had better fit than a model that posits no distinction between these motivations. Nevertheless, IMP and EMP were highly correlated, suggesting that these motivations are functionally non-independent. This high correlation between the two latent variables could explain why the IMP and EMP items loaded on the same factors in our exploratory factor analyses. The relative non-independence of these subscales suggests that, in our college samples, people for whom expressing prejudice towards Black people or gay men is consistent both with their internal values also to express prejudice to gain approval from an external audience. Because of the consistently high correlation between the IMP and EMP subscales,² we will continue to average together the

¹An examination of the correlation residuals revealed that item 3 of the EMS (“If I acted prejudiced toward Black people, I would be concerned that others would be angry with me”) had several large correlation residuals with IMS items. Adding a path from the latent internal motivation variable to this external motivation item resulted in a significant improvement in overall model fit for both the Black version, $\chi^2(1, N = 1123) = 158.35, p < .001$, and the gay male version $\chi^2(1, N = 1119) = 102.44, p < .001$. Also, the 95% confidence intervals around the path did not include 0 (Black: $B = .61, 95\% \text{ CI} = .52 - .71$; Gay male: $B = .46, 95\% \text{ CI} = .37 - .56$), suggesting that this item reflects both external and internal motivational concerns. After adding this path, all global fit indices improved to satisfactory levels (Black: RMSEA = .058, RMSEA 95% CI = [.053 - .063], SRMR = .061, CFI = .943, AIC = 870; Gay male: RMSEA = .060, RMSEA 95% CI = [.055 - .065], SRMR = .059, CFI = .950, AIC = 910). As reported in the text, there were no problems with local fit for items measuring IMP and EMP.

IMP and EMP items to create a single MP value in the following studies, but we revisit this issue in Study 7.

In Study 3, we tested whether people low in IMS but high in EMS are highest in MP, consistent with our interpretations of patterns in past studies that led us to hypothesize the existence of MP. We addressed this issue through the meta-analysis of seven large samples of online survey data.

Study 3: Meta-analysis of the relationship between IMS, EMS, and MP

As noted in the introduction, past research suggests that people who lack values that prohibit expressions of prejudice (i.e., who are low in IMS) but who are sensitive to pressure from external audiences to respond without prejudice (i.e., who are high in EMS) are particularly negative in their responses to outgroups (Cox & Devine, 2014; Plant & Devine, 1998; 2001; 2009). To the extent that this negativity is motivated, these results suggest that people low in IMS and high in EMS are relatively high in the motivation to express prejudice. Testing this relationship allows us to situate the MP within past research on IMS and EMS, and, if the hypothesized relationship is borne out, enable us to reevaluate the interpretations of some of this past evidence. We tested the relationship between MP and the IMS by EMS interaction by conducting separate meta-analyses using the Black and gay versions of these scales using seven large online surveys.

Method

Data sources and procedure—At the beginning of every semester at our university, students enrolled in Introductory Psychology may complete a large online survey for extra credit. These online surveys were the means through which participants in Studies 1–6 completed the Black and gay versions of the MP scale. Because the studies in this paper were conducted over the course of several years, we had available seven online surveys in which the Black versions of MP, IMS, and EMS were administered and six online surveys in which the gay male versions were administered. In each survey, between 850 and 1138 Introductory Psychology students (74–80% White, 57–63% female, 93–97% straight) completed the survey online for extra credit. For each version of the scales, we extracted the coefficients and standard errors for the IMS by EMS interaction predicting MP. We excluded Black participants for the analyses on the Black scales and gay participants from analyses on the gay scales.

Results and discussion

We conducted parallel meta-analyses on the Black and gay scale versions, using random effects meta-analysis with restricted maximum likelihood. The meta-analytic results are shown in Figure 1. The meta-analytic estimates for the IMS by EMS interaction predicting MP were non-zero, across both scale versions (Black $B = -.085$, 95% CI = $[-.11, -.062]$, gay $B = -.088$, 95% CI = $[-.097, -.078]$). As shown in the Figure 2, people high in MP tend to be both low in IMS and high in EMS, matching our interpretations of past work with IMS

²The overall meta-analytic estimates for the correlations of IMP and EMP (using the datasets described in Study 3) were quite high (Black $r = .81$, 95% CI = $[.79, .83]$; gay $r = .79$, 95% CI = $[.78, .80]$).

and EMS. The outgroup negativity people low in IMS and high in EMS express may arise because of MP, rather than because of a failure to regulate unintentional bias when they lack an external audience (Cox & Devine, 2014; Plant & Devine, 1998; 2001; 2009). Some past findings related to people low in IMS and high in EMS may not arise from IMS and EMS themselves, but from a motivation to express prejudice. We will elaborate on the theoretical importance of the relationships between IMS, EMS, and MP in the General discussion.

This study provided initial evidence of the convergent validity of MP. Study 4 further investigates its convergent validity, as well as its discriminant validity and test-retest reliability.

Study 4: Convergent and discriminant validity

The purpose of Study 4 was both to investigate the convergent and discriminant validity of the motivation to express prejudice scale and to obtain test-retest correlations for this scale. Extending the convergent and discriminant validity demonstrated in Studies 1–3, we investigated the MP scale's relationship with two personality characteristics that have previously been linked to negative out-group attitudes and discriminatory tendencies, Social Dominance Orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) and Right-Wing Authoritarianism (RWA; Altemeyer, 1996). To the extent that MP measures a motivation rooted in one's intentions, it should have moderate to strong relationships with these alternative measures, but should not completely overlap with them. We also investigated the scale's relationship with social desirability (SDS; Crowne & Marlow, 1960) and self-monitoring (SMS; Snyder, 1974). To the extent that the scale measures a motivated tendency and not merely the tendency to respond in a socially desirable way, it should not be strongly related with either of these scales.

Method

Participants and procedure—Eight hundred and ninety-one students (368 male, 523 female; 713 White, 93 Asian, 14 Black, 71 other; 9 gay, 882 nongay) who were enrolled in Introductory Psychology completed the Black and gay versions of MP, IMS and EMS, and the feelings thermometers as part of a large online survey at the beginning of the semester. Of the full sample of 891 participants who completed the survey, 149 non-Black, non-gay students (68 male, 81 female; 123 White, 11 Asian, 15 other) completed another survey three months later that contained the motivation scales again, as well as the Social Dominance Orientation scale, the Right-Wing Authoritarianism scale, the Social Desirability scale, and the Self-Monitoring Scale.

Results and discussion

Correlational and descriptive results are shown in Table 4. Although the MP test-retest correlations were somewhat low (Black $r = .44$; gay $r = .36$), they were similar to those observed for the IMS (Black $r = .52$; gay $r = .53$) and EMS (Black $r = .33$; gay $r = .30$), and they fell within an acceptable range given the long time period between administration of the scales.

Whether measured at baseline or time 2, MP had moderate correlations with both the Social Dominance Orientation scale ($r = .31$ to $.42$) and the Right-Wing Authoritarianism scale ($r = .32$ to $.51$) and near-zero correlations with both the Self-Monitoring scale ($r = .00$ to $.04$) and the Social Desirability scale ($r = -.14$ to $-.01$). These results indicate that both the Black and gay men versions of MP have good convergent and discriminant validity.³

Predictive validity

Studies 1–4 demonstrated the MP scale's convergent validity, discriminant validity, and reliability, and we will next investigate its predictive validity. Demonstrating predictive validity requires that a measure predicts outcomes above and beyond other relevant measures, in this case, that MP predicts outcomes above and beyond attitudes, IMS, and EMS.

The motivation to express prejudice should relate to behaviors that allow people to pursue their intentions to express prejudice. As an initial look at predictive validity, we conducted a post-hoc analysis using data from a published study on stereotyping that was conducted while our validation work was ongoing (Cox, Devine, Bischmann, & Hyde, 2015, Study 5). Although many contemporary models of stereotyping treat stereotype activation as an unmotivated, unintentional process (e.g., Brewer, 1988; Devine, 1989; Fiske & Neuberg, 1990), stereotype application can be a motivated process (Goodwin, Gubin, Fiske, & Yzerbyt, 2000; Sinclair & Kunda, 2000), especially when such stereotypes serve as the basis for judgments about or behavior toward a target group. We tested whether MP was related to the application of gay stereotypes, predicting that people high in MP toward gay men would be more likely to use gay stereotypes. Matching our predictions, MP predicted gay stereotyping on its own, $B = .029$, $t(151) = 2.33$, $p = .021$, $R^2 = .035$, and when simultaneously controlling for attitudes (measured by a feelings thermometer for gay men), IMS, EMS, and the IMS by EMS interaction, $B = .042$, $t(147) = 2.51$, $p = .013$, $R^2 = .066$.⁴ This result suggests people who are motivated to express prejudice are relatively likely to use stereotypes and that stereotyping can be motivated.

Our post-hoc analysis provides some initial evidence of the MP scale's predictive validity. To provide stronger tests, we conducted two studies, one testing whether people high in MP resist pressure to support an intergroup organization (Study 5) and another testing whether people high in MP vote for political candidates who support antigay policies (Study 6).

³An anonymous reviewer asked whether we had collected information on the relationship between MP and a measure of unintentional bias. Because our lab was conducting a large-scale project that involved the Black/White pleasant/unpleasant IAT, a measure of unintentional race bias, we had the opportunity to assess, in a large sample of college student participants ($N = 963$), the relationship between the Black version of the MP scale and the race evaluative IAT (Cox, 2015). Further supporting our argument that the motivation to express prejudice scale measures a construct distinct from those tapped by other measures, it had a near-zero correlation with the race evaluative IAT ($r = .060$).

⁴The original purpose of the study by Cox and colleagues (2015; Study 5) was to determine whether the folk concept of “gaydar”, the idea that one can directly intuit a whether a man is gay, influences people's tendency to use stereotypes to infer sexual orientation. The study thus contained a three condition gaydar belief manipulation in which participants were told either nothing (the control condition), that scientific evidence suggests that gaydar is real (the “gaydar is real” condition), or that scientific evidence suggests that gaydar is not a real perceptual ability and that “gaydar” is merely another term for stereotyping (the “gaydar is stereotyping” condition). Because people in the “gaydar is stereotyping” condition are led to believe that they cannot determine who is gay, this condition is not appropriate for testing the relationship between stereotyping and MP. Thus, we limited our attention to the “gaydar is real” and the control conditions, which we collapsed together.

Study 5: MP and resistance to an intergroup contact organization

Motivations are distinguished from other constructs in that they promote the pursuit of desired end states and obstruct the pursuit of undesired end states (Higgins, 1987; Plant & Devine, 1998). Therefore, people high in MP should resist pressures to behave in ways that facilitate an undesirable end state (Plant & Devine, 2009). Organizations that promote cross-group contact promote an end state that should be undesirable for high MP people. As such, people high in MP should resist pressure to voice support for such organizations.

To test these predictions, we adapted an induced compliance paradigm (Elliot & Devine, 1994; Festinger & Carlsmith, 1959), asking college students to write an essay either in favor of or against a hypothetical student organization promoting cross-group friendships, called “BadgerConnect” (Kunstman, Plant, Zielakowsky, & LaCrosse, 2013; Maner, DeWall, Baumeister, & Schaller, 2007). We measured participants' emotional responses to writing their essay and provided opportunities to support or undermine their written position by leaving anonymous comments and ratings on their own and others' online essays. The commenting and rating procedure was inspired by comment sections on social networking and news websites, which often yield debate that degenerates into acrimonious, ad hominem attacks (Glaser et al., 2002). As such, this paradigm captures behaviors that play out in people's everyday experiences.

We predicted that people high in MP would be more likely to refuse to write an essay in favor of BadgerConnect. If they agreed to write the pro-Badgerconnect essay, we predicted that they would feel distressed and would undermine their support by, for example, evaluating their own essay poorly, evaluating essays that support their actual views favorably, and posting negative comments on their essay. To the extent that MP uniquely predicts these outcomes, its relationship to them should hold even when statistically controlling for IMS, EMS, and attitudes.

Method

Participants—One hundred sixty-seven White students in Introductory Psychology participated in this study.⁵ We excluded two participants because they had previously participated in a similar, unrelated study, for a final sample of 165 (55 male, 110 female). During recruitment for this study and Study 6, we attempted to obtain a full representation of MP by sending recruitment emails to people at the upper end of the MP distribution. These emails mentioned neither the content of the study nor the reasons for recruitment.

⁵Initially, we also allowed non-White students to participate in our study. However, after we had reached our target sample size of 160 and 170 participants, we noticed two issues that affected the experience of our non-White participants: (1) 56 of these participants used English as a second language, and 5 of these mentioned in their debriefing that they felt nervous about writing an essay in a non-native tongue; and (2) 21 mentioned in either their essay or debriefing that they did not like BadgerConnect's focus on Black and White students because this focus excludes students of other races. Based on this evidence, we reasoned that non-White students had reasons besides MP to react negatively to BadgerConnect. Consequently, although our findings with the initial sample of participants supported our hypotheses, we decided that the most appropriate strategy was to exclude the non-White participants (60 Asian, 10 other) and recruit an additional 70 White participants to reach our original target sample size. With the exception of the effect on comments, the study results hold when the non-White students are included in the sample; refusals $B = .55$, $\chi^2(1, N = 235) = 6.34$, $p = .012$, ratings of others' essays $B = -.23$, $t(166) = -3.06$, $p = .003$, $R^2 = .053$, ratings of own essay, $B = -.13$, $t(166) = -1.93$, $p = .054$, $R^2 = .022$, comments $B = -.095$, $\chi^2(1, N = 235) = .78$, $p = .38$.

Procedure—During the experimental session, each participant was run individually, but they were led to believe that other participants were completing the experiment in adjacent rooms with other experimenters. The participants were told that the experiment was a collaboration with University Residence Life and the goal was to obtain student input about the advantages and disadvantages of implementing a program called “BadgerConnect”. The program was described as a student service that would put on events such as concerts and game nights with the overarching goal of connecting students of diverse racial and ethnic backgrounds, and particularly Black and White students. The experimenter mentioned that participation in BadgerConnect would be integrated with the university's ethnic studies requirements.

The experimenter further described how past research had discovered that a good way to obtain student input about possible advantages of implementing a program like BadgerConnect is to ask people to write strong, forceful essays on only one side of the issue. The experimenter said that the participant would be asked to write an essay, after which the essay would be posted on a custom Psychology Department website so that students could read and discuss the essays. After the participant's essay was posted to the website, he or she would be asked to rate and comment on another person's essay, and other people would rate and comment on the participant's essay. They were also told that after the project was done, Resident Life would use the essays and comments to prepare a report to the Dean about the proposed BadgerConnect program.

The experimenter then delivered the essay assignment manipulation. This manipulation was designed to exert pressure to write an essay of a certain stance, but to ensure that the participants still felt some degree of choice about their decision (Elliot & Devine, 1994). In the *pro-BadgerConnect* [anti-BadgerConnect] condition, the experimenter said:

We have already gathered a sufficient number of essays arguing *against* [in favor of] BadgerConnect and are now ready to gather essays *in favor of* [against] BadgerConnect. So, while we would like to stress that you can write your essay either for or against BadgerConnect, what we currently need is strong, forceful essays arguing *in favor of* [against] BadgerConnect. Whatever your choice is, please write a strong, forceful essay about BadgerConnect.

The participant then selected a stance for his or her essay and wrote it (see below for details on all measures). After posting the essay to the website, the experimenter asked the participant to complete a measure of self-reported affect and told the participant that the other participants would be posting their comments on the essay. The participant then read an essay supposedly written by a different participant. In reality, the essay was one of four constructed essays (two pro- and two anti-BadgerConnect) that had been pre-tested to be approximately equal in clarity, persuasiveness, organization, writing quality, and strength and plausibility of arguments. The participants always read a constructed essay that was of the opposite stance to which they were assigned. In addition, posted to the essay were two comments, one positive and one negative, and accompanying ratings that the “other participants” had left on the essay.

After leaving their comment and ratings on the experimenter-constructed essay, the experimenter asked the participant to follow the same procedure on his or her own essay. Posted to the participant's essay were two comments, one positive and one negative, that were written by the “other participants”, along with accompanying ratings. The two comments were always the two that were not shown on the experimenter-constructed essay. Which experimenter-constructed essay the participants were shown, which comments were posted to which essays, and which ratings sets accompanied the comments, were all counterbalanced across participants. At the end of the session, participants were debriefed and thanked for their participation.

Refusals—Before writing their essay, participants were asked to select whether their essay was in favor of or against BadgerConnect. Participants who selected the stance that was different from the one they were encouraged to write were labeled refusers, whereas participants who selected the same stance were labeled compliers.

Affect indices—The affect measure was adapted from Devine et al. (1991), and consisted of 32 affect-related words. For each word, the participants rated the word on a 1 (*does not apply at all*) to 7 (*applies very much*) scale the extent to which the word applied to how they were feeling about having written their essay. A scree test based on a principal components analysis suggested a four-factor solution. We used an oblimin rotation to construct indices, retaining all items that had loadings above .5, resulting in the following four factors: negative feelings toward the self (*angry at myself, guilty, annoyed at myself, regretful, disappointed with myself, disgusted with myself, low, shame*), positive feelings (*friendly, consistent, happy, energetic, optimistic, good*), distress (*fearful, uneasy, anxious, tense, threatened, uncomfortable*), and negative feelings toward others (*angry at others, bothered, frustrated, irritated at others, disgusted with others*).

Essay ratings—Participants rated the essays on a series of dimensions accompanied by a 1 to 5 scale, similar to the 5-star scales often found on comment sections of popular news websites. The essay dimensions were clarity, persuasiveness, organization, writing quality, strength of arguments, plausibility of arguments, and agreement with arguments. Exploratory factor analyses on the essay rating items for the experimenter-constructed essay and the participant's own essay suggested that it was appropriate to treat each set of items as a single indicator of perceived essay quality.

Comments—We conducted a content analysis of the participants' comments on their own written essays. Two independent coders categorized each comment as pro-BadgerConnect, neutral, or anti-BadgerConnect. Coders had complete agreement in their categorizations ($\kappa = 1$). We treated comment stance as an ordered categorical variable with anti-BadgerConnect comments as the lowest category, neutral comments as the middle category, and pro-BadgerConnect comments as the highest category.

Sample pro-BadgerConnect comments include “Students will benefit greatly from the implementation of BadgerConnect” and “This is my essay and I agree the BadgerConnect can open people up to new opportunities be meeting new and different people than they would on a normal basis”. Sample neutral comments include “Organization hurts the

argument. BadgerConnect may have positives and negatives a trial and error process may need to be implemented” and “I am unsure how I feel about BadgerConnect”. Sample anti-BadgerConnect comments include “It is a racist event” and “Personally, I do not believe BadgerConnect is a good idea, but I wrote the essay arguing BadgerConnect is a good idea because the instructor informed me they would like more papers supporting BadgerConnect”.

Results

Data analytic plan—We analyzed all quantitative outcomes using General Linear Models, refusals using a Generalized Linear Model with a binomial link function, and comments using proportional odds logistic regression (McCullagh, 1980). For each of our outcome variables, we fit two models. First, we tested a basic model wherein we evaluated whether the relationship between MP and the outcome depended on the stance of the essay the participant wrote or evaluated. Second, if we discovered that the relationship between MP and the outcome variable depended on essay stance, we tested whether this effect held when we simultaneously controlled for both the IMS by EMS by essay condition interaction and the feelings thermometer by essay condition interaction. Because the analyses on all outcomes except refusals are designed to test the psychological consequences of complying with experimenter instructions, we only used data from compliers for these analyses. Although we report analyses of simple effects as a means of verbally describing the nature of interactions, these simple effects are not intended as formal hypothesis tests because they are not useful in this capacity (Braumoeller, 2004). Correlations, reliabilities, and descriptive statistics for all measures are in the Online Supplement, and Figure 3 shows visualizations of the major study results.⁶

Refusals—The relationship between MP and the probability of refusal was different depending on whether the participants were assigned to write a pro- or anti-BadgerConnect essay, $B = .85$, $\chi^2(1, N = 165) = 7.71$, $p = .006$. Descriptively, when the participants were assigned to write an anti-BadgerConnect essay, MP was negatively related to the probability of refusal, $B = -.22$, $\chi^2(1, N = 165) = 1.32$, $p = .25$. When they were assigned to write a pro-BadgerConnect essay, MP was positively related to the probability of refusal, $B = .63$, $\chi^2(1, N = 165) = 6.78$, $p = .009$. The interaction between MP and essay condition held when simultaneously controlling for the interaction between IMS, EMS, and essay condition and the interaction between attitude and essay condition, $B = .83$, $\chi^2(1, N = 165) = 3.40$, $p = .046$.

Affect indices—Somewhat surprisingly, the relationship between MP and each affect index did not depend on the type of essay written, all $ps > .11$. The only relationships that we observed were that people high in MP felt relatively distressed, $B = .24$, $t(119) = 3.46$, $p < .001$, $R^2 = .091$, negative about themselves, $B = .13$, $t(119) = 2.43$, $p = .017$, $R^2 = .044$, and others, $B = .19$, $t(119) = 2.74$, $p = .007$, $R^2 = .057$. Simply writing an essay about BadgerConnect – even against it – was an aversive experience for people high in MP.

⁶The overall compliance rate in this study (75%) was lower than that in other studies using the induced compliance paradigm (e.g., Festinger & Carlsmith, 1959; Elliot & Devine, 1994), possibly the behavior the participants were induced to perform was relevant to many of the participants' identities (Devine, Tauer, Baron, Elliot, & Vance, 1999).

Essay ratings: Experimenter-constructed essay—The relationship between MP and the ratings of the experimenter-constructed essay was different depending on whether the participants were rating a pro- or an anti-BadgerConnect essay, $B = -.27$, $t(120) = -2.98$, $p = .004$, $R^2 = .068$. Descriptively, when the participants were evaluating an anti-BadgerConnect essay, MP was related to higher ratings of the experimenter-constructed essay, $B = .14$, $t(120) = 2.10$, $p = .038$, $R^2 = .034$. When the participants were evaluating a pro-BadgerConnect essay, MP was related to lower ratings of the experimenter-constructed essay, $B = -.13$, $t(120) = -2.12$, $p = .037$, $R^2 = .035$. The interaction between MP and essay condition remained when controlling for both the interaction between IMS, EMS, and essay condition and the interaction between attitudes and essay condition, $B = -.25$, $t(112) = -2.24$, $p = .027$, $R^2 = .041$.

Essay ratings: Participants' own essays—The relationship between MP and the ratings of the participants' own essays depended on whether the participants wrote a pro- or an anti-BadgerConnect essay, $B = -.18$, $t(120) = -2.17$, $p = .032$, $R^2 = .037$. Descriptively, when the participants wrote an anti-BadgerConnect essay, MP was related to higher ratings of the participants' own essays, $B = .10$, $t(120) = 1.76$, $p = .080$, $R^2 = .024$, whereas when the participants wrote a pro-BadgerConnect essay, MP was related to lower ratings of the participants' own essays, $B = -.077$, $t(120) = -1.31$, $p = .19$, $R^2 = .014$. The interaction between MP and essay condition remained when simultaneously controlling for both the IMS by EMS by essay condition interaction and the attitudes by essay condition interaction, $B = .20$, $t(120) = 2.04$, $p = .044$, $R^2 = .032$.

Comments—Higher levels of MP were related to a greater tendency to write negative comments about BadgerConnect on one's own essay, $B = -.34$, $\chi^2(1, N = 123) = 5.96$, $p = .015$. This relationship was marginal when simultaneously controlling for the interaction between IMS and EMS and for attitudes, $B = -.33$, $\chi^2(1, N = 123) = 3.62$, $p = .057$. This relationship remained when controlling for the actual stance of the participants' essays, $B = -.41$, $\chi^2(1, N = 123) = 4.87$, $p = .027$, suggesting that even if people high in MP complied with instructions to write a pro-BadgerConnect essay, they reversed this stance in their comments.

Discussion

Compared to people lower in the motivation to express prejudice, people high in the motivation to express prejudice were more likely to refuse to write an essay in favor of BadgerConnect, a student organization with the mission of increasing interracial interactions. When people high in the motivation to express prejudice did agree to write an essay in favor of BadgerConnect, they took steps to undermine the effectiveness of this support. It is notable that people high in MP evaluated undermined their own essay, because contradicting oneself and evaluating oneself poorly are often psychologically costly actions (Swann, Griffith, Predmore, & Gaines, 1987).

One potentially puzzling finding that emerged from this study was that people high in MP did not, as one might expect from previous evidence (e.g., Elliot & Devine, 1994), feel more distressed after agreeing to write a pro- than an anti-BadgerConnect essay. Instead, these

people felt negative in general about writing an essay about BadgerConnect, regardless of whether the stance of their essay was in favor of or against the program. Perhaps people high in the motivation to express prejudice would feel distressed writing about a program that encourages interracial contact in any way simply because this task reminds them that they are in an environment whose norms oppose their intentions. Regardless, the results of this study support the utility of the MP scale for predicting behavior.

Study 6: MP and voting for political candidates

Voting is one consequential way in which people express their values. Recent legal and political battles surrounding same-sex marriage have been extremely heated, with proponents and opponents of same-sex marriage taking strong personal and moral stances. To the extent that people are motivated to express prejudice towards gay men, they should be more likely to express their identities and intentions by supporting candidates who oppose same-sex marriage. Political candidates also vary in how directly they connect their positions to negativity toward gay people. Some candidates oppose same-sex marriage on the basis of rhetoric that condemns gay people as immoral or dangerous. Other candidates oppose same-sex marriage, but the rhetoric in support of this position is expressed in terms of protecting “family values”. Though the public policy implications are the same whether supported using family values or anti-gay rhetoric, family values rhetoric is not directly linked to animus towards gay people. In Study 6, we tested the extent to which the motivation to express prejudice relates to judgments about and support for political candidates with varying positions and rhetoric about same-sex marriage.

Participants learned about three ostensibly real political candidates whose positions and rhetoric about a constitutional ban on same-sex marriage expressed increasing levels of antigay sentiment. The first candidate opposed the ban on the basis of equality rhetoric. The second candidate supported the ban on the basis of “family values” rhetoric that did not mention gay people. This candidate thus expressed anti-gay sentiment only in his position, not his rhetoric. The third candidate supported the ban and couched his support in explicitly anti-gay rhetoric. This candidate expressed antigay sentiment both with his position and rhetoric. The participants made judgments about each candidate, voted for a candidate, and chose a candidate to publicly support in a political discussion with another student. We predicted that people high in MP would perceive candidates who expressed increasingly anti-gay sentiment relatively favorably and would be more likely to vote for and publicly support these candidates.

Method

Participants and procedure—Undergraduate participants ($N = 183$; 102 female, 81 male) were run singly, but were led to believe that they would discuss the candidates with a participant in another room. As detailed below, participants learned about three political candidates, filled out a questionnaire about the candidates, cast a private ballot to vote for a candidate, took notes in preparation to discuss their support of a candidate, and, finally, chose and put on a T-shirt bearing a candidate's name to display their public support. Participants were led to believe that purpose of the study was to compare voting behaviors in the lab with behaviors from a real recent election for the House of Representatives of an

undisclosed state. To that end, participants read a fabricated news article that summarized an interview with three candidates, each with a White-sounding male name (Ron Nelson, Brad Drake, and George Miller). The candidates responded to two issue questions regarding “job creation” and “tax relief” in similar, conservative ways taken from the Official Republican Platform (2012). Candidates varied on their answers to the third issue question, which asked about their support for an amendment to “ban gay marriage.” The response of the candidate who opposed with equality rhetoric was:

I'm opposed to this amendment. I support ensuring that committed gay couples have the same rights and responsibilities afforded to any married couple in this country.

The candidate who supported the ban with family values rhetoric said the following, taken from the 2012 Official Republican Platform:

I support the amendment. This is more than a matter of warring legal concepts and ideals. It is an assault on the foundations of our society, challenging the institution of traditional marriage which, for thousands of years in virtually every civilization, has been entrusted with the rearing of children and the transmission of cultural values. It must be defended.

The candidate who supported the ban with anti-gay rhetoric said the following, a quote adapted from former Congresswoman Michele Bachmann (2004; from Badash, 2011):

I'm in favor of the amendment because I'm strongly opposed to gay marriage. I don't believe the government should condone immoral homosexual behavior in any form. This could change our state forever because the immediate consequence, if gay marriage goes through, is that K-12 little children will be forced to learn that homosexuality is normal and natural.

The pairing of names with manipulated positions, the order of the candidate responses, and the pairing of manipulated positions with filler responses were fully crossed and counter-balanced. Based on the information presented in the article, the participants completed the *candidate perceptions questionnaire*, described below.

Once participants completed the candidate perceptions questionnaire, they went into a private voting booth to cast a vote for the candidate of their choice. Their ballots had no identifying information on them, and they placed them inside a locked box, which ostensibly held the votes of many participants. While participants were voting, the experimenter laid out six T-shirts out on a table in the middle of the room, two for each candidate. Each T-shirt showed a candidate's name overlaid atop a politically themed background. One shirt had a U.S. flag, another had a capitol building, and the third had a flag-themed crest. To enhance the cover story that participants would meet another participant, a second experimenter entered the room during this portion of the study and said, “Are you guys ready?” The first experimenter said, “Just about, we'll meet you over there.” This brief conversation occurred in the lab room while the participant was voting to ensure it was overheard. The second experimenter took one of the T-shirts corresponding to the oppose ban candidate, to allegedly take to the “other participant.” The second experimenter left and the first experimenter explained to the participant that for the next portion of the study

he/she would be joining another participant who had just read the same material to have a short discussion about which candidate they each would publicly support.

Participants were told they would be selecting a campaign T-shirt to wear in support of the candidate they selected, and were given a moment to look back over the interview to choose which candidate they would like to endorse. They were given a blank sheet of paper to organize their thoughts. When ready, they were told to take the appropriate T-shirt and put it on. At this point, participants were probed for suspicion, then debriefed and thanked.

Candidate perceptions—The candidate perceptions questionnaire was drawn from past research on the qualities important to political candidates (e.g., Burns et al., 2000; Molden, 2004; Schwartz, 2007) and was divided into separate feelings thermometer, trait ratings, and overall evaluation sections. In the feelings thermometer section, the participants rated how favorably they felt toward each candidate using a 0 (very unfavorable) to 100 (very favorable) scale. On the trait ratings section, the participants rated each candidate using eleven 1 to 7 Likert scales with the following poles: Immoral-Moral, Dishonest-Honest, Unpredictable-Predictable, Not Empathetic-Empathetic, Democrat-Republican, Irresponsible-Responsible, Liberal-Conservative, Untraditional-Traditional, Stubborn-Cooperative, Follower-Leader, and Ignorant-Knowledgeable. In the overall opinion section, the participants rated their agreement using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale with the following statements: “I would approve of [candidate name]’s policy decisions,” “[candidate name] is highly qualified,” “[candidate name]’s moral values closely match my own,” and “Overall, I would support this candidate.” The participants also completed candidate thought-listing tasks, which are not discussed further.

We used exploratory factor analysis on the 11 trait ratings and 4 overall evaluation questions to create separate indices of perceived ideology (*Democrat-Republican*, *Liberal-Conservative*, *Untraditional-Traditional*), perceived qualifications (*Dishonest-Honest*, *Irresponsible-Responsible*, *Follower-Leader*, *Ignorant-Knowledgeable*, and the qualifications question), and perceived moral match index (the policy approval, moral match, and candidate support questions). The indices were all averaged such that higher numbers indicate greater perceived conservatism, qualifications, and match with the candidate’s morals.

Voting and public support—We recorded the candidates that the participants chose on their ballots and chose to publicly support. The voting and public support variables were treated as categorical variables that were rank-ordered according to the amount of antigay sentiment they expressed. Thus, the candidate who opposed the ban with equality rhetoric had the lowest ranking, followed by the candidate who supported the ban with family values rhetoric, followed by the candidate who supported the ban with anti-gay rhetoric.

We verified our assumption that candidates could be rank-ordered by their anti-gay sentiment by asking 57 people to read the fabricated news article, rate each candidate using a 1 (*not at all*) to 7 (*very much*) scale on the degree to which they perceived each candidate as anti-gay, and rank-order the candidates on the same dimension. Participants perceived the candidate who used anti-gay rhetoric as the most anti-gay ($M = 6.09$, $SD = 1.75$), followed

by the candidate who used family values rhetoric ($M = 5.44$, $SD = 1.83$), $t(56) = 1.47$, $p = .017$, followed by the candidate who used equality rhetoric ($M = 1.86$, $SD = 1.62$), $t(56) = 9.31$, $p < .001$. Furthermore, 77% of the participants ranked the candidates in our hypothesized order, a percentage that is much greater than chance, $\chi^2(4, N = 57) = 195.68$, $p < .001$. These results support our treatment of the candidates as an ordered categorical variable.

Results

Data analytic plan—We analyzed the voting and public support variables using proportional odds logistic regressions (McCullagh, 1980), which are suited to the analysis of ordered categorical variables. In our analyses of the candidate perception measures, consistent with our treatment of candidate as an ordered categorical variable, we represented the candidates using a contrast that coded the candidate who opposed the ban as -1, the candidate who supported the ban with family values rhetoric as 0, and the candidate who supported the ban with anti-gay rhetoric as 1. We then post-multiplied each set of perception measures by the contrast, creating difference scores wherein higher values reflect a greater difference in perception between candidates who expressed increasing levels of anti-gay sentiment. We analyzed the difference scores using a series of General Linear Models.

For all outcomes, we first tested whether MP predicted the outcome on its own, then tested whether the relationship between MP and the outcome held when simultaneously controlling for attitudes and IMS, EMS, and their interaction. If we observed a significant relationship between MP and a given outcome on its own and controlling for the other variables, we conducted follow-up analyses using the ratings, voting, or support for each candidate on their own to better understand the form of the relationships we observed.

Finally, we conducted exploratory analyses to see whether the candidate perception difference scores mediated any effects we found on the voting and public support variables. We computed indirect effects and confidence intervals for these effects using nonparametric bootstrapping using the mediation package in R (Tingley et al., 2014). Descriptive statistics are in the Online Supplement, and the major study results are shown in Figure 4.

Candidate perceptions—MP was positively related to the linear contrast in the temperature ratings, $B = 10.56$, $t(181) = 6.58$, $p < .001$, $R^2 = .19$, political ideology, $B = -.21$, $t(181) = -2.58$, $p = .011$, $R^2 = .036$, perceived qualifications, $B = .28$, $t(178) = 4.54$, $p < .001$, $R^2 = .10$, and moral match, $B = .92$, $t(181) = 7.62$, $p < .001$, $R^2 = .24$. All these effects except that on qualifications held when simultaneously controlling for attitudes and IMS, EMS, and their interaction, temperature $B = 6.51$, $t(177) = 2.67$, $p = .008$, $R^2 = .030$, ideology $B = -.21$, $t(181) = -2.58$, $p = .011$, $R^2 = .036$, qualifications $B = .13$, $t(174) = 1.43$, $p = .16$, $R^2 = .010$, moral match $B = .36$, $t(181) = 1.99$, $p = .048$, $R^2 = .015$. Because the effects on qualifications did not hold when controlling for other variables, they are not explored further.

Compared to people lower in MP, people higher in MP rated the candidate who used anti-gay rhetoric more favorably on the thermometer, $B = 6.89$, $t(181) = 6.35$, $p < .001$, $R^2 = .18$, and felt that this candidate's morals matched their own, $B = .43$, $t(181) = 5.76$, $p < .001$,

$R^2 = .15$. They had similar, but less extreme perceptions of the candidate who supported the ban with family values rhetoric, thermometer $B = 5.00$, $t(181) = 4.73$, $p < .001$, $R^2 = .11$, moral match $B = .36$, $t(181) = 4.99$, $p < .001$, $R^2 = .12$, and had opposite perceptions of the candidate who opposed the ban, thermometer $B = -10.56$, $t(181) = 6.58$, $p < .001$, $R^2 = .19$, moral match $B = -.31$, $t(181) = -4.99$, $p < .001$, $R^2 = .12$. Finally, MP did not relate to participants' perceptions of the political ideology of the candidates who supported the ban, (*anti-gay rhetoric*, $B = -.068$, $t(181) = -1.03$, $p = .21$, $R^2 = .006$, *family values rhetoric*, $B = -.016$, $t(181) = -.23$, $p = .82$, $R^2 = .0003$). People higher in MP perceived the candidate who opposed the ban as relatively conservative, $B = -.13$, $t(181) = 2.07$, $p = .040$, $R^2 = .023$. This pattern suggests that people high in MP perceived less of an ideological contrast between candidates based on their anti-gay sentiment than people lower in MP.

Voting and public support—MP was related to an increased tendency to vote for, $B = .52$, $\chi^2(1, N = 183) = 31.95$, $p < .001$, and publicly support, $B = .54$, $\chi^2(1, N = 183) = 33.59$, $p < .001$, candidates who expressed increasing amounts of anti-gay sentiment. These relationships held when controlling for attitudes and IMS, EMS, and their interaction, voting $B = .32$, $\chi^2(1, N = 183) = 5.20$, $p = .023$, public support $B = .33$, $\chi^2(1, N = 183) = 5.41$, $p = .020$.

Compared to people low in MP, people high in MP were more likely to both vote for, $B = .44$, $\chi^2(1, N = 183) = 13.17$, $p < .001$, and publicly support, $B = .47$, $\chi^2(1, N = 183) = 14.37$, $p < .001$, the candidate who supported the ban with anti-gay rhetoric. They were also more likely to vote for, $B = .31$, $\chi^2(1, N = 183) = 9.09$, $p = .003$, and publicly support, $B = .33$, $\chi^2(1, N = 183) = 9.80$, $p = .002$, the candidate who supported the ban with family values rhetoric, though to a somewhat lesser extent than the candidate who used anti-gay rhetoric. They were less likely than people low in MP to vote for, $B = -.58$, $\chi^2(1, N = 183) = 32.14$, $p < .001$, and publicly support, $B = -.59$, $\chi^2(1, N = 183) = 33.94$, $p < .001$, the candidate who opposed the ban.

Mediation analyses—Because MP was related to candidate perceptions, voting, and public support, we conducted exploratory analyses to determine whether any of the candidate perception variables statistically mediated the relationships between MP and either voting or public support. Only perceived moral match uniquely fulfilled these criteria. When all the perception variable contrasts were added to models that allowed MP to predict either voting or support, only the moral match linear contrast significantly predicted either variable, voting, $B = .65$, $\chi^2(1, N = 183) = 26.48$, $p < .001$, support $B = .68$, $\chi^2(1, N = 183) = 28.18$, $p < .001$. In these same models, the coefficients for MP were drastically reduced compared to models with only MP as a predictor; on voting, the coefficient was reduced from .52 to .045, and on public support, from .54 to .092. When simultaneously controlling for all other perception variables, the confidence interval for the indirect effect of MP through moral match on both voting, $B = .18$, 95% CI = [.042, .30], and public support, $B = .20$, 95% CI = [.10, .30], did not include 0. These results suggest that MP is related to both voting and public support for candidates expressing increasingly anti-gay sentiment because of perceived moral match.

Discussion

Given political candidates who are otherwise identical, people high in the motivation to express prejudice felt relatively warm towards candidates if they supported oppressive policies and used antigay rhetoric. Perhaps most revealingly, people high in the motivation to express prejudice viewed candidates who expressed increasing amounts of anti-gay sentiment through their policies and rhetoric as having morals that match their own. These perceptions of moral match drove people high in the motivation to express prejudice to vote for and publicly support candidates who supported a ban on same-sex marriage. Even if a candidate did not use anti-gay rhetoric, merely supporting the ban with family values rhetoric was sufficient to generate perceptions of moral match, voting, and public support.

Overall, the results of this study lend further support to the predictive validity of the motivation to express prejudice scale. Independent of other variables, the motivation to express prejudice predicts a behavior has dramatic public policy consequences, namely voting for political candidates who support legal bans of same-sex marriage. Thus, the motivation to express prejudice could be one psychological reason for popular support of oppressive public policy initiatives.

Studies 1–6 demonstrate the reliability and convergent, discriminant, and predictive validities of the motivation to express prejudice scale for two target groups, Black people and gay men. Despite this strong evidence, a few puzzling issues remain stemming from our finding that IMP and EMP are functionally non-independent. Addressing these issues was the topic of our final study.

Study 7: MP and normative climate

In contrast to the typical pattern for IMS and EMS, we have found that IMP and EMP are functionally non-independent – people who are high in IMP tend also to be high in EMP. We speculate that this pattern may be related to the fact that the present work was conducted on a college campus that has strong norms that oppose prejudice toward the target groups that we have used for our validation thus far (Black people and gay men). Maintaining an internal motivation to express prejudice is likely difficult in a normative climate that strongly opposes prejudice (Crandall & Eshleman, 2003; Crandall, Eshleman, & O'Brien, 2002). A person may only be able to maintain an internal motivation to express prejudice in a normative environment that prohibits prejudice if that person has the support of an audience of important others who share the same values and who are not part of the local normative climate. If the above reasoning holds, when normative climates are more accepting of prejudice, EMP need not be anchored as heavily on personally important others because people feel more pressure from others generally to express prejudice. IMP should also be less strongly related to EMP in these climates, because a greater number of people in the local social environment share similar values.

To test these ideas, we examined the relationships among campus norms, the motivation scales, attitudes, and measures of reference group norms (i.e., norms among people who are personally important to participants). We assessed for five different target groups (i.e., Black people, gay men, feminists, Republicans, and racists), which we selected with the

expectation that the campus norms about expressing negativity towards these groups would vary. We predicted that, for target groups for which campus norms permit more negativity, EMP would less strongly anchored to reference group norms and would also be less strongly tied to IMP.

Method

Participants—Two-hundred twenty-two Introductory Psychology students (56% female, 85% White) participated in this study. Students were eligible for the study if they had lived in the US for at least five years. We did not prevent participants from completing multiple surveys because none of the surveys were deceptive, and we reasoned that completing one survey would not undermine the validity of the others. Fifty-eight participants completed multiple surveys (37 completed two, 11 completed three, 4 completed four, and 3 completed five). As detailed below, we used standard statistical procedures to correct for non-independence.

Procedure—We created six separate surveys, one that asked the questions about campus norms, and five that asked the questions about reference group norms and the motivations to express and respond without prejudice for each group, and thermometers for all the groups. The five motivation surveys varied only in the target group that they asked about: Black people, gay men, Republicans, feminists, and racists. As described below, we collected campus norms and thermometers for additional target groups, but the motivation scales were only collected for these five groups. We selected Black people and gay men for comparability with our other studies, Republicans on the basis of the relatively liberal climate on our campus, and feminists and racists on the basis of past evidence suggesting that college students view the expression of negative views toward these groups as relatively acceptable (Crandall et al., 2002; Fiske et al., 2002).

Participants signed up for the surveys online. We took down the campus norms survey after 100 people had responded and the other surveys after 40 or more students had responded.

Campus norms—The campus norms scale directed people ($N = 100$) to think about how people on campus felt about a variety of different groups. Each item started with the stem “According to most people on campus ...” and ended with one of the following two phrases: “... if someone is [target group], that makes it acceptable to express negativity toward him/her” and “... it is appropriate to treat people poorly because they are [target group]”. The target groups included the five target groups used for this study, as well several other groups included for a different project that are not discussed further. Participants responded to these items using a 1 (*strongly disagree*) to 7 (*strongly agree*), and for a given target group, the two items were averaged such that higher numbers indicate that campus norms permit greater prejudice.

Reference group norms—The norms scale directed the participants to think about the people important to them and how these people felt the participants should act toward the target group. The participants then answered seven items starting with the stem “People important to me believe that I should ...” Five of the items ended with the following

phrases: "... express negative views about [target group]", "... seek out positive interactions with [target group]", "... avoid interactions with [target group]", "... make jokes that play on stereotypes about [target group]", "... not use stereotypes about [target group]". The remaining two items described policies or behaviors relevant to the target group, but the policies and behaviors were quite dissimilar across groups, so these items were excluded from the final scale. Participants responded to each item using a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. These scales were scored such that lower numbers indicate reference group norms that prohibit negativity towards the target group and higher numbers indicate reference group norms that endorse negativity towards the target group.

Feelings thermometers—The feelings thermometers asked the participants to rate on a 0 (extremely unfavorable) to 100 (extremely favorable) how favorable they felt toward nine different groups. Five of these groups were our five target groups; the other target groups were White people, Asian people, straight people, and Democrats, and were included only to increase the reliability of the feelings thermometer by allowing participants to compare and triangulate their attitudes toward the different groups.

Motivation scales—All participants completed a version of IMS, EMS, IMP, and EMP tailored to one of the five target groups used for this study. The motivation to express prejudice items were presented separately from the motivation to respond without prejudice items. We modified the motivation to respond without prejudice items to say "unbiased" rather than "non-prejudiced" because we thought that the term "prejudice" might not make sense for some of the target groups that we were investigating (e.g., racists). Otherwise, the text of the items was the same as used for other studies in this paper.

Results

Reliabilities, descriptive statistics, and correlations between the major study variables for the motivation surveys are shown in Table 5, along with the mean values of the campus norm scales. As can be seen from the table, the target groups varied from a low of 1.83 (Black people) to a high of 4.64 (racists) in the extent to which campus norms permit expressions of prejudice. Notably, however, none of the groups, including racists, had a mean on the campus norms scale that was much above the scale midpoint of 4. Table 5 also reveals substantial variation in the relationships between reference group norms, IMP, and EMP. Although not the original intent of this study, there was an intriguing variation in the relationships between IMS and EMS, with the correlation being much smaller in magnitude for target groups for which norms prohibit prejudice (Black $r = -.03$, gay $r = .02$) than for target groups for which norms are more permissive of prejudice (feminist $r = .30$, Republican $r = .29$, racist $r = .27$).

We formally tested whether the pattern of correlations between reference group norms, IMP, and EMP varied across the five target groups by synthesizing these correlation matrices in a random effects meta-analytic SEM model (Cheung & Chan, 2009; Cheung & Chan, 2005). This analysis revealed significant heterogeneity between the five correlation matrices, $Q(12) = 35.32, p < .001$. We next explored whether the heterogeneity in the correlations was related to the local normative climate through fitting two separate univariate random effects

meta-analytic models, one of the correlation between IMP and EMP and a second of the correlation between EMP and reference group norms. Each of these meta-analytic models predicted the target correlation from the campus norms values that we obtained in our campus norms survey. To address the fact that some participants completed multiple surveys, we corrected sampling variances with the variance inflation factor, which is proportionate to the average number of surveys taken by a given participant and the degree of nonindependence in participant survey responses (Borenstein et al., 2009). We conducted our analysis on z -transformed correlations to correct for the small-sample bias in the sampling distributions of raw correlation coefficients.

As shown in Figure 5, the relationship between IMP and EMP was of a much smaller magnitude when campus norms were more accepting of prejudice, $B = -.44$, 95% CI = $[-.58, -.28]$. Moreover, when campus norms were less accepting of prejudice, there was a stronger relationship between reference group norms and EMP, $B = -.14$, 95% CI = $[-.27, .006]$, though the 95% confidence interval for this relationship overlapped slightly with 0.

Discussion

In Study 7, the relationships between IMP, EMP, and reference group norms varied as a function of normative climate. When the target group was one for which the campus norms permit more prejudice, IMP and EMP became increasingly independent and EMP was less strongly tied to reference group norms. Both of these patterns are consistent with the interpretation that the support of important others is less required when the local normative climate supports one's values. We also observed suggestive evidence that the relationship between IMS and EMS is affected by campus norms, following a similar pattern.

Speculatively, people whose internal motivations are incongruent with local norms regarding a given target group may require a stronger link between internal and external motivations (see also Crandall & Eshleman, 2003; Crandall et al., 2002), with external motivation anchored on a distinct, personally important reference group that shares one's values. Overall, Study 7's results suggest that the relationships between intergroup motivations are related to the local normative climate.

General discussion

Intergroup relations is a field already populated by a wide variety of individual difference measures. Thus, a skeptic might question whether yet another individual difference measure is necessary for understanding intergroup phenomena. Our results suggest that the answer to this question is a resounding yes. Our studies strongly support the assertion that the motivation to express prejudice is an independent construct that can be measured reliably and with good convergent, discriminant, and predictive validity. Studies 1 and 2 indicate that MP is distinct from both IMS and EMS. The motivation to express prejudice is unrelated to general tendencies to respond in socially desirable ways, is moderately related to general tendencies to respond to all groups in negative ways, and is moderately related to specific intergroup attitudes. Finally, the MP scale predicted consequential outcomes across two vastly different experimental paradigms, even when controlling for attitudes and the motivations to respond without prejudice. Overall, our results suggest that the motivation to

express prejudice is a real, distinct motivational construct that can be measured in a psychometrically valid way.

For the two primary target groups in the present work, Black people and gay men, the internal and external motivations to express prejudice were highly correlated. Our confirmatory factor analyses revealed, however, that IMP and EMP measure distinguishable latent factors, and Study 7's findings suggested their relationship is related to the local normative climate. In climates that prohibit prejudice, IMP and EMP are functionally non-independent, perhaps suggesting that normative climates that oppose one's values force people to more tightly link the personal and social aspects of their identities (Brewer & Gardner, 1996). IMS and EMS may thus become similarly linked in normative climates that strongly expect and encourage expressions of prejudice (Crandall & Eshleman, 2003).

As shown in Study 3, people high in MP tend to be low in IMS and high in EMS. This pattern may suggest that, MP develops when people who care about neither expressing nor withholding prejudice arrive in social environments that have strong nonprejudiced norms. Perhaps these people, initially low in both IMS and MP, express prejudice as a way to resist social pressures that they perceive as unfair, and this translates into higher levels of MP. If this account is borne out, it would indicate that social norms designed to reduce prejudice may have the ironic consequence of increasing expressions of prejudice. This interpretation is consistent with our findings that people high in MP are resistant to pressure to support organizations that promote intergroup contact. The psychological factors that lead to the development of the motivation to express prejudice remain an important area for future research.

In addition to providing the empirical benefit of predicting variance above and beyond other individual differences, we suggest that thinking in terms of the specific motivations and intentions that drive prejudicial behavior provides the conceptual benefit of providing greater insight into the underlying psychology of prejudice. In contrast to the motivations to respond without prejudice, the motivation to express prejudice forces researchers to consider the specific intentions that are linked to negative intergroup behavior. In contrast to attitudes, we suggest that the motivation to express prejudice may be directly linked to the psychological systems involved in the ongoing regulation of behavior (Carver & Scheier, 1998). Thus, just as the motivations to respond without prejudice have provided a bridge between the research topics of self-regulation research and people's efforts to respond without prejudice, the motivation to express prejudice may help provide a bridge between the research topics of self-regulation and people's efforts to express prejudice. As such, the motivation to express prejudice gives researchers theoretical leverage to directly harness the constructs developed for investigating general self-regulation, such as values (Devine & Monteith, 1993), goals and intentions (Plant & Devine, 2009), standards (Devine et al., 1991), and self-discrepancies (Devine et al., 1991; Higgins, 1987).

Although we have labeled our new construct “the motivation to express prejudice”, those who are high in MP may or may not actually consider themselves “prejudiced.” Although most people in the United States agree that people who are labeled “racist” are often perceived as uneducated or immoral (O'Brien et al., 2010), they disagree about who “racists”

tend to be and the types of behaviors that should be labeled “prejudiced” or “racist” (Sommers & Norton, 2006). For example, in one of the large, online surveys used for this paper, we observed a negative relationship between MP and agreement that opposition to same-sex marriage is prejudice, $r(956) = -.26, p < .001$, such that people higher in MP tend to believe that opposition to same-sex marriage is not “prejudice”. This suggests that some of the people who were both high in MP and who voted for candidates supporting bans on same-sex marriage in Study 6 did not consider their actions to be “prejudiced”. Instead, these people may view their actions as realistic, virtuous, and/or moral.

If we take seriously the notion that some people have intentions that drive them to express prejudice, it behooves us to expand the types of outcomes we examine in prejudice research. Although subtle forms of discrimination can certainly be consequential for the well-being of minorities (Sue et al., 2007), they make up only a subset of the discrimination minorities face. The prevalence of hate crimes remains alarmingly high (U.S. Department of Justice, 2014), and a few simple searches online will uncover websites and forums that exist solely to create a safe space to express a shared hatred of a particular outgroup (Glaser, Dixit, & Green, 2002). Looking beyond the borders of the United States, news reports of extreme intergroup behavior, up to and including ethnic cleansing, are distressingly common. Although we do not claim that the motivation to express prejudice is the sole cause of extreme intergroup behavior, we believe that this measure may provide a psychological tool to help understand these behaviors.

Overall, our results strongly support the empirical and theoretical utility of the motivation to express prejudice scale. We hope that the existence of this measure will help call attention to our lack of theoretical knowledge about the psychological underpinnings of outcomes other than those presumed to be caused by unintentional bias (Forscher & Devine, in press). We encourage prejudice researchers to use this new tool to gain a greater understanding of the intentions that underlie intergroup behavior, to broaden the samples and target groups that they examine in their research, and to broaden the range of intergroup phenomena that they study.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Appendix 1: The motivation to express prejudice scale

(Note: The gay men version of this scale was identical to the version below, except it replaced the words “Black people” with “gay men”. Internal items are labeled “imp”, whereas external items are labeled “emp”).

The following questions concern various reasons or motivations people might have for responding in various ways towards Black people. Some of the reasons reflect internal – personal motivations whereas others reflect more external – social motivations. Of course, people may be motivated for both internal and external reasons; we want to emphasize that neither type of motivations is by definition better than the other.

Please indicate the degree to which you agree or disagree with each of the following statements using the scale below.

1 strongly disagree	2	3	4	5	6	7	8	9 strongly agree

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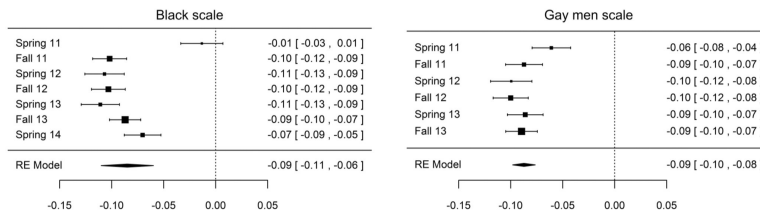


Figure 1. Forest plots for two meta-analyses of the interaction between IMS and EMS predicting MP in seven samples of large, online survey data. The size of each dot is proportionate to the sample size in a given survey, and lines represent 95% confidence intervals for each survey estimate

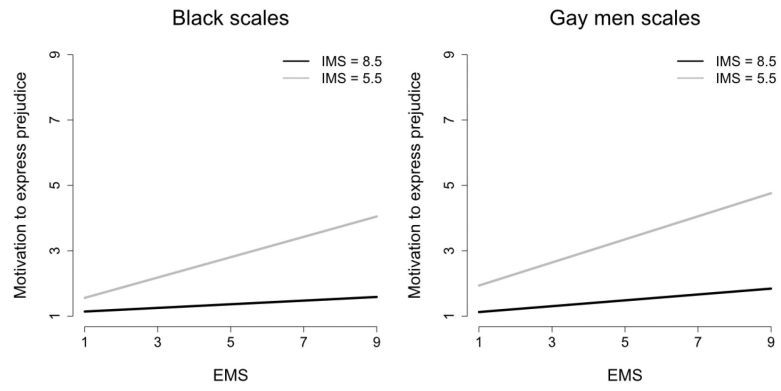


Figure 2. Meta-analytic relationship between internal and external motivations to respond without prejudice and the motivation to express prejudice. Predicted values for the motivation to express prejudice were obtained using the meta-analytic estimates of the intercept and the coefficients for IMS, EMS, and their interaction. Prediction lines for EMS are plotted at IMS = 5.5 and IMS = 8.5, which correspond approximately to the mean of $IMS \pm 1 SD$.

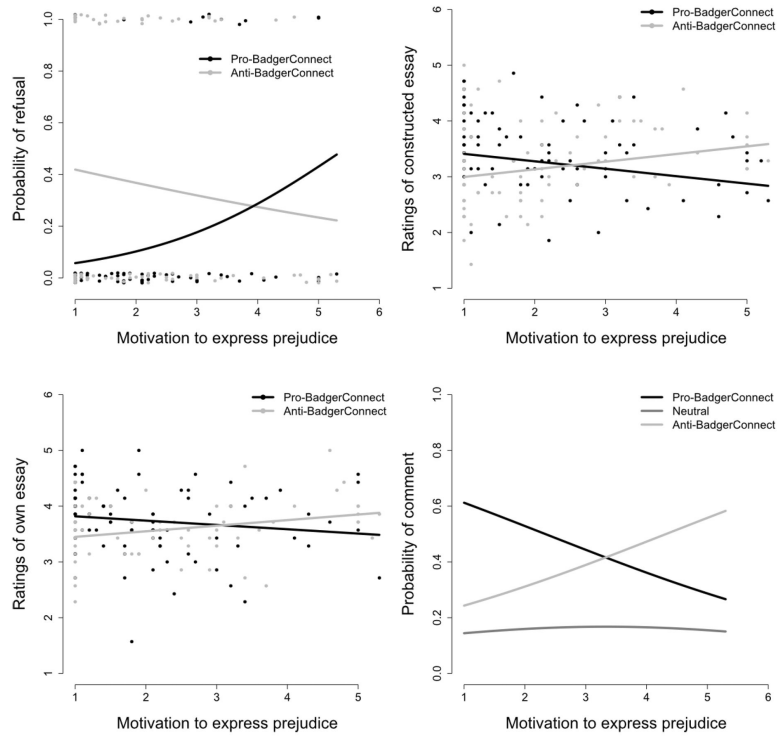


Figure 3. The relationship between the motivation to express prejudice and the probability of refusing to write pro- and anti-BadgerConnect essays, ratings of experimenter-constructed pro- and anti-BadgerConnect essays, ratings of the participants' own pro- and anti-BadgerConnect essays, and the probability of writing pro-, neutral, or anti-BadgerConnect comments. In all cases, lines represent predictions from the model in question.

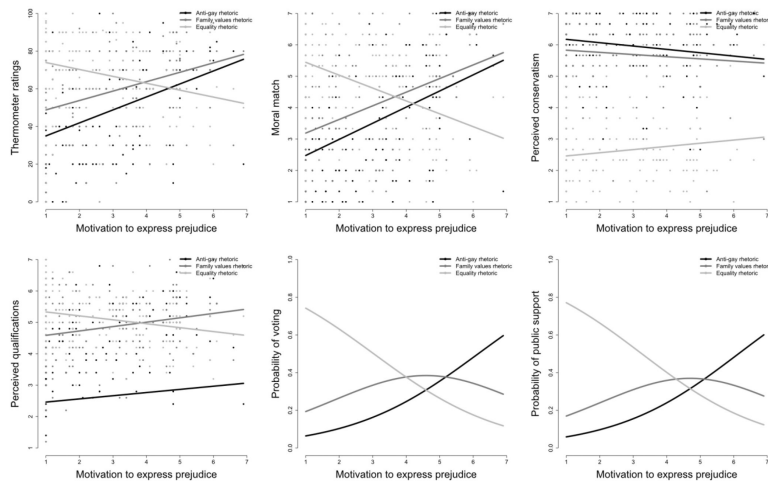


Figure 4.

The relationships between the motivation to express prejudice and thermometer ratings, perceived moral match, perceived conservatism, perceived qualifications, probability of voting, and the probability of expressing public support for the candidates who either opposed a gay marriage ban with equality rhetoric, supported a ban with family values rhetoric, or supported the ban with anti-gay rhetoric. Note that the relationship between the motivation to express prejudice and perceived qualifications is no longer significant when one controls for attitudes and IMS, EMS, and their interaction.

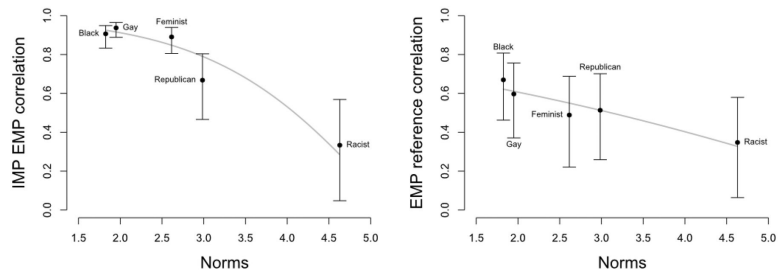


Figure 5.

Meta-analytic relationships between the campus norms governing the expression of prejudice, the correlation between IMP and EMP, and the correlation between EMP and reference group norms for five different target groups. Higher numbers on norms indicate that greater expected negativity toward that group on campus. Bands represent 95% confidence intervals for each correlation. The fit lines for each meta-analysis follow a curve because the meta-analysis was conducted on Fisher's z -transformed correlations rather than raw correlations.

Table 1

Exploratory factor analysis factor loadings

	Black version			Gay version		
	Factor 1	Factor 2	Factor 3	Factor 1	Factor 2	Factor 3
EMS 1		0.19	0.52		0.76	
EMS 2			0.77	-0.14	0.49	
EMS 3		0.23	0.60		0.84	
EMS 4			0.89		0.79	
EMS 5			0.77		0.83	
IMS 1	-0.12	0.71			0.20	0.59
IMS 2	-0.17	0.52			0.11	0.75
IMS 3		0.86			0.16	0.59
IMS 4		0.79				0.92
IMS 5		0.84			-0.12	0.78
EMP 1	0.64			0.64		
EMP 2	0.71			0.77		
EMP 3	0.88			0.92		
EMP 4	0.93			0.99	0.11	
EMP 5	0.83			0.91		
IMP 1	0.83			0.53	-0.32	
IMP 2	0.35			0.31		
IMP 3	0.87			0.68	-0.24	
IMP 4	0.75			0.54	-0.26	
IMP 5	0.93			0.69	-0.23	
IMP 6	0.80			0.58	-0.33	
IMP 7	-0.34	0.15		-0.26	0.48	

Note: Factor loadings from two exploratory factor analyses with oblimin rotations from Study 1. Loadings with absolute values below .10 are omitted from the table. Items IMP 2 and IMP 7 were eventually eliminated from the motivation to express prejudice scales, which reduced the cross-loadings between Factor 1 and Factor 2 on the gay men versions of the scales.

Table 2

Correlations and descriptive statistics for Studies 1 and 2

	Study 1													
	Black version					Gay version								
	MP	IMP	EMP	IMS	EMS	Thermometer	Attitudes scale	MP	IMP	EMP	IMS	EMS	Thermometer	Attitudes scale
MP	0.94							0.95						
IMP	0.96	0.93						0.95	0.93					
EMP	0.96	0.84	0.91					0.94	0.79	0.92				
IMS	-0.57	-0.56	-0.53	0.88				-0.67	-0.68	-0.58	0.88			
EMS	0.07	0.03	0.11	0.10	0.84			0.13	0.09	0.16	0.06	0.84		
Thermometer	-0.37	-0.37	-0.35	0.43	-0.03	--		-0.52	-0.54	-0.44	0.59	0.00	--	
Attitudes scale	-0.60	-0.59	-0.57	0.66	-0.09	0.52	0.89	-0.70	-0.73	-0.58	0.68	-0.07	0.66	0.95
Mean	1.92	1.79	2.05	7.16	5.29	74.19	5.43	2.34	2.30	2.37	6.80	5.00	66.44	4.18
SD	1.30	1.31	1.39	1.62	2.02	19.91	0.88	1.56	1.68	1.61	1.84	2.03	24.72	0.78
Skew	1.79	1.98	1.56	-0.79	-0.19	-0.66	-0.53	1.05	1.22	1.02	-0.66	-0.13	-0.61	-1.06

	Study 2													
	Black version					Gay version								
	MP	IMP	EMP	IMS	EMS	Thermometer	Attitudes scale	MP	IMP	EMP	IMS	EMS	Thermometer	Attitudes scale
MP	0.91							0.93						
IMP	0.94	0.81						0.95	0.90					
EMP	0.95	0.79	0.88					0.93	0.75	0.89				
IMS	-0.56	-0.54	-0.51	0.84				-0.67	-0.69	-0.56	0.84			
EMS	0.21	0.16	0.24	0.03	0.78			0.28	0.20	0.34	-0.06	0.80		
Thermometer	-0.29	-0.28	-0.27	0.36	-0.10	--		-0.62	-0.63	-0.52	0.59	-0.14	--	
Attitudes scale	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mean	1.84	1.83	1.85	7.30	4.51	76.18	--	2.33	2.38	2.27	6.96	4.20	70.14	--
SD	1.14	1.18	1.22	1.62	1.89	19.67	--	1.53	1.75	1.53	1.77	1.89	25.19	--
Skew	1.52	1.50	1.59	-0.87	0.10	-0.89	--	1.14	1.33	1.17	-0.70	0.22	-0.88	--

Note: Where appropriate, Cronbach's alpha is shown in the diagonal.

Table 3
Fit statistics for five confirmatory factor analysis models for the Black and gay motivation to express prejudice scales

	Black version						Gay version							
	df	χ^2 (df, N = 1123)	p-value	RMSEA	SRMR	CFI	AIC	df	χ^2 (df, N = 1119)	p-value	RMSEA	SRMR	CFI	AIC
Model 1	170	3534	.000	.133 (.128 – .137)	.167	.689	3614	170	3704	.000	.136 (.132 – .141)	.161	.727	3784
Model 2	169	3226	.000	.127 (.122 – .132)	.162	.718	3308	169	2866	.000	.119 (.115 – .124)	.147	.792	2948
Model 3	169	2207	.000	.104 (.099 – .108)	.136	.812	2289	169	2238	.000	.105 (.100 – .109)	.122	.840	2320
Model 4	167	1111	.000	.071 (.066 – .076)	.107	.913	1197	167	1536	.000	.086 (.081 – .090)	.105	.894	1622
Model 5	164	992	.000	.067 (.062 – .072)	.104	.924	1084	164	952	.000	.066 (.061 – .070)	.091	.939	1044

Note: The numbers in parentheses after the RMSEA are 95% confidence intervals. The AIC reported here is based on the degrees of freedom formula, not the model parameters formula.

Table 4

Convergent and discriminant validity statistics

	Black version													Gay version																			
	MP 1	IMP 1	EMP 1	IMS 1	EMS 1	MP 2	IMP 2	EMP 2	IMS 2	EMS 2	SDO	RWA	SMS	SDS	MP 1	IMP 1	EMP 1	IMS 1	EMS 1	MP 2	IMP 2	EMP 2	IMS 2	EMS 2	SDO	RWA	SMS	SDS					
MP 1	0.93														0.88																		
IMP 1	0.94	0.89													0.93	0.81																	
EMP 1	0.95	0.79	0.88												0.93	0.74	0.80																
IMS 1	-0.71	-0.57	-0.76	0.85											-0.58	-0.44	-0.63	0.84															
EMS 1	0.36	0.44	0.24	-0.13	0.80										0.23	0.26	0.16	-0.02	0.80														
MP 2	0.44	0.44	0.40	-0.28	0.20	0.88									0.36	0.38	0.29	-0.31	0.16	0.92													
IMP 2	0.47	0.51	0.39	-0.26	0.27	0.91	0.85								0.34	0.39	0.25	-0.19	0.20	0.88	0.92												
EMP 2	0.32	0.27	0.33	-0.25	0.08	0.88	0.62	0.79							0.30	0.29	0.27	-0.35	0.09	0.90	0.59	0.90											
IMS 2	-0.39	-0.33	-0.41	0.52	-0.11	-0.41	-0.34	-0.42	0.82						-0.40	-0.35	-0.41	0.53	-0.09	-0.60	-0.35	-0.71	0.89										
EMS 2	0.14	0.20	0.07	-0.04	0.33	0.17	0.24	0.06	0.08	0.87					0.02	0.05	-0.01	0.05	0.30	0.19	0.31	0.03	0.04	0.89									
SDO	0.31	0.20	0.37	-0.42	0.01	0.37	0.28	0.40	-0.55	-0.01	0.92				0.38	0.29	0.41	-0.52	0.13	0.42	0.22	0.52	-0.55	-0.03	0.92								
RWA	0.51	0.38	0.57	-0.45	0.14	0.38	0.30	0.39	-0.31	0.11	0.39	0.92			0.32	0.27	0.33	-0.31	0.20	0.50	0.30	0.38	-0.50	0.10	0.39	0.92							
SMS	0.04	0.14	-0.05	0.04	0.12	-0.01	0.05	-0.07	-0.08	0.11	0.03	-0.15	0.63		0.01	0.05	-0.02	0.02	0.11	0.00	0.11	-0.11	0.12	0.07	0.03	-0.15	0.63						
SDS	-0.01	-0.07	0.05	0.03	-0.05	-0.09	-0.08	-0.08	0.21	-0.04	0.21	0.09	-0.23	0.74	-0.14	-0.10	-0.17	0.28	0.01	-0.08	-0.12	-0.02	0.09	-0.05	0.21	0.09	-0.23	0.74					
Mean	2.61	2.48	2.74	6.62	4.04	2.01	2.21	1.82	7.05	5.19	2.71	-1.24	13.59	15.02	1.90	1.92	1.87	7.28	4.09	2.40	2.42	2.37	6.62	4.65	2.71	-1.24	13.59	15.02					
SD	1.65	1.61	1.88	1.86	1.81	1.12	1.33	1.17	1.45	1.73	1.10	1.23	3.66	4.93	1.12	1.19	1.21	1.60	1.86	1.47	1.58	1.73	1.86	1.81	1.10	1.23	3.66	4.93					
Skew	0.76	0.80	1.06	-0.53	0.05	1.23	1.17	1.49	-0.55	-0.52	0.45	0.25	0.06	-0.15	1.44	1.36	1.46	-0.81	0.13	0.98	1.01	1.47	-0.84	-0.41	0.45	0.25	0.06	-0.15					

Note: Cronbach's alpha is shown in the diagonal. The first and second administrations of the motivation scales were obtained four months apart. SDO is the Social Dominance Orientation scale, RWA is the Right-Wing Authoritarianism scale, SMS is the Self-Monitoring scale, and SDS is the Social Desirability scale.

Table 5

Descriptive statistics and correlations for five different target groups; reliabilities are in the diagonal

	Black (N = 43, norms = 1.83)					Gay (N = 46, norms = 1.95)					Feminist (N = 43, norms = 2.62)					Republican (N = 45, norms = 2.99)					Racist (N = 46, norms = 4.65)									
	Thermometer	Reference	IMP	EMP	IMS	EMS	Thermometer	Reference	IMP	EMP	IMS	EMS	Thermometer	Reference	IMP	EMP	IMS	EMS	Thermometer	Reference	IMP	EMP	IMS	EMS						
Thermometer	--																													
Reference	-0.40	0.83					-0.48	0.83					-0.59	0.71					-0.41	0.70					-0.17	0.51				
IMP	-0.42	0.66	0.92				-0.48	0.55	0.93				-0.50	0.54	0.91				-0.64	0.57	0.86				-0.24	0.62	0.89			
EMP	-0.43	0.67	0.91	0.93			-0.43	0.60	0.94	0.97			-0.43	0.49	0.89	0.90			-0.38	0.51	0.67	0.95			0.19	0.35	0.33	0.93		
IMS	0.36	-0.70	-0.70	-0.70	0.85		0.37	-0.59	-0.47	-0.47	0.86		0.49	-0.48	-0.40	-0.30	0.86		0.35	-0.48	-0.48	-0.20	0.90		0.08	-0.35	-0.25	0.80		
EMS	-0.05	0.04	0.05	0.08	-0.03	0.82	-0.05	0.34	0.31	0.36	0.02	0.84	0.02	0.18	0.21	0.22	0.30	0.93	-0.09	-0.01	0.29	0.35	0.29	0.84	0.35	-0.15	-0.34	0.37	0.27	0.91
Mean	74.51	2.25	1.91	2.00	7.39	4.70	73.57	2.67	2.06	2.03	7.24	4.29	63.44	2.61	2.03	2.03	6.10	4.16	69.00	3.25	2.68	2.36	6.05	3.41	11.57	4.23	6.04	4.43	4.72	3.17
SD	21.67	1.02	1.39	1.39	1.59	1.88	21.56	1.33	1.48	1.49	1.57	1.94	24.22	0.89	1.12	0.96	1.71	2.04	24.55	1.11	1.66	1.34	1.98	1.58	13.72	0.93	1.69	2.09	1.50	1.61
Skew	-0.69	0.59	1.52	1.29	-0.68	0.26	-0.86	0.54	1.80	1.77	-0.68	0.43	-0.55	0.55	0.86	1.24	-0.20	0.29	-0.43	-0.01	0.97	0.85	-0.22	0.19	1.26	0.36	-0.06	0.00	0.18	0.55