

Managing Intergroup Emotions: How Intergroup Ideologies and Emotion Regulation Can Stifle  
Positive Emotions and Intergroup Friendships

By

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## Abstract

### Managing Intergroup Emotions: How Intergroup Ideologies and Emotion Regulation Can Stifle Positive Emotions and Intergroup Friendships

by

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In interracial settings, a chief concern among majority group members is whether they appear prejudiced. These concerns often elicit feelings of anxiety and threat, which, ironically, run the risk of being interpreted as prejudice. One of the challenges majority group members face in intergroup interactions is the regulation of these negative emotions. Drawing on Gross's (1998, 2002) emotion regulation framework, I examine individual differences in how people manage negative emotions during intergroup encounters. I investigate whether a particular costly emotion regulation strategy, *expressive suppression*, is used by majority group members to limit intergroup emotional expressions, and in particular, used by individuals espousing colorblind ideologies that seek to avoid the perception, acknowledgement, and use of race. People endorsing more multicultural ideologies, on the other hand, accept group differences and thus should be less likely to rely on emotional suppression to manage interracial interactions. In Study 1a, I establish intergroup emotion regulation as distinct from global forms of emotion regulation. In Study 1b, I demonstrate the links between ideology and intergroup suppression. In Study 2, I examine of the social consequences of this ideology-suppression link, demonstrating that colorblind ideologies are associated with less positive, and multiculturalism with more positive, intergroup encounters and that these effects are mediated by intergroup suppression. Finally, in Study 3, I test this pathway experimentally, priming participants with multicultural or colorblind ideologies prior to an interracial interaction. Colorblind primes led to more suppression and less positive emotional expression, leading to less positive experiences for interaction partners.

For majority group members in interracial settings, concerns over appearing prejudiced give rise to anxiety and threat (Goff, Steele, & Davies, 2008; Plant & Devine, 1998; Plaut, 2010; Trawalter, Richeson, Shelton, 2009). Ironically, these concerns and emotions run the risk of being interpreted as prejudice (Shelton, Richeson, Salvatore, & Trawalter, 2005), and more generally contribute to the negativity of intergroup interactions (Vorauer, 2006). As such, majority group members are likely motivated to regulate the negative emotions that accompany these interactions (Toosi, Babbitt, Ambady, & Sommers, 2012).

What are the strategies that people use to regulate emotional expressions in intergroup settings? In the present research I draw from an emotion regulation framework developed by James Gross and colleagues (Gross, 1998a, 1998b; Gross & Thompson, 2007) to examine individual differences in *how* people manage intergroup anxiety and other negative emotions during intergroup encounters. This framework suggests that a particular emotion regulation strategy, *expressive suppression*, may be commonly used by individuals seeking to limit intergroup emotional expressions, but that this suppression may come at a high social cost (Butler, Egloff, Wilhelm, Smith, Erickson, & Gross, 2003).

In addition, I examine the relationship between intergroup emotion regulation and intergroup ideologies. These ideologies have seen a recent surge in research attention in part because they predict and lead to several forms of implicit and explicit bias (Apfelbaum, Sommers, & Norton, 2008; Plaut, 2010; Richeson & Nussbaum, 2004; Ryan, Casas, & Thompson, 2010). In particular, I examine the link between expressive suppression in intergroup contexts and a class of race-avoidant, *colorblind* ideologies that suggest that reacting to race is inappropriate in part due to an apprehension that such reactions may be misinterpreted as prejudice (Apfelbaum et al., 2008; Plaut, 2010). Expressive suppression may be necessary if one is to maintain a colorblind ideology in instances where racial cues evoke emotional responses. Without such constraints limiting their emotional expressions, people should be relatively less reliant on suppression. *Multiculturalism*, for instance, accepts the acknowledgement of group differences and does not specifically prescribe avoiding or inhibiting a reaction based on the perception of group differences (Plaut, 2002; Wolsko, Park, Judd, & Wittenbrink, 2000). Thus in the present research I investigate the relationship between intergroup ideology and intergroup emotion regulation and in particular investigate a colorblind–suppression link.

### **Regulating and Suppressing Emotions during Intergroup Interactions**

A recent meta-analysis confirms that for majority group members, interracial interactions are marked by more negative emotions, relative to same-race interactions (Toosi et al., 2012). Anxiety, for instance, as one of the more prevalent negative intergroup emotions (Plant & Devine, 2003; Stephan & Stephan, 1985; Toosi et al., 2012), is associated with worsened intergroup interaction expectations and quality (Page-Gould, Mendoza-Denton, & Tropp, 2008; Plant & Devine, 2003). Of course, individuals do not sit idly by while their emotions dictate the terms and outcome of any encounter. Instead, people are often motivated to modulate emotions and their expression (Gross, 1998b) and intergroup interactions are a context that generates high levels of self-regulation and expressive concerns (Dovidio & Gaertner, 1998; Fazio, Jackson, Dunton, & Williams, 1995; Plant & Devine).

People have a range of strategies available for managing negative emotions in order to achieve interpersonal goals. Gross (1998b, 2002) classifies these strategies into two broad categories based on when they are implemented during the emotion-generation process. Strategies implemented pre-emptively, before the full generation of an emotion, target *emotional experience*. Alternatively, strategies implemented in response to a fully activated emotion target *emotional expression*. This distinction supposes intent (either controlled or automatic), whereby regulatory strategies that target emotional expression are potentially driven by social presentational concerns. They are attempts to control the emotions other see; a late effort to engage in impression management that have only limited effects on the emotional experiences of the “suppressor” (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004; Gross & Levenson, 1997; Zinner, 2008). Supporting the idea that a primary purpose of suppressing during interpersonal contexts is to achieve self-presentational and impression management goals, self- and peer-rated data of emotion regulation shows that observers’ perceptions are more influenced by the use of suppression than are the regulator’s own emotional experiences (Lopes, Brackett, Nezlek, Schutz, Sellin, & Salovey, 2004).

Research shows that when people enter a new or unfamiliar context, such as transitioning to college, they become more concerned with their emotional expressions and are subsequently more reliant on expressive suppression (Srivastava, Tamir, McGonigal, John, & Gross, 2009). Intergroup interactions, being both relatively unfamiliar contexts for majority group members and laden with self-presentations concerns (Bergsieker, Shelton, & Richeson, 2010; Fazio et al., 1995; Plant & Devine, 1998; Vorauer, Main, & O’Connell, 1998), should therefore also rely on expression regulation. I suggest that individual differences in concerns over emotional expression are manifested in individual differences in the use of intergroup emotional suppression and will furthermore be a function of the intergroup ideology to which people adhere

Though previous research focuses on the cognitive suppression of bias (Correll, Park, & Smith, 2008; Crandall & Eshleman, 2003; Crandall, Eshleman, & O’Brien, 2002; Gordijn, Hindriks, Koomen, Dijksterhuis, & van Knippenberg, 2004; Macrae, Bodenhausen, Milne, & Jetten, 1994), emotional suppression is likely a concurrent strategy used by those with strong self-presentation concerns about appearing prejudiced. The suppression of intergroup emotions may have similar as well as unique costs to the cognitive suppression of bias, which I explore below.

### **The Potential Costs of Expressive Suppression in Intergroup Settings**

While emotional suppression is effective at limiting emotional expressions that are visible to observers (Bonanno et al., 2004), work from emotion regulation researchers demonstrates that suppression comes at a significant cognitive and social cost (Butler et al., 2003; Richards & Gross, 2000). Researchers offer at least three mechanisms through which suppression may have negative social consequences: First, suppression is cognitively demanding and therefore depletes resources that could otherwise be directed toward an interaction partner (John & Gross, 2007; Richards, 2004; Richards, Butler, & Gross, 2003; Richards & Gross, 2000). Second, observers may misattribute a suppressor’s intent. Through picking up emotional inconsistencies when a suppressed emotion “leaks,” observers may assume suppressors are being

inauthentic or cryptic toward them (English & John, 2012; Srivastava et al., 2009). Alternatively, if an emotion is successfully hidden from others, the observer's inability to know a suppressor's internal state can stifle the closeness that develops from sharing authentic emotions (Gross & John, 2003; Mauss, Shallcross, Troy, John, Ferrer, Wilhelm, & Gross, 2011). Third, suppression may unintentionally disrupt the expressions and behaviors associated with positive emotions (Butler et al., 2003; Gross & John, 2003).

The intergroup literature supports the relevance of each of these mechanisms in intergroup settings. For instance, the cognitive suppression of stereotypic information is cognitively depleting (Gordijin et al., 2004) and does not make one free of a stereotype, the expression of which may "rebound," becoming more likely to be expressed at a later time (Correll et al., 2008; Crandall & Eshleman, 2003; Crandall et al., 2002; Macrae et al., 1994). Furthermore, interracial interactions themselves are resource depleting (Richeson & Trawalter, 2005; Trawalter & Richeson, 2006) and a motivation to inhibit prejudice can lead to having fewer resources available to engage with outgroup members (Shelton et al., 2005). Intergroup contexts also appear marred with miscommunications and inauthenticity (Shelton, Richeson, & Salvatore, 2005; Vorauer & Sakamoto, 2006).

The effect suppression has on positive emotions may be most relevant to building cross-group friendships, which are one of the most reliable and effective methods for improving intergroup attitudes (Page-Gould et al., 2008; Pettigrew & Tropp, 2006). For instance, research on interracial roommates implicates a lack of positive emotions and closeness/intimacy-building behaviors as significant mechanisms through which interracial relationships may fail (Trail, Shelton, & West, 2009). Similarly, several influential theories of prejudice suggest bias is increasingly manifested and perceived as a lack of positive behaviors, rather than overt negative behaviors (Brewer, 1999; Dovidio & Gaertner, 2004). Further, positive interactions seem to be a critical component in alleviating concerns over prejudice (Mendoza-Denton & Page-Gould, 2008; Page-Gould et al., 2008). Thus in the present studies I test the hypothesis that a lack of positive expressions in intergroup settings is a consequence of emotional suppression, which subsequently disables interpersonal closeness (Gross & John, 2003; Srivastava et al., 2009).

### **Linking Intergroup Ideologies and Expressive Suppression**

The comprehensive preference to categorize intergroup encounters as no different from any other – thereby attempting to eliminate the role, perception, or use of race – is part of an umbrella of race-avoidant, *colorblind* ideologies (Apfelbaum et al., 2008; Plaut, 2002, 2010; Wolsko et al., 2000). I propose that colorblind ideologies are intimately tied to emotional suppression in intergroup contexts given its focus on preventing the acknowledgment and use of a salient feature of intergroup interactions – namely, race.

Endorsement of colorblindness often stems from a desire to be and act egalitarian (Plaut; 2010; Wolsko et al., 2000; though see Knowles, Lowery, Hogan, & Chow, 2009). While traditional versions of colorblindness prescribed avoiding the perception of race, the automaticity of racial categorizations makes this interpretation and application difficult, if not impossible (Ito & Urland, 2003). Thus more modern, sophisticated interpretations of colorblind ideologies

assume that an individual should minimize or eliminate any expressions attesting to the acknowledgement of racial or ethnic differences (Apfelbaum et al. 2008; Plaut, 2010), for such expressions would leave them susceptible to accusations of prejudice and discrimination, and run the risk of encouraging discussions of group difference, which are uncomfortable topics for many majority group members (Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006; Vorauer et al., 1998; Vorauer, Hunter, Main, & Roy, 2000). However, *precisely* because racial categorizations are automatically activated (Devine, 1989; Ito & Urland, 2003), endorsers of colorblindness are left to manage the unwanted emotions and cognitions already activated. Since a colorblind ideology seeks to minimize the expression of these emotions and cognitions, colorblind endorsers may regulate with attempts to dampen, hide, and suppress this arousal (i.e., use strategies that target emotional expressions and expressive behavior).

Supportive of my belief that colorblindness mandates the suppression of emotional expressions, priming the ideology inhibits expressing positive and negative stereotypes (Wolsko et al., 2000). Wolsko et al. (2000) originally argued that colorblindness prevented the activation of stereotypes since it does not make group categorizations salient. However, more recent work suggests that colorblind primes more directly affect whether stereotypes are explicitly expressed, rather than their activation. Correll and colleagues (2008, Study 3) found that after a colorblind prime, participants did in fact express relatively less bias. However, following a 20 minute interim, these same participants expressed relatively *more* stereotyping. This suggests a “rebound” effect whereby a colorblind prime may initially lead to the cognitive suppression of stereotypes, but as that regulatory effort to suppress erodes, expressions of bias and stereotyping begin to leak out. This work reinforces the idea that colorblindness’ primary concern is on the expression of anything that can be (mis)interpreted as bias.

By contrast, ideologies less concerned with observers’ interpretations of expressive reactions to perceiving race should be less tied to expressional-control strategies. For instance, another dominant American ideology, *multiculturalism*, emphasizes the acknowledgement, acceptance, and appreciation of group differences and their integral role in shaping modern American society (Plaut, 2002; Wolsko et al., 2000). Although its endorsement or adherence can, like colorblindness, have negative intergroup consequences (Plaut, Thomas, & Goren, 2009; Thomas & Plaut, 2002; Vorauer & Sasaki, 2011; Wolsko et al., 2000), multiculturalism should not be associated with suppression as this ideology does not specifically prescribe avoiding or inhibiting a reaction based on the perception of group differences. This is not to say that multiculturalists do not regulate their intergroup emotions. They are not, however, forced into a situation whereby the existence of intergroup emotions is in opposition to their prevailing ideology, as is the case for endorsers of colorblindness.

## Overview of Studies

I examined individual differences in the use of emotion regulatory strategies in intergroup settings. As an initial test of the hypothesis that expressive suppression accompanies intergroup interactions more than other types of interactions, in Study 1a I compared self-reports of expressive suppression (and for comparison, cognitive reappraisal) in intergroup settings to self-reported global preferences for these strategies. In Study 1b, I investigated the proposed



ideology-suppression link, testing whether intergroup emotion regulation (suppression and reappraisal) is reliably predicted from broader intergroup ideologies (colorblindness and multiculturalism). Use of cognitive reappraisal was particularly informative because it contrasts with the response/expression-focus of suppression, targeting emotional experience rather than emotional expression (Gross, 1998a; Gross & John, 2003).

In Study 2 I examined the association the ideology-suppression link has with intergroup social consequences, namely intergroup contact. Specifically, I assessed whether self-reports of intergroup ideology and intergroup emotion regulation was associated with self-reports of the quality of previous intergroup interaction experiences. Suppressing intergroup emotions should be effective at minimizing intense, negative intergroup experiences, albeit at a detriment to forming close, positive intergroup relationships as suppression inhibits the emotional expressivity necessary for such relationships to form (Collins & Miller, 1994; Gross & John, 2003; Mauss et al., 2011). In Study 3, I tested the causal relationship between ideology and emotion regulation by priming participants with multiculturalism or colorblindness before interacting with an outgroup confederate. I further examined the effects of both ideology and suppression on positive and negative emotions as well as both the participant's emotional experience and their emotional expression. In line with previous research outside of the intergroup domain (Butler et al., 2003), I expected that emotional suppression would lead to negative social outcomes in interracial interactions, but I examined the meditational role that positive emotional expression has on these social outcomes. This incidental suppression of positive emotions may be partly responsible for the negative social consequences associated with emotional suppression.

### **Study 1a**

Intergroup interactions tend to be more novel, uncertain, and stressful than intragroup interactions (Ickes, 1984; Stephan & Stephan, 1985). Emotion regulation research suggests that upon entering novel, uncertain, and stressful situations people may rely more heavily on expressive suppression than they would otherwise (Srivastava et al., 2009). Bringing these two strands of research together, in Study 1a, I compared participant's global preferences for emotion regulatory strategies with how they reported regulating emotions when interacting with someone of a different race. While cross-contextual use of cognitive reappraisal or expressive suppression should overlap to a degree, I expected more use of suppression and subsequently, less use of reappraisal, when participants imagined interacting with an outgroup member.

### **Method**

#### **Participants**

A total of 377 psychology students (71% female, 61% Asian-American, 39% European-American) participated in exchange for course credit. Participants ranged in age from 18 years to 45 years ( $M = 19.13$ ,  $SD = 2.44$ ).

#### **Measures**

**Self-reported emotion regulation.** I used Gross & John's (2003) Emotion Regulation Questionnaire (ERQ) to assess global preferences and tendencies for cognitive reappraisal and expressive suppression. Six items comprise the reappraisal subscale ( $\alpha = .80$ ) – for example, “When I'm faced with a stressful situation, I make myself *think about it* in a way that helps me stay calm.” Four items comprise the suppression subscale ( $\alpha = .76$ ) – for example, “I control my emotions by *not expressing them*.” Participants responded on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) assessing how likely they are to use that specific strategy.

To assess self-reported emotion regulation in an intergroup context I constructed an adapted ERQ specific to intergroup settings.<sup>1</sup> Specifically, participants were prompted to imagine an interaction with an African-American undergraduate and the emotions this interaction might elicit. Participants were then instructed to respond to the ERQ items while imagining an interaction with that African-American student. The ERQ items were altered to make reference to the imagined interaction. Six items again assessed cognitive reappraisal ( $\alpha = .86$ ) – for example, “If I find this situation stressful, I would make myself think about it in a way that helps me stay calm.” Four items again assessed expressive suppression ( $\alpha = .73$ ) – for example, “I would control my emotions during this interaction by not expressing them.” Participants responded on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*) assessing how likely they are to use that specific strategy.

## Procedure

Participants received all instructions, measures, and debriefing materials through a survey link and completed all measures on their personal computers. Participants first completed the intergroup version of the ERQ, followed by a series of unrelated questionnaires, then completed the Gross and John ERQ (2003) before being debriefed.

## Results and Discussion

I submitted responses to the two versions of the ERQ to a 2 (type of strategy: reappraisal vs. suppression)  $\times$  2 (ERQ context: global vs. intergroup) repeated measures ANOVA. Consistent with previous work comparing use of reappraisal and suppression (Gross & John, 2003), there was a significant effect of type of strategy,  $F(1, 374) = 269.91, p < .001$ , such that participants typically reported more use of reappraisal ( $M = 4.85, SD = .86$ ) than suppression ( $M = 3.81, SD = .97$ ). There was also a significant main effect of ERQ context,  $F(1, 374) = 9.18, p < .01$ , which was more importantly qualified by the expected interaction between strategy and context,  $F(1, 374) = 119.89, p < .001$ . As is clear in Figure 1a, participants reported increased use of expressive suppression when interacting with African-Americans ( $M = 4.07, SD = 1.07$ ), relative to their global tendency to suppress ( $M = 3.53, SD = 1.20$ ),  $F(1, 374) = 70.38, p < .001$ . Conversely, participants reported decreased use of cognitive reappraisal when interacting with African-Americans ( $M = 4.70, SD = .96$ ), relative to their global tendency to reappraise ( $M = 4.99, SD = .99$ ),  $F(1, 374) = 37.81, p < .001$ . Thus, I find that in intergroup interactions participants report increases in their use of expressive suppression. This supports previous work on the dynamic effect context has on emotion regulation when people are confronted with novel and stressful experiences (Srivastava et al., 2009).

## Study 1b

Aside from being relatively novel and stressful, intergroup interactions are marked by motivations and ideological belief systems that distinguish them from other interactions (Devine, Plant, Amodio, Harmon-Jones, & Vance, 2002; Legault, Green-Demers, Grant, & Chung, 2007; Moneith, 1993; Plant & Devine, 1998; Plaut, 2010). These ideologies likely promote and constrain the use of particular emotion regulation strategies during intergroup encounters. In Study 1b, I assess the association between intergroup ideologies and intergroup emotion regulation. I focus on individual differences in endorsement of multiculturalism and colorblindness, two ideologies that receive popular support across a range of Americans (Plaut, 2010; Ryan et al., 2010; Ryan, Hunt, Weible, Peterson, & Casas, 2007). I anticipated that attempts to avoid arousal activated by racial cues would be associated with the suppression of those emotions – that is, a colorblindness-suppression link. Conversely, multiculturalism suggests that expressions based on the perception of race should not be avoided and thus I expected multiculturalists to be less reliant on intergroup emotional suppression. My hypotheses surrounding the relationship between ideology and reappraisal were less clear. Some conceptualizations of multiculturalism and colorblindness consider both ideologies as promoting intergroup harmony (Plaut, 2010; Wolsko et al., 2000). Therefore both ideologies may be positively associated with intergroup reappraisal insofar as they *attempt* to change the meaning of an uncomfortable situation.

## Method

### Participants

A total of 140 White/European-American (67% female) psychology students participated in exchange for partial course credit. Participants ranged in age from 17 to 34 years of age ( $M = 19.50$ ,  $SD = 2.12$ ).

### Measures

**Self-reported emotion regulation.** Participants completed the same measures of self-reported emotion regulation used in Study 1a: the Gross & John (2003) ERQ in its original form ( $\alpha_{\text{reappraisal}} = .83$ ;  $\alpha_{\text{suppression}} = .75$ ) and the ERQ situated in an intergroup context ( $\alpha_{\text{reappraisal}} = .88$ ;  $\alpha_{\text{suppression}} = .77$ ). Just as in Study 1a, to measure intergroup emotion regulation participants were instructed to imagine interacting with an African-American student on campus when describing how they would manage their emotions. Participants again responded on a 7-point scale (1 = *strongly disagree*, 4 = *neutral*, 7 = *strongly agree*).

**Ideology endorsement.** Endorsements of multiculturalism and colorblindness were assessed using several items adopted from previous research (see Correll et al., 2008; Study 4) in addition to items created by the authors for the purpose of this study. All items are listed in the Appendix.

**Multiculturalism.** Seven items assessed endorsement of a multicultural ideology. The items revolved around having an appreciation of group differences as an integral component of

American society. For instance, “Recognizing ethnic diversity within the U.S. would help build a sense of goodwill and complementarity among the various ethnic groups.” Participants responded on a 7-point scale (1 = *strongly disagree*, 4 = *neutral*, 7 = *strongly agree*;  $\alpha = .84$ ).

**Colorblindness.** Seven items assessed endorsement of a race-avoidant, colorblind ideology. The items suggest that a focus on subordinate and salient categorizations such as race is disadvantageous and/or inappropriate. For instance, “Viewing others in terms of their race or ethnicity is likely to lead people to act prejudiced.” Participants responded on a 7-point scale (1 = *strongly disagree*, 4 = *neutral*, 7 = *strongly agree*;  $\alpha = .75$ ).

## Procedure

Participants received all instructions, measures, and debriefing materials through a survey link and completed all measures on their personal computers. Participants first completed the Gross and John ERQ (2003), followed by a series of unrelated questionnaires, and then completed the intergroup version of the ERQ and the measures of ideology endorsement before being thanked and debriefed.

## Results and Discussion

### Emotion Regulation by Context

Replicating Study 1a, I again submitted responses to the two versions of the ERQ to a 2 (type of strategy: reappraisal vs. suppression)  $\times$  2 (ERQ context: global vs. intergroup) repeated measures ANOVA. Of greatest interest is the interaction between the two factors, which was again significant,  $F(1, 139) = 50.87, p < .001$ . As shown in Figure 1b, the pattern was similar to that found in Study 1a. Again, participants reported using more expressive suppression when interacting with an African-American target ( $M = 3.80, SD = 1.14$ ) than when reporting their general preference for using suppression ( $M = 3.40, SD = 1.13$ ),  $F(1,139) = 13.35, p < .001$ . Also replicating Study 1a, participants reported using less reappraisal when interacting with an African-American target ( $M = 4.53, SD = 1.01$ ) than when reporting their general preference for reappraisal ( $M = 4.98, SD = 0.99$ ),  $F(1, 139) = 30.93, p < .001$ .

### Relationships between Intergroup Ideology and Emotion Regulation Strategies

All zero-order correlations are displayed in Table 1. Due to the correlations between (1) ideologies,  $r = -.51, p < .001$ ; (2) global and intergroup suppression,  $r = .35, p < .001$ ; and (3) global and intergroup reappraisal,  $r = .55, p < .001$ , I regressed intergroup emotion regulation scores simultaneously on standardized ideology scores and global use of suppression/reappraisal. This analytic strategy allowed assessment of the *unique* effect of ideology on intergroup emotion regulation strategies, beyond the relationship between global and intergroup emotion regulation.

I first assessed self-reports of intergroup suppression using the above strategy – that is, with colorblindness, multiculturalism, and global suppression as predictors. Central to my primary hypothesis, endorsement of colorblindness significantly predicted more reliance on intergroup suppression,  $\beta = .35, t(136) = 4.01, p < .001$ . Endorsement of multiculturalism, however, was not related to intergroup suppression,  $\beta = .02, t(136) = .19, p = .85$ . I used the same

analytic strategy in assessing the predictors of intergroup reappraisal – here using colorblindness, multiculturalism, and global reappraisal as predictors. Neither endorsement of colorblindness,  $\beta = .11$ ,  $t(136) = 1.13$ ,  $p = .18$ , or multiculturalism,  $\beta = .09$ ,  $t(136) = 1.05$ ,  $p = .30$ , predicted reports of intergroup reappraisal.

Together, Studies 1a and 1b demonstrate that people report relying more heavily on expressive suppression in intergroup interactions. While Study 1a suggests a greater reliance on expressive suppression in intergroup settings relative to an individual's own global tendency to rely on this strategy, Study 1b provides preliminary support for my hypothesis that colorblindness, with its emphasis on avoiding race-based categorizations, is associated with increased use of intergroup suppression. Conversely, multiculturalism, with an emphasis on the acceptance of race-based differences, is associated with less use of intergroup suppression (though not when controlling when for self-reported endorsement of colorblindness).

## Study 2

In Study 2, I examined the intergroup social consequences associated with the ideology-suppression link established in Study 1b. Expressive suppression generally has significant social costs, specifically on positive outcomes. For instance, expressive suppression is associated with less positive expressivity and responsiveness during interpersonal interactions (Butler et al., 2003). Further, use of suppression is associated with both self- and other-reports of less interpersonal sharing of positive emotions (Gross & John, 2003) and less interpersonal closeness (Mauss et al., 2011; Srivastava et al., 2009). Further, intergroup contacts appear more likely to lack authentic, engagement related emotions, which prevents such contacts from growing into close intergroup friendships (Trail et al., 2009) – the same sort of contacts that are instrumental in improving intergroup attitudes (Page-Gould et al., 2008). Thus, I expected that the colorblind-suppression link would be associated with fewer positive intergroup experiences. Multiculturalism, with a negative association with suppression, should be subsequently associated with more positive intergroup experiences. Thus, in Study 2, I investigate the downstream social consequences of intergroup ideology, focusing on suppression as its mechanism.

## Method

### Participants

A total of 203 psychology students participated in exchange for partial course credit. I restricted analysis to those identifying as White/European-American or Asian-American leaving a sample of 131 (42% female; 35% White/European-American, 65% Asian-American). Participants ranged in age from 17 to 58 years of age ( $M = 23.37$ ,  $SD = 9.19$ ).

### Measures

**Self-reported intergroup emotion regulation.** Participants completed a measure of self-reported intergroup emotion regulation similar to that used in Study 1a and 1b. However, in this instance, the reference group used in the prompt now referred to outgroups in general, rather than

having participants imagine an African-American. In this case, participants were instructed to think about how they control their emotions “when interacting with people from groups (e.g., racial or ethnic) other than your own.” Otherwise, emotion regulation was assessed as it was in Studies 1a & 1b by using the Gross & John (2003) ERQ in its original form ( $\alpha_{\text{reappraisal}} = .83$ ;  $\alpha_{\text{suppression}} = .75$ ) and the ERQ situated in an intergroup context ( $\alpha_{\text{reappraisal}} = .88$ ;  $\alpha_{\text{suppression}} = .77$ ). Participants again responded on a 7-point scale (1 = *strongly disagree*, 4 = *neutral*, 7 = *strongly agree*).

**Ideology endorsement.** Endorsements of multiculturalism ( $\alpha = .84$ ) and colorblindness ( $\alpha_{\text{reappraisal}} = .77$ ) were assessed using 5-item versions of the indices used in Study 1b.

**Measure of quality of prior intergroup contact.** A 6-item index of quality of intergroup contact ( $\alpha = .66$ ) was adapted from the Michigan Student Study and The Program on Intergroup Relations (Program on Intergroup Relations, 2009). These items asked participants whether they “had meaningful and honest discussions,” “shared our personal feelings and problems,” “had close friendships,” “had tense, somewhat hostile interactions,” “had guarded, cautious interactions,” and “felt excluded, ignored” with outgroup members. The last three items were reverse-coded. Participants responded on a 7-point scale (1 = *strongly disagree*, 4 = *neutral*, 7 = *strongly agree*).

## Results and Discussion

As in Study 1b, endorsements of multiculturalism and colorblindness were negatively correlated,  $r = -.44$ ,  $p < .001$ . Further, intergroup suppression again had divergent relationships with ideology – a positive relationship with colorblindness,  $r = .30$ ,  $p < .001$ , and a negative relationship with multiculturalism,  $r = -.23$ ,  $p < .01$  (Table 2).

### Predicting Quality of Intergroup Contact

My prediction was that intergroup suppression has marked effects on intergroup outcomes. As shown in Table 2, and as predicted, self-reports of intergroup suppression were associated with reduced intergroup contact quality,  $r = -.35$ ,  $p < .001$ . To ensure that intergroup suppression is uniquely implicated in reduced intergroup contact quality, I conducted a regression analysis that simultaneously included scores of the two ideologies and intergroup suppression in predicting intergroup contact quality. In this regression model, suppression remained an independent predictor of contact quality,  $\beta = -.27$ ,  $t(127) = -3.19$ ,  $p < .001$ . Endorsement of colorblindness was also a predictor worse contact quality,  $\beta = -.26$ ,  $t(127) = -2.82$ ,  $p < .01$ . Multiculturalism, however, was no longer related to contact quality, ( $\beta = .01$ ,  $p = .90$ ). Overall, then, the above analyses support the link between using suppression and having reduced quality of intergroup interactions.<sup>3</sup>

### Mediational Analyses

Is the relationship between ideology and contact quality mediated by suppression? I tested these mediations using bootstrapping procedures to examine the indirect effect of intergroup suppression, first between colorblindness and contact quality, then on



multiculturalism and contact quality (Preacher & Hayes, 2004; Shrout & Bolger, 2002). This first mediation model (Figure 2a) was significant, 95% CIs [-.1473, -.0167], suggesting that endorsers of colorblindness have worse intergroup contact quality because of the suppression of emotions associated with endorsement of that particular ideology. I next tested whether suppression mediated the link between multiculturalism and previous contact quality. As shown in Figure 2b, this mediator model also led to a substantive drop in the positive relationship between multiculturalism and contact quality, 95% CIs [.0202, .1449], suggesting that endorsers of multiculturalism have higher quality contact because they rely less on suppression. These two mediation models fit my stance that part of ideologies' relationship to intergroup outcomes is specifically a consequence of their relationships to emotional suppression. Having investigated the role that intergroup ideologies play in orchestrating the regulation of intergroup emotions (Studies 1b and 2) and in behavioral outcomes (Study 2), in Study 3 I experimentally test whether the ideology-suppression link specifically affects positive emotions, as suppression often has the consequence of inhibiting these emotions (Gross & John, 2003).

### Study 3

Adherents to a colorblind ideology often desire improved intergroup relations (Plaut, 2010). In fact, adherents likely believe the strategies they use in the name of this ideology are effective. Expressive suppression is indeed typically effective at its primary purpose – inhibiting the expression of emotions to others (Bonanno et al., 2004). Yet, as evidenced by prior work on expressive suppression, that purpose is interpersonally detrimental (Butler et al. 2003). Study 2 supports these findings in an intergroup domain, where both colorblindness and suppression were associated with less self-reported meaningful, positive, quality intergroup contacts while multiculturalism, through its negative association with suppression, was related to more self-reported meaningful, positive, quality intergroup contacts. In Study 3, I examined the ideology-suppression relationship to positive emotions as a means through which suppression may have negative social costs. I experimentally tested this process by priming participants with a multicultural or colorblind ideology before they engaged in a friendship-building task with an outgroup member. I chose a friendship-building paradigm because it provided a scenario where shared emotions are instrumental (Collins & Miller, 1994) and the anxiety and self-presentational concerns endemic to intergroup settings are still relevant (Plant & Devine, 2003; Plant & Devine, 2009). I restricted examination of emotional experience/expression to one class of negative emotions (anxiety) and one class of positive emotions (enthusiasm/engagement) as previous work highlights these two classes of emotions as both integral, salient, and strained in intergroup interactions (Dijker, Koomen, van den Heuvel, & Frijda, 1996; Plant & Devine, 2003; Toosi et al., 2012; Vorauer, Gagnon, Sasaki, 2009). Consistent with recent work (Mauss et al., 2011), I expected suppression to cause dissociation between emotional experience and expression particularly for positive emotions.

I additionally examined the presence of a divergence in interaction experiences resulting from this ideology-suppression-positive emotion link by assessing both the participant's and outgroup partner's interaction experience. If endorsers of colorblindness successfully suppress any expressions of negative emotions they may view their interactions as successful and positive.

Nevertheless, I anticipated that their outgroup partners would view these interactions less positively.

## Method

### Participants

Ninety five undergraduate females participated either for partial course credit or in exchange for \$10. Data from 5 participants were excluded after they expressed suspicion during debriefing that their interaction partner was a confederate. Data from 2 additional participants were excluded because they were previously acquainted with the confederate. Of the remaining 88 participants, 50 identified as White/European-American, 38 as Asian/Asian-American. Their ages ranged from 18 to 22 years old ( $M = 18.92$ ,  $SD = 1.16$ ).

### Procedure

Participants were ostensibly recruited for a study examining first impressions upon meeting students from different groups. Upon arrival, participants were seated at a computer and received the exact intergroup ideology manipulation from Wolsko et al. (2000, Exp. 1). This manipulation consisted of 3 between-participants conditions: a colorblind ( $N = 29$ ), a multicultural ( $N = 29$ ), and a control condition ( $N = 30$ ). Participants receiving the experimental primes were instructed to read through a half-page essay purportedly reflecting the consensus opinion of social scientists that a colorblind [multicultural] ideology would best improve intergroup relations in the U.S. These participants were then instructed to list 5 of their own reasons why colorblindness [or multiculturalism] is a positive approach to improving interethnic relations. In the final component of the manipulation, participants in the experimental conditions received a list of 21 items, ostensibly created by previous study participants, and were instructed to check items similar to the list they previously generated. Participants in the control condition did not receive any ideological prime but received similar instructions notifying them the experimenters were interested in perceptions of interracial relationships.

Next, all participants were notified they would “interact with another student, who may or may not be a racial or ethnic minority.” I then assessed participant’s emotions heading into their interaction (i.e., their post-manipulation, pre-interaction emotions). The experimenter then provided participants with a sheet of 15 scripted questions “meant to guide [their] interaction.” The questions were adopted from previous closeness-inducing procedures (Aron, Melinat, Aron, Vallone, & Bator, 1997; Page-Gould et al., 2008). These questions ranged from superficial (e.g., “What is your major and how do you like it?”) to increasingly personal (“If you were to die tomorrow, what would you most regret not having done?”). By design, none of the questions explicitly pertained to race, or required an answer referencing race, so that the task would not be at odds with a strict adherence to a race-avoidant, colorblind ideology. Participants were instructed they could ask as many or as few questions as they liked, in any order they liked, and that their partner would receive the same question sheet and instructions.

The experimenter then led the participant to another room where the confederate was already waiting. One of two Black female confederates served as interaction partners for each



participant. Confederates were kept blind to the hypotheses and to participant condition. The experimenter then sat the participant at a table directly across from the confederate and informed the pair that the participant had been randomly chosen to lead the interaction (this was, in fact, always the case) and they would therefore determine which questions to ask and when the interaction would end. The experimenter repeated the confederate's role, which was to respond to each question her partner asked and then repeat the same question back. Before leaving the room the experimenter started a video-recorder, which was placed on the far side of the table and captured the side profile of the interactants. After the participant and confederate completed their interaction, the experimenter led the participant back to their original room. Now separated, both participant and confederate completed a final questionnaire before the participant was probed for suspicion and debriefed.

## Dependent Measures

**Emotion ratings.** A class of positive and negative emotions relevant to intergroup interactions assessed participant's emotional experiences heading into the interaction and again during the interaction. Specifically, five items from the PANAS (Watson, Clark, & Tellegen, 1988) assessed positive emotional engagement – *enthusiastic, attentive, excited, active, alert* ( $\alpha_{\text{pre-interaction}} = .83$ ;  $\alpha_{\text{interaction}} = .84$ ). Another five items from the PANAS assessed participant's anxiety - *distressed, nervous, jittery, anxious, afraid* ( $\alpha_{\text{pre-interaction}} = .88$ ;  $\alpha_{\text{interaction}} = .79$ ). Ratings were made on 5-point scales with higher scores indicating more intense emotional experience.

**Emotional suppression.** Participants reported their levels of expressive suppression during the interaction. The two items used were meant to capture the general essence of the strategy - "I kept my emotions to myself" and "I controlled my emotions during the interaction by not expressing them." Ratings were made on 7-point scales with higher scores indicating more use of emotional suppression ( $\alpha = .69$ ).

**Quality of interaction.** Five items assessed participant's judgments of the overall quality of the interaction. These items assessed how positively raters believed the interaction went (e.g., "I am satisfied with how our interaction went") and whether they believed a friendship was possible with their partner (e.g., "I could imagine becoming friends with my partner outside of this study"). Ratings were made on a 1 (strongly disagree) to 7 (strongly agree) scale ( $\alpha = .87$ ).

**Confederate ratings.** Confederates responded to the same items as participants, but were instructed to provide their perceptions of what the participants did and expressed. Thus, using the same items described above, confederates indicated how much their partner: suppressed ( $\alpha = .97$ ), expressed positive emotional engagement ( $\alpha = .94$ ), and expressed anxiety ( $\alpha = .64$ ). Finally, confederates rated the quality of the interaction from their own perspective ( $\alpha = .90$ ).

## Analytic Strategy

I first tested for any effect of ideological manipulation on emotional arousal heading into the interaction. My primary analyses then examined the effect of the ideological manipulation on: (1) participant emotional experience; (2) participant emotional suppression; (3) participant emotional expression (as rated by the confederate); and (4) both the participant's and

confederate's perceptions of the overall quality of interaction. Assessing both participant and confederate perceptions of interaction quality allowed me to test whether suppression leads to divergent interaction experiences for both participant and confederate. Suppressors may view their interactions as successful and positive assuming they inhibit any expressions of negative emotions. Confederates, however, may be more sensitive to other cues (e.g., their partner's emotional expressions), viewing interactions with suppressors less positively. Finally, I examined a set of mediation models meant to test the mechanisms influencing my primary outcome variable – confederate interaction experiences. Specifically, I tested whether (1) the relationship between ideology and confederate interaction experiences was mediated by participant reported use of emotional suppression; and (2), whether the relationship between participant reported use of emotional suppression and the confederate interaction experiences was mediated by the participant's emotional expressivity.

## Results and Discussion

### Pre-Interaction Emotions

Participants reported baseline levels of emotional enthusiasm and anxiety immediately after receiving the ideological prime. There was no significant main effect of ideology on participant's pre-interaction emotions ( $F_s < 1$ ). Therefore, since the two ideologies were similar to the control condition, I concluded that ideological prime did not alter emotional arousal heading into the interaction.

### Effect of Ideological Manipulation

Participants engaged in interactions of similar length between conditions ( $M_{overall} = 11$  minutes 26 seconds,  $SD_{overall} = 54$  seconds),  $F(2, 85) = .11, p = .90$ . Descriptive statistics for all remaining dependent measures within the 3 ideology conditions are presented in Table 3.

**Participant self-reported emotional experience.** Participants did not differ in their self-reports of enthusiasm,  $F(2, 85) = .31, p = .74$ , or in their reports of anxiety,  $F(2,85) = 1.54, p = .22$ , based on ideological condition.

**Participant self-reported emotional suppression.** A one-way ANOVA on participants' self-reports of emotional suppression yielded a significant effect of ideological condition,  $F(2, 85) = 3.29, p = .04$ . Colorblind condition participants ( $M = 3.59, SD = 1.12$ ) reported using significantly more suppression than participants in the multicultural condition ( $M = 2.78, SD = .95$ ),  $t(56) = -2.97, p < .01$ . The control group ( $M = 3.20, SD = 1.47$ ) fell between the two experimental groups, though not significantly different from either group,  $ps > .20$ .

**Confederate rated emotional suppression.** Confederates did not report perceiving different magnitudes of partner suppression between ideological conditions,  $F(2, 85) = 1.41, p = .25$ . Thus, while colorblind condition participants reported greater levels of suppression, unacquainted confederates were not necessarily perceptive of participants' suppression efforts.

**Confederate rated emotional expression.** Regarding expressions of anxiety, confederates did not differ in their partner ratings based on ideological condition,  $F(2, 85) = .25,$

$p = .78$ . In regard to enthusiasm, however, confederates did significantly differ in their partner ratings based on ideological condition,  $F(2, 85) = 3.31, p = .04$ . Specifically, confederates reported less enthusiasm/engagement from both colorblind condition partners ( $M = 1.99, SD = .78$ ),  $t(56) = -2.01, p = .05$ , and control condition partners ( $M = 1.94, SD = .88$ ),  $t(57) = -2.16, p = .04$ , relative to multicultural condition partners ( $M = 2.53, SD = 1.21$ ).

**Participant rated interaction quality.** A one-way ANOVA revealed no effect of ideological prime on the participants' rating of the quality of the interaction,  $F(2, 85) = .89, p = .42$ . Thus, colorblind condition participants, while aware they were suppressing, did not report emotional or overall experiences different than their multicultural counterparts. This is consistent with the idea that suppression is focused on limiting the expression of emotions and thus may not alter emotional experience in a single interaction (Butler et al., 2003). These findings suggest that colorblind condition participants had similar emotional experiences to multicultural and control condition participants (even if it meant using more suppression).

**Confederate rated interaction quality.** An ANOVA of ideological prime on my primary outcome variable, confederates' ratings of how well the interaction went, was marginally significant,  $F(2, 85) = 2.51, p = .09$ . A comparison between the two experimental groups of particular interest, however, did yield a significant effect,  $t(56) = 2.12, p = .04$ , such that, as expected, Black confederates rated interactions with multicultural condition participants ( $M = 5.62, SD = .82$ ) more positively than interactions with colorblind condition participants ( $M = 5.08, SD = 1.09$ ). Confederate interaction experiences with control condition participants ( $M = 5.28, SD = .83$ ) fell in between the two experimental conditions and did not significantly differ from either ( $ps > .12$ ). Considering that confederates reported colorblind condition participants as displaying less positive emotions than multicultural condition participants, it is likely that confederates considered this factor in determining their overall interaction experience. In fact, participant positive emotion expressivity was strongly associated with more positive confederate experiences,  $r = .63, p < .001$ . Further emphasizing the importance of positive emotions in determining interpersonal closeness in interaction experiences, both participant self-reports of anxiety and confederate perceptions of anxious expressions were unrelated to the confederate's rating of interaction quality,  $r = -.08$  and  $r = -.06$ , respectively, ( $ps > .46$ ). Thus, confederate experiences were shaped more by partners' positive expressions, rather than the anxiety their partners may have displayed.

### **Effect of Emotional Suppression**

Though not directly manipulated, I examined the relationship across all ideological conditions between participant reports of emotional suppression and the remaining outcome variables. Again, suppression can neutralize the expression of negative emotions, however it often takes an unintended toll on both the experience and expression of positive emotions (Gross & John, 2003; Nezlek & Kuppens, 2008). Accordingly, participant reported use of suppression was unrelated to anxious expressions (as rated by confederates),  $r = -.16, p = .13$ . Participant reports of suppression were however associated with less positive emotions, both experienced (i.e., participant reports),  $r = -.26, p = .01$ , and expressed (i.e., confederate reports),  $r = -.21, p = .05$ .

Regarding suppression's relationship to overall interaction quality, participant reports of suppression were unrelated to participant reports of overall interaction experiences,  $r = -.11$ ,  $p = .33$ . Participant reports of suppression were however associated with lower quality interaction experiences as rated by the confederate,  $r = -.29$ ,  $p < .01$ . This is consistent with the hypothesized divergence in experiences caused by suppressing. Specifically, while suppressors may have assumed a successful interaction from having met their goal of suppressing emotion, their partners' experience may have been one of interacting with a relatively "cold" person (Butler et al., 2003). The same may be said for an endorser of colorblindness who believes s/he successfully "avoided" race during an interracial interaction.

### **Mediational Analyses**

The above findings demonstrate some of the negative consequences of a colorblind ideology, at least from the perspective of a minority group member during an intergroup interaction. Specifically, Black confederates viewed partners in the colorblind condition as being less enthusiastic and furthermore, viewed these interactions less positively, relative to interactions with partners in the multicultural condition. In a mediation analysis, I tested participant suppression as a mechanism through which the colorblind prime lead to lower quality interaction experiences for the confederates. Utilizing the full sample, I used a linear trend of ideological prime (-1= multicultural; 0 = control; 1 = colorblind). I used bootstrapping procedures to compute confidence intervals around the proposed mediator (Preacher & Hayes, 2004; Shrout & Bolger, 2002). This mediation model (shown in Figure 3a) was significant, 95% CIs [-.0140, -.2080]. Colorblind condition partners were more negatively received by confederates in part because the ideology resulted in more emotional suppression among participants.

That positive emotional expressivity was closely associated with confederate experiences,  $r = .63$ ,  $p < .001$ , suggests that a dampening of positive emotions may be a process through which suppression has negative social costs. Therefore, I tested a second mediation model whereby positive emotional expressivity mediated the link between participant suppression and confederate rating of interaction quality. I tested this model using the same procedures described above. The model, displayed in Figure 3b, was significant, 95% CIs [-.0065, -.1773]. Consistent with the idea that confederates were more accurate and attuned to perceiving participants' positive emotions, rather than the suppression itself, confederate ratings of interaction quality were more strongly related to participant reports of positive emotions,  $r = .55$ ,  $p < .001$ , than to participant reports of suppression,  $r = -.29$ ,  $p < .01$ ; Fisher  $r$ -to- $z = 2.08$ ,  $p = .04$ . Suppressors likely intend to hide both emotional expressions and their reasons for hiding those emotions. Consequently, perceivers seem to have more difficulty accurately perceiving suppression relative to some of the by-products of suppressing – such as a lack of positive emotions or a lack of engagement (Ickes, 1997).

### **General Discussion**

My aim in the present research was to examine emotion regulation within the context of intergroup relations, as well as to link intergroup ideology to the emotion regulatory strategies

people use. As a domain laden with emotion and self-regulatory motivation, the management of intergroup emotions should be both inevitable and vital to shaping the outcome of an intergroup interaction. While numerous strategies exist for regulating emotions, I focused on two – cognitive reappraisal (Studies 1a, 1b, and 2) and emotional suppression (Studies 1-3) – that are distinct in both process and consequence. Study 1a and 1b supported my hypothesis that people do not rely exclusively on global emotion regulation preferences in intergroup settings. In Study 1b, I examined a determinant of intergroup emotion regulation – namely, intergroup ideology. Multiculturalism and colorblindness, because they differ in the emphasis placed on acknowledgement of race, itself an emotionally evocative cue, lead to my assertion that colorblindness should be associated with greater levels of intergroup suppression. Self-report data from Studies 1b and 2 and experimental data from Study 3 supported this ideology-suppression link.

Previous work demonstrates that significant social costs accompany expressive suppression (Butler et al., 2003; Gross & John, 2003; Srivastava et al., 2009) and the present results add to this important literature. In Study 2 suppression was associated with worse intergroup contact quality. To some extent, suppression likely overlooks positive affective states and experiences for the sake of stabilizing negative affective states. Personal endorsement of a colorblind ideology was also correlated with worse quality intergroup experiences and multiculturalism with better quality intergroup experiences. Suppression, consistent with the interpretation above, was a mechanism for both links between ideology and quality of intergroup experiences.

In Study 3, I again found that intergroup suppression was effective at limiting negative emotional experience and expression. This was, however, not without costs, as suppressing was also associated with less positive emotional experience and expression during an interracial interaction. The lack of positive emotional engagement specifically mediated the relationship between suppression and confederate ratings of interaction quality, suggesting another mechanism through which emotional suppression can have negative social consequences. While suppression may be effective at inhibiting expressions of negative emotions, partners of suppressors, however, are unwittingly forced to interact with disengaged partners (Butler et al., 2003). In other words, intergroup suppression is likely effective at preventing interracial social disasters, but at the cost of spoiling interracial intimacy. Additionally, Study 3 highlights the pervasiveness of the ideology-suppression link. Participants did not have to explicitly acknowledge race in their interactions, yet, upon confronting someone of a different race, colorblindness led to emotional suppression.

### **The Cost of Regulating Negative Intergroup Emotions**

Research on intergroup interactions tends to focus on the role played by negative, rather than positive emotions. For instance, we know that realistic threat by outgroup members may lead to anger (Butz & Plant, 2006). A lack of intergroup experience is often accompanied by anxiety (Turner, Hewstone, & Voci, 2007). Such negative emotions preclude the sort of quality relationship building that would improve intergroup relations while also generally necessitating some level of regulation. The present studies suggest that more taxing strategies, such as



emotional suppression, while often effective at regulating expressions of negative emotion (Bonanno et al., 2004; Butler et al., 2003), may be detrimental to the generation of certain positive emotions – in the present studies, positive emotional engagement. Excess or inefficient downregulating of emotion can be perceived as a lack of engagement by an intergroup partner (Butler et al., 2003), particularly if regulation leads to the depletion of resources necessary to attend to or empathize with a partner (Richeson & Trawalter, 2005; Trawalter & Richeson, 2006; Vorauer et al., 2009).

The present research examined emotional suppression and its effect on engagement to the extent that interpersonal engagement is associated with positive emotions such as enthusiasm and excitement. Whether emotional suppression takes a toll on other positive emotions remains to be seen and may require examination outside of intergroup settings, however, other intergroup emotions previously implicated with improving intergroup attitudes are trust and empathy (Tam, Hewstone, Kenworthy, & Cairns, 2009; Todd, Bodenhausen, Richeson, & Galinsky, 2011; Turner et al., 2007). Both emotions could be similarly deterred by cognitively taxing regulation strategies. Since trust and empathy may require a mutual self-disclosing process or perspective-taking, respectively, both should require considerable attentional resources devoted to an interaction partner. Future work should address the role emotional suppression has on a broader range of discrete positive emotions.

### **Causes of Intergroup Emotion Regulation**

This research adds to a growing literature on the effects of endorsing various intergroup ideologies and should be viewed alongside evidence that colorblindness is associated with cognitive suppression of stereotypic information upon perceiving racial cues (Apfelbaum et al., 2008; Correll et al., 2008). Whether this process is automatic or controlled remains to be seen. However, since any expression elicited by interacting with an outgroup member (e.g., explicit mention of group differences or emotional arousal) would be in opposition to strict adherence to a colorblind ideology, I expect some controlled processing to be necessary if one attempts to adhere to a colorblind ideology. Nonetheless, I found evidence that intergroup ideology determines how one manages emotion during an intergroup interaction, adding to a set of previous findings that colorblindness is associated with cognitive suppression (Correll et al., 2008; Wolsko et al., 2000).

Throughout the present studies I was guided by a belief that broader intergroup motivations, values, goals, ideas, and ideologies influence intergroup emotion regulation. While I focused on intergroup ideology as a predictor of intergroup suppression, other intergroup constructs may be similarly informative. For instance, chronic concerns over appearing prejudiced - and anticipating negative reactions from others if one did express prejudice - should be associated with a careful restraint in intergroup contexts. Research already demonstrates that individuals high in such self-presentational concerns avoid expressing explicit prejudice, particularly in public settings, when their expressions are apparent to others (Devine et al., 2002; Fazio et al., 1995; Legault et al., 2007; Moneith, 1993; Plant & Devine, 1998). Thus, we should expect individuals with external, self-presentational concerns (i.e., external motivations to control prejudice) to also hide their emotional expressions during intergroup interactions for fear

of displaying emotions that may reveal any bias. Because motivations to control prejudice are seen as relatively stable constructs that change slowly, becoming more or less internalized (Legault et al., 2007), I expect they would determine how one manages intergroup emotions, and not vice versa. Furthermore, motivations to control prejudice and intergroup ideologies are likely interrelated predictors of intergroup emotion regulation – possibly working in tandem to determine how one manages intergroup emotions when they arise.

### **Limitations and Future Directions**

The current work focused on expressive suppression as a strategy for regulating intergroup emotions. I also examined individual differences in the use of cognitive reappraisal to regulate intergroup emotions. While reappraisal was not associated with multiculturalism or colorblindness, Studies 1a and 1b clearly highlight that reappraisal is less used in intergroup settings than participant's typical usage. Since reappraisal is often associated with more positive social consequences (Butler et al., 2003; Gross & John, 2003; Halperin & Gross, 2011), the reasons why people shift away from using reappraisal should be investigated in future research. There are, of course, several other emotion regulatory strategies unexamined in the present work. Situational avoidance (e.g., choosing to forego or avoid intergroup interactions and settings) is already a construct intergroup researchers have assessed (Mendoza-Denton et al., 2002; Pinel, 1999; Plant & Devine, 2003). While this work has typically not viewed the avoidance of intergroup contexts through an emotion regulation framework, individuals avoiding such contexts may do so, in part, to avoid certain emotions. Future work should investigate these relationships and their consequences for intergroup relations keeping in mind that intergroup actors act in anticipation of and in response to their intergroup emotions.

Finally, the present studies focused on emotions presumably elicited from the race of an interaction partner (or from being in an intergroup context). A prominent theory of intergroup emotions posits that emotions about one's own group are integral to determining intergroup behaviors (Mackie, Devos, & Smith, 2000). The model presented here is compatible with this theory, as emotions evoked from feelings of belongingness to one's own group membership, for instance, are another generator of intergroup emotions that, like all emotions, will be regulated in some manner (Gross, 1998b). Thus, whether emotions are determined from one's level of ingroup identification (Smith, Seger, & Mackie, 2007), the presence of an outgroup member, or the interaction of either with one's intergroup ideologies or motivations, some emotion regulation is inevitable. The current research demonstrates certain factors will determine the regulatory strategy used and the strategy used plays a significant role in intergroup social outcomes.

### **Concluding Remarks**

This work adds to a growing literature on emotion regulation, here examining emotion regulation in a specific context – intergroup relations – and a domain specific factor, namely intergroup ideology, which influences domain-specific emotion regulation. Other domains, for example romantic attachments or workplace relationships between supervisors and subordinates, also consist of their own motivations and values specific to those domains, which may influence

how one manages emotions within those domains. Finally, regarding intergroup ideologies, considering the prevalence with which certain Americans hold colorblind ideologies, and the prevailing *belief* that this ideology is beneficial towards advancing equality, this study demonstrates some of the interpersonal consequences resulting from conceptualizations of race and group difference. Intergroup ideologies, by instructing adherents how to perceive and interpret intergroup cues and encounters, compel strategy preferences for managing intergroup interactions, potentially at a significant cost. While people generally intend for intergroup interactions to go positively (Shelton & Richeson, 2005), using inefficient intergroup strategies can spoil that intention.



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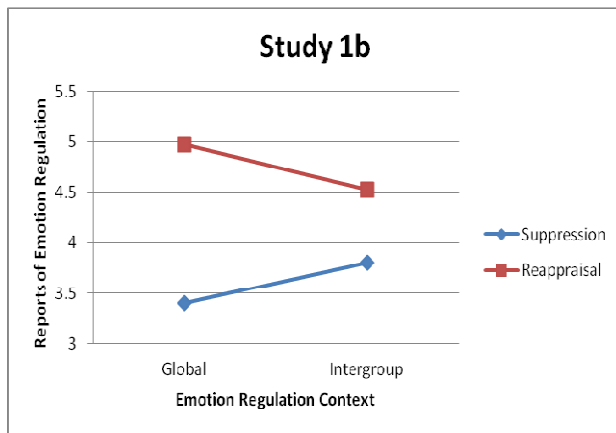
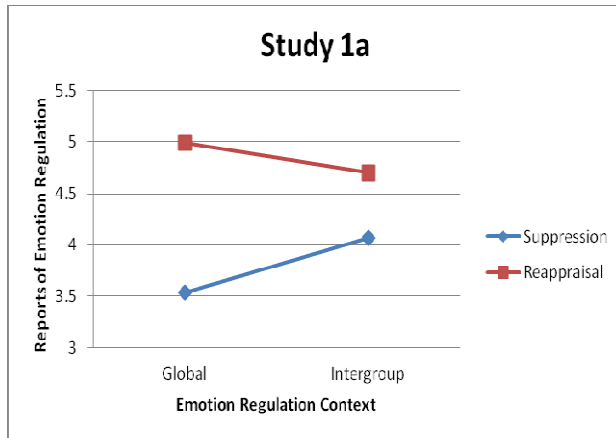
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## Footnotes

<sup>1</sup> I restricted participation to Asian- and European-Americans for two primary reasons. They are the two largest ethnic groups on campus with ethnic Asians outnumbering white/European-Americans. Second, as will be further detailed in the description of the intergroup emotion regulation measure, this scale has participants imagine an interaction with another African-American student. Previous research suggests that both Asian- and European-Americans hold similar levels of anxieties toward intergroup interactions (Levin, van Laar, & Sidanius, 2003). Thus for the remaining studies, the participant sample is restricted to persons identifying as Asian- or European-American.

<sup>2</sup> I conducted an additional study to check that colorblindness was not simply related to less quantity contact, and that was leading to less opportunity for positive quality contacts. Thus, I had a sample of 185 participants (69 White/European-American; 116 Asian-American) complete our measure of colorblindness and Islam & Hewstone's (1993) qualitative and quantitative aspects of intergroup contact scales, adopted for contact with African-Americans. Colorblindness was associated with less contact quality,  $r = -.30, p < .001$ . However, colorblindness was unrelated to quantity of contact,  $r = .00, ns$ .



*Figure 1a (top) and 1b (bottom).* Both graphs illustrate participants' increased reliance on expressive suppression and decreased reliance on cognitive reappraisal in intergroup settings, relative to their general preferences for the two emotion regulatory strategies.

Table 1

*Correlations Between Ideology and Global and Intergroup Emotion Regulation in Study 1b*

| Ideology         | Suppression |        | Reappraisal |        |
|------------------|-------------|--------|-------------|--------|
|                  | Intergroup  | Global | Intergroup  | Global |
| Colorblindness   | .41*        | .25*   | .12         | .09    |
| Multiculturalism | -.23*       | -.25*  | .09         | .12    |

\*  $p < .01$ .

Table 2

*Correlations Between Ideologies, Intergroup Emotion Regulation, and Previous Intergroup Contact Quality in Study 2*

|                               | Previous intergroup contact quality | Intergroup emotion regulation |             |
|-------------------------------|-------------------------------------|-------------------------------|-------------|
|                               |                                     | Suppression                   | Reappraisal |
| Ideologies                    |                                     |                               |             |
| Colorblindness                | -.35**                              | .30**                         | -.09        |
| Multiculturalism              | .19*                                | -.23**                        | .14         |
| Intergroup emotion regulation |                                     |                               |             |
| Suppression                   | -.35**                              | ----                          | .28**       |
| Reappraisal                   | -.03                                |                               | ----        |

\*\*  $p < .01$ ; \*  $p < .05$ .

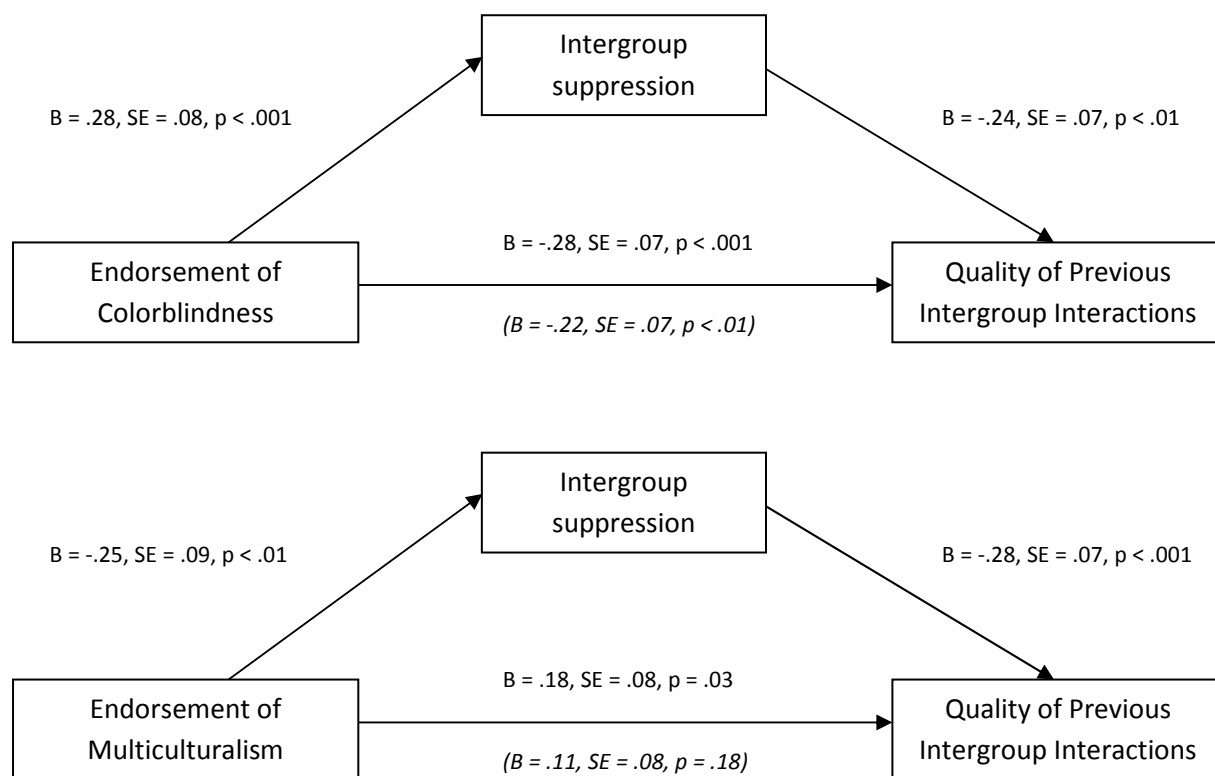


Figure 2a (top) and 2b (bottom). The top figure shows that use of intergroup suppression partially mediated the negative link between colorblind ideology and quality of previous intergroup interactions. The bottom figure illustrates that use of intergroup suppression also mediated the positive relationship between multicultural ideology and quality of previous intergroup interactions.

Table 3

*Means (and SDs) of emotion, emotion regulation, and interaction outcome variables as a function of Ideology (Study 3)*

| Interaction variable                                       | Ideology manipulation    |                            |                          |
|--|--------------------------|----------------------------|--------------------------|
|  | Multicultural            | Control                    | Colorblind               |
| Interaction emotional experience<br>(Rated by participant) |                          |                            |                          |
| Positive engagement  | 3.61 (.69) <sup>a</sup>  | 3.52 (.86) <sup>a</sup>    | 3.45 (.76) <sup>a</sup>  |
| Anxiety  | 1.77 (.64) <sup>a</sup>  | 1.59 (.60) <sup>a</sup>    | 1.87 (.65) <sup>a</sup>  |
| Suppression use during interaction<br>rated by:            |                          |                            |                          |
| Participant  | 2.78 (.95) <sup>a</sup>  | 3.20 (1.47) <sup>a,b</sup> | 3.59 (1.12) <sup>b</sup> |
| Confederate  | 3.57 (1.99) <sup>a</sup> | 3.95 (1.48) <sup>a</sup>   | 4.36 (1.91) <sup>a</sup> |
| Interaction emotional expression<br>(Rated by confederate) |                          |                            |                          |
| Positive engagement  | 2.53 (1.22) <sup>a</sup> | 1.94 (.88) <sup>b</sup>    | 1.99 (.78) <sup>b</sup>  |
| Anxiety  | 1.50 (.48) <sup>a</sup>  | 1.45 (.46) <sup>a</sup>    | 1.54 (.48) <sup>a</sup>  |
| Overall quality of interaction<br>rated by:                |                          |                            |                          |
| Participant  | 5.77 (.82) <sup>a</sup>  | 5.99 (.96) <sup>a</sup>    | 5.70 (.82) <sup>a</sup>  |
| Confederate  | 5.62 (.82) <sup>a</sup>  | 5.28 (.83) <sup>a,b</sup>  | 5.08 (1.09) <sup>b</sup> |

*Note.* Emotion ratings are based on a 5-point scale (1 = *not at all*, 5 = *a lot*). Suppression and overall experience ratings are based on 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*). Emotional experience ratings are self-reported by the participant. Emotional expression ratings are observer ratings by the confederate. Means in a row with different superscripts differ from each other at  $p < .05$ , two-tailed.

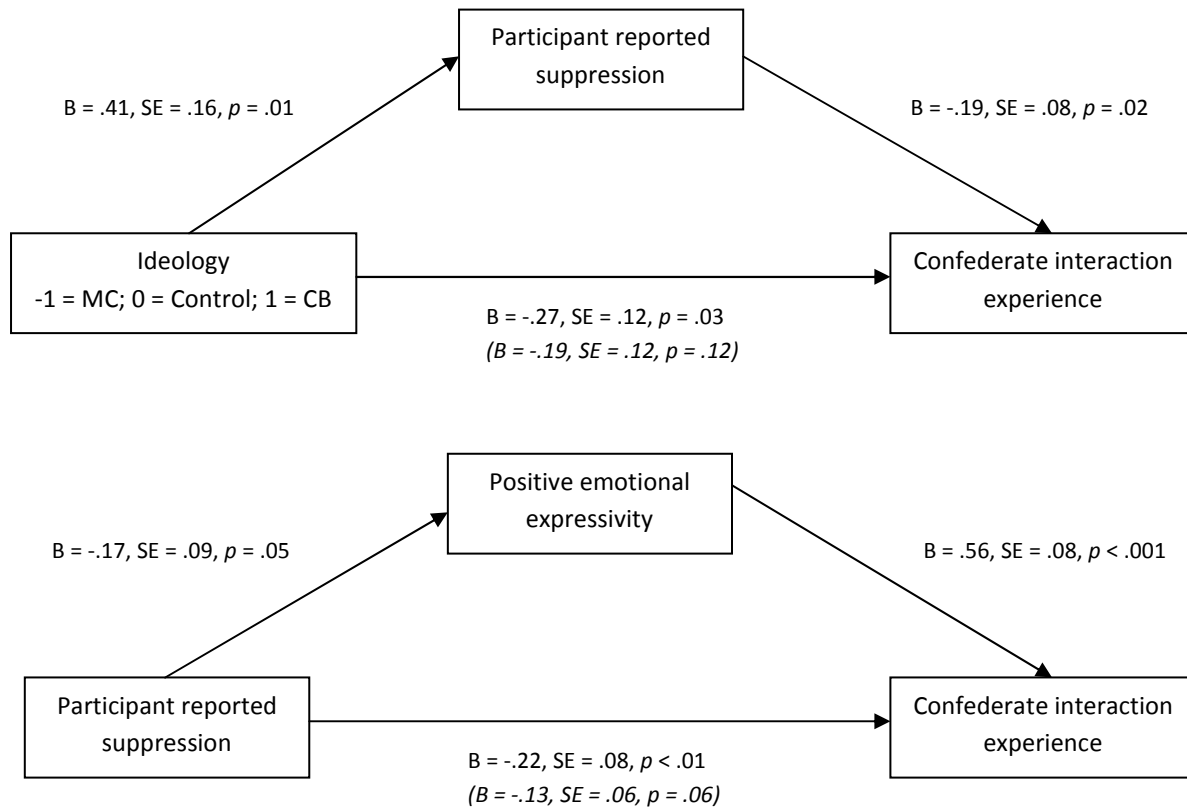


Figure 3a (top) and 3b (bottom). Top figure is mediational model for ideological manipulation predicting the confederates' overall interaction experience. The bottom figure essentially tests the mechanism for the suppression—confederate experience link in the top figure (i.e., the *b* link in the top model). Thus, this mediational model tests positive emotional expressivity as the mechanism between participants' self-reports of expressive suppression and the confederates' overall interaction experience.

## Appendix

### Multicultural items

- Recognizing ethnic diversity within the U.S. would help build a sense of goodwill and complementarity among the various ethnic groups.
- Each ethnic group has its own talents, as well as its own problems, and it is important to acknowledge the strengths and weaknesses of each.
- Understanding both the similarities and differences among ethnic groups is an essential component of long-term social harmony in the United States.
- In order to live in a cooperative society, it is important to learn about the unique histories and cultural experiences of different ethnic groups.
- If we want to help create a productive society, we must recognize that each ethnic group has the right to maintain its own unique traditions.
- Within the U.S., racial and ethnic differences should NOT be minimized.
- The preservation of racial and ethnic diversity is an integral part of American culture.

### Colorblind items

- When people in the U.S. display pride for a non-American heritage, they hurt this country.
- People in this country would be better off if they ascribed to only one identity - as an American.
- There are too many racial and ethnic subcultures in the United States.
- Although people are free to have multiple identities, racial and ethnic identities tend to cause the most tensions.
- Seeing people as part of a racial or ethnic group has more negative consequences than positive consequences.
- Viewing others in terms of their race or ethnicity is likely to lead people to act prejudiced.
- It is best if people ignore other people's races and ethnicities.