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Predicting Behavior During Interracial Interactions: A Stress and Coping Approach

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The social psychological literature maintains unequivocally that interracial contact is stressful. Yet research and theory have rarely considered how stress may shape behavior during interracial interactions. To address this empirical and theoretical gap, the authors propose a framework for understanding and predicting behavior during interracial interactions rooted in the stress and coping literature. Specifically, they propose that individuals often appraise interracial interactions as a threat, experience stress, and therefore cope—they antagonize, avoid, freeze, or engage. In other words, the behavioral dynamics of interracial interactions can be understood as initial stress reactions and subsequent coping responses. After articulating the framework and its predictions for behavior during interracial interactions, the authors examine its ability to organize the extant literature on behavioral dynamics during interracial compared with same-race contact. They conclude with a discussion of the implications of the stress and coping framework for improving research and fostering more positive interracial contact.

Keywords: *intergroup interactions, prejudice, stress and coping, nonverbal behavior*

As the racial demographics of the United States continue to shift, interracial contact is becoming increasingly frequent. Indeed, it is projected that, by 2050, White Americans will no longer compose the racial majority group in the United States, making interracial interactions virtually inevitable for many individuals (Feagin & O'Brien, 2004). Although increases in

interracial contact will undoubtedly have positive effects on intergroup attitudes in the long term (see Pettigrew & Tropp, 2007), considerable research suggests that increased contact across racial lines may also come with a host of negative consequences, at least in the short term. For instance, examinations of relatively brief interracial encounters have revealed that White individuals often feel anxious, self-conscious, and uncomfortable during interracial interactions (Crocker, Major, & Steele, 1998; Stephan & Stephan, 2000). Moreover, recent work has found that interpersonal interactions with members of racial minority groups can induce a state of physiological threat in some White individuals (Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001; Mendes, Blascovich, Lickel, & Hunter, 2002; Page-Gould, Mendoza-Denton, & Tropp, 2008).

Similarly, research has shown that the psychological and physiological health of racial minorities may be compromised by interracial contact with Whites. There is considerable research documenting Black individuals' anecdotal accounts of racism and prejudicial responses

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during interactions with Whites (Essed, 1991; Feagin, 1992), and, consequently, some Blacks feel anxious about and during interactions with Whites (Clark, Anderson, Clark, & Williams, 1999; Crocker et al., 1998; Major, Quinton, & McCoy, 2002; Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002). Like other stressors, these experiences with race-related stressors can yield negative cardiovascular outcomes (for reviews, see Clark et al., 1999; Harrell, Hall, & Taliaferro, 2003; Mays, Cochran, & Barnes, 2006). For instance, studies have shown that self-reported history of experienced racism (Clark, 2000), exposure to racially provocative movie scenes (Armstead, Lawler, Gorden, & Cross, 1989), and perceived racial mistreatment (Guyll, Matthews, & Bromberger, 2001) significantly and positively predict cardiovascular reactivity among Black individuals. Considered in tandem, these two lines of research suggest that interracial interactions can be a source of stress for both Whites and racial minorities.

Despite these two lines of work, research has rarely considered how the stress associated with interracial contact may shape behavioral dynamics during interracial encounters (cf. Blascovich, Mendes, & Seery, 2002; Mendes, Blascovich, Hunter, Lickel, & Jost, in press; Olson & Fazio, 2007). Instead, research has largely examined differences in behavior during interracial compared to same-race interactions, assuming that racial biases result in and are revealed by negative behavior. Although this approach has been fruitful, the findings regarding who will display negative behaviors during interracial contact, and when, are equivocal at best. Sometimes, White and Black individuals behave anxiously; for instance, they fidget during interracial interactions (McConnell & Leibold, 2001; Shelton, 2003). At other times, individuals avoid their interaction partners by creating interpersonal distance and averting their gaze (Fazio, Jackson, Dunton, & Williams, 1995; Fugita, Wexley, & Hillery, 1974; Goff, Steele, & Davies, 2008; Ickes, 1984; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006; Word, Zanna, & Cooper, 1974). And still at other times, individuals behave extremely positively during interracial interactions (Hyers & Swim, 1998; Hofmann, Gschwendner, Castelli, & Schmitt, 2008; Ickes, 1984; Mendes & Koslov, 2009; Shelton, 2003; Shelton, Richeson, & Salvatore, 2005; Shelton, Richeson, Salvatore, & Trawalter, 2005; Vorauer & Turpie, 2004). Adding further complexity to these behavioral dynamics, many White individuals exhibit both positive *and* negative behaviors during interracial contact. Specifically, their nonverbal behaviors are negative whereas their verbal behaviors are positive (Dovidio, Kawakami, & Gaertner, 2002).

Research on individual differences has not been able to provide a unified theoretical account for the wide

range of behaviors that individuals display during interracial contact (for a similar critique, see Dovidio, Hebl, Richeson, & Shelton, 2006; Olson & Fazio, 2007). It has not been able to explain why behavior during interracial interactions is sometimes positive and engaged whereas, at other times, it is negative and withdrawn. Some work finds that the behavior of low-bias Whites is more positive than that of high-bias Whites during interracial contact (Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio et al., 1995; McConnell & Leibold, 2001). Other work finds just the opposite; that is, some work finds that the behavior of high-bias, compared to low-bias, Whites is more positive during interracial contact (Shelton, Richeson, Salvatore, & Trawalter, 2005). Similarly, research on Whites' concerns about appearing prejudiced and behavior during interracial contact has yielded mixed results. In some studies, concerns about appearing prejudiced result in positive behavior (Shelton, 2003), whereas in other studies concerns about appearing prejudiced can result in negative behavior (Plant, 2004; Plant & Devine, 2003; Vorauer & Turpie, 2004). Thus, the primary goal of the present work is to offer a framework that can contribute a theoretical grounding to make sense of these divergent findings.

Specifically, we propose that the stress and coping literature may provide a useful framework for understanding and predicting how individuals are likely to behave during interracial interactions. Given the extant research documenting intergroup anxiety with both self-report and physiological measures, it certainly seems reasonable to consider the extent to which the behaviors individuals display during interracial interactions reflect stress reactions and coping responses to these encounters. In support of this claim, we first review Lazarus's (1966; Lazarus & Folkman, 1984) well-known model of psychological stress and coping. Then, we present an adapted version of Lazarus's model that pertains to stress and coping during interracial compared to same-race interactions. In the bulk of the article, we review the literature on interracial contact. We consider the extent to which existing data are consistent with the claims of the framework that individuals appraise interracial contact as a threat, experience stress, and subsequently cope via engagement, antagonism, avoidance, or freezing to reduce this stress. This literature review provides post hoc evidence for the utility of a stress and coping framework for understanding and predicting behavior during interracial interactions. Last, we propose future directions for research based on the predictions of the model and discuss some of the implications of this approach for the dynamics of interracial contact. We believe that, by adopting a stress and coping approach, research on interracial contact will have

new leverage from which to make predictions as well as new avenues for interventions to promote positive interracial contact experiences.

OVERLAP WITH PREVIOUS MODELS OF INTERRACIAL CONTACT

Although our approach has not previously been fully articulated, it is not completely novel. Blascovich and colleagues have argued for the relevance of threat in shaping individuals' psychological motivational states and subsequent physiological reactivity during interracial interactions (e.g., Blascovich et al., 2001; Mendes et al., 2002). Most of this work, however, has focused on the perspective of White majority group members, and the focus has not squarely been on behavioral dynamics. Hence, the present work seeks to build on this perspective, extending and modifying it to understand the vast array of behavior often displayed during interracial interactions. Similarly, recent reviews in the social stigma literature have adopted a stress and coping framework to understand stigmatized group members' responses to intergroup contact (e.g., Major & O'Brien, 2005; Miller & Kaiser, 2001). These reviews, however, have focused on the enduring experience of stigma, across time and social interactions. As Major and O'Brien (2005) noted, "[They] were unable to review several important areas of research, such as . . . the impact of stigma on social interactions" (p. 394). The present work thus builds on this perspective, examining how stigmatized group members' stress during intergroup contact shapes their behavior during these social interactions. Because nonstigmatized group members (i.e., Whites) are also susceptible to stress during intergroup contact, we also consider how they may cope in the face of intergroup contact (also see Shelton, Richeson, & Vorauer, 2006). In short, the proposed work seeks to marry and extend the theoretical and empirical work of Blascovich and Major to provide a framework for understanding the behavior of majority and minority group members during interracial contact; for although these two perspectives are clearly complimentary, they have not been formally integrated. Moreover, although these two perspectives have implications for behavior during intergroup contact, both stop short of articulating how stress and coping with intergroup contact shape the behavioral dynamics of such encounters.

In this article, we also forward an alternative to (and extension of) the individual differences approach to the study of intergroup behavior. We believe that our understanding of the behavioral dynamics of interracial contact will benefit from greater attention to and incorporation of the stress and coping literature, as the work of

Blascovich and Major suggests. To that end, in the next section we offer a brief review of research on stress and coping before outlining an adapted model in the subsequent section that applies more directly to the case of interracial contact. We then use this adapted model for understanding and predicting behavior during interracial interactions.

Psychological Stress and Coping

Richard Lazarus and colleagues developed a model of psychological stress and coping premised on the fact that stress arises from "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). According to this model, in other words, the appraisal of the environment in relation to the self is critical to the experience of stress. Because stress is an aversive psychological state, individuals are motivated to reduce it (Folkman & Lazarus, 1985; Lazarus, 1966; Lazarus & Folkman, 1984). Therefore, individuals use various coping strategies to manage their psychological stress.

Psychological stress. Since Lazarus's (1966) original formulation, most stress researchers have adopted his transactional perspective on stress, recognizing the importance of individuals' *appraisals* of a potential stressor rather than the features of a stressor per se (Bernard & Krupat, 1994; Folkman & Lazarus, 1985; Tomaka, Blascovich, Kelsey, & Leitten, 1993). According to this perspective, when faced with a potential stressor, individuals make two types of cognitive appraisals: primary and secondary appraisals.¹ During primary appraisals, individuals evaluate the *demands* of the potential stressor; they evaluate the stakes at hand. Primary appraisal is tantamount to asking, "Is this important to my well-being or to the well-being of a relevant other (e.g., a loved one)?" At this stage, individuals' primary appraisals can result in one of three appraisals: irrelevant, benign, or stress appraisals. If the potential stressor is deemed to be irrelevant or to have only benign or good outcomes, individuals do not experience psychological stress. They are not motivated to cope. If, instead, the potential stressor could result in negative outcomes, then individuals experience stress and go on to secondary appraisals to cope with the stressor.

During secondary appraisals, individuals evaluate their *resources* to cope with the stressor. Resources can be physical and/or psychosocial so long as they facilitate one's ability to change the situation, mitigate negative outcomes, and/or generate positive outcomes. Secondary appraisal is tantamount to asking, "What resources do I have to deal with this stressor?" Perceived resources

refine individuals' appraisals of the stressor (i.e., their primary appraisals). If individuals perceive the demands of the stressor as exceeding their available resources, then they expect harm; they appraise the stressor as a *threat*. If individuals perceive their resources as exceeding the demands of the stressor, however, they expect gains (e.g., growth and development). They appraise the stressor as a *challenge*.

Coping. Similar to research on psychological stress, contemporary research on coping has also adhered to Lazarus and colleagues' original formulation. Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage external and/or internal demands that are appraised as taxing or exceeding resources of the person" (p. 141). Coping involves the effortful self-regulation of emotion, cognition, behavior, and/or physiology as well as the regulation of the environment to diminish psychological stress (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Eisenberg, Fabes, & Guthrie, 1997; Koolhaas et al., 1999; Lazarus & Folkman, 1984; Skinner, 1995). Coping responses can thus be differentiated from stress reactions in at least two ways. First, coping responses are goal directed; they serve to manage and reduce stress reactions. Second, coping responses require self-regulation; accordingly, coping responses are resource demanding (e.g., Muraven & Baumeister, 2000), whereas stress reactions are not (Compas et al., 2001).²

Although there has been a proliferation of research on coping during the past 40 years, this proliferation has led to little consensus regarding the ways in which people typically cope with stress. In fact, a recent review of the coping literature reported more than 400 discrete ways of coping (Skinner, Edge, Altman, & Sherwood, 2003). As mentioned in the previous section, coping responses to stressful situations are inherently tied to the specific demands of the situation and the resources available to individuals. Consequently, there indeed could be infinite ways of coping with the infinite variations of stressors. Individuals' responses to a stressor such as chronic pain (e.g., cancer, AIDS, serious injury) or past traumatic life events (e.g., divorce, rape, natural disaster) are likely to differ from the ways in which they cope with the stress associated with an ongoing interpersonal interaction. Individuals are not able to seek professional help during the course of an interpersonal interaction, for example.

Nevertheless, a careful review of the coping literature does offer guidance regarding the "ways of coping" that individuals are most likely to employ during stressful interpersonal interactions. Bio-behavioral approaches have outlined broad categories of behavioral coping responses that are relevant to coping with stressful

interpersonal interactions (e.g., Cannon, 1929, 1932; Engel & Schmale, 1972; Frijda, 1986; Gallup & Maser, 1977; Henry, 1992; Koolhaas et al., 1999; Marks, 1987; Taylor, Klein, Lewis, & Gruenewald, 2000). These approaches maintain that humans have an evolved capacity to detect threats in their environment and coordinate their responses to those threats depending on the severity of the threat and the availability of resources (e.g., Gray, 1988). Specifically, stress engenders primary action tendencies to (a) fight, (b) flight, (c) freeze, or (d) "tend and befriend" (Taylor et al., 2000).

Interestingly, these action tendencies are strikingly similar to the four coping responses originally formulated by Lazarus (1966), coping responses he also termed "direct-action tendencies." Specifically, Lazarus identified four direct-action tendencies: (a) attack, (b) avoid, (c) inactivity, and (d) positive actions to increase one's coping resources, corresponding loosely to fight, flight, freeze, and "tend and befriend," respectively. In the context of interpersonal interactions, for our purposes, we call these action tendencies (a) antagonism, (b) avoidance, (c) freezing, and (d) positive engagement, respectively (for similar responses to ostracism, see Williams, 2009; for three of these four responses to threatened belonging, see Smart Richman & Leary, 2009).

According to Lazarus's original formulation, which coping response is generated depends on a number of factors, including (a) the appraisal of the stressor as a potential threat or challenge to the self or a relevant other such as loved one and (b) the extent to which resources are available. When individuals appraise their resources as meeting or slightly exceeding the demands of the interaction, they feel challenged rather than threatened (also see Blascovich et al., 2001; Mendes et al., 2002; Tomaka et al., 1993). Challenged individuals typically feel able to "manage" stressful encounters, and, consequently, they engage in planful problem solving to increase their resources. In other words, they approach the challenge as an opportunity for growth (Lazarus & Folkman, 1984; Lazarus, 1966; Tomaka et al., 1993). We call this type of coping response *positive engagement*. As an example of this type of coping, consider a job applicant giving a job talk. If she has prepared adequately, she may appraise the job talk as a challenge rather than a threat. She is then likely to cope by engaging—by giving her talk to her audience, competently and enthusiastically.

Interestingly, individuals will also cope through engagement in at least some situations in which the demands are greater than the resources (i.e., threatening situations). Individuals will cope with threat through positive engagement when the threat is perceived to be significant to relevant others, not just the self (also see Crocker & Garcia, 2009; Taylor et al., 2000). Consider, for example, that same job applicant giving a talk in

front of an audience of people whom she greatly admires and respects. Imagine that the applicant in question is concerned about the implications that her performance may have for her audience—she may be concerned that her performance will disappoint them or that her characterization of their work will displease them. In this case, she may try to give her talk competently and enthusiastically, to engage her audience, despite the fact that she may be feeling quite threatened. Her engagement, however, may be strained and inauthentic, perhaps overdone. This type of engagement—engagement under threat—may be better characterized as overcompensation at times.

When the demands of an encounter exceed available resources and the threat is perceived to be directed at the self (rather than a relevant other; e.g., an audience), individuals will use different coping responses depending on the available resources relative to the perceived threat. As decades of research on the “fight or flight” response have generally revealed (Cannon, 1929, 1932; Durant, 2000; Engel & Schmale, 1972; FitzGibbon & Lazarus, 1995; Gray, 1988; Henry, 1992; Koolhaas & de Boer, 2008; Lazarus, 1966; Scherer, Zentner, & Stern, 2004), organisms including humans will “fight” in the face of threat if resources are deemed sufficient to defeat the threat. If resources are deemed to be insufficient, they will take “flight.” Sometimes, however, neither “fight” nor “flight” is possible because of extremely low resources and/or exhaustion. In that case, organisms will freeze in response to threat. Freezing offers a viable alternative to “fight or flight” that allows for the conservation of scarce resources.

To put these coping responses in context, consider once again a job applicant. On at least some occasions, she is likely to appraise a job talk as a threat, specifically, a threat to her academic or professional self-concept. If appraised resources are relatively high (albeit insufficient to appraise the talk as a challenge), she may respond to the threat of a job talk with antagonism (i.e., a “fight”), accusing her audience of being malicious, unfair, and/or incompetent. Although this response is socially inappropriate and perhaps disconcerting, research has shown that threats to the self-concept such as social rejection and negative feedback can elicit anger and even aggression among some individuals. For instance, research finds that individuals with high self-esteem antagonize others after receiving negative feedback to bolster, protect, or repair their sense of self-worth (Heatherton & Vohs, 2000; for a review on aggression in response to interpersonal threats more generally, also see Baumeister, Smart, & Boden, 1996; and Leary, Twenge, & Quinlivan, 2006). Just like high self-esteem individuals antagonize others to cope with self-threats, our job applicant may antagonize her audience to rescue her academic self-concept from threat. However, she will do so only given sufficient resources (e.g., confidence in the quality of

her job talk, the professional backing of a revered advisor, and/or the security of other job offers). Without sufficient resources, she may not be in a position to antagonize and successfully “defeat” the threat to her academic self-concept.

If appraised resources are more moderate, she may avoid (i.e., take “flight”) instead. She may disengage from the talk and avoid her audience’s gaze and/or their questions. She may even leave the room. In other words, she may distance or (if possible) extricate herself from the threatening situation. Although less than ideal, especially in this social context, when resources are not sufficient to remove or defeat the threat itself, avoiding or escaping the threatening situation can provide an effective means to reduce stress.

Finally, if appraised resources are especially low, she will be unable to do much of anything because taking action would require resources that she does not have. Given exceedingly low resources, she is thus likely to freeze, perhaps failing to utter even a word. Although this coping response is socially awkward and undesirable, it can be effective at reducing stress. At the very least, the job applicant can find comfort in the knowledge that she has not actively done or said anything wrong. In addition, she can conserve what little resources she has to sustain her through the interview (or until she can escape or avoid, defeat, or engage).

In sum, the stress and coping literature highlights the importance of cognitive appraisals in shaping behavior in response to stressful encounters. More precisely, behavioral coping responses depend on how the stressor is appraised, the direction of the threat (self or other), and what resources are available. These coping responses range from freezing to antagonism and engagement. Whether coping is successful is determined solely by the extent to which stress is reduced (also see Folkman & Lazarus, 1988; Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Folkman, Lazarus, Gruen, & DeLongis, 1986). If stress is reduced, minimized, or altogether eliminated, then coping is successful (albeit to varying degrees). If stress persists unabated, then coping is unsuccessful. Furthermore, these coping responses can lead to either positive or negative intrapersonal and interpersonal outcomes independent of stress reduction.³

Given the well-documented experience of stress and anxiety during interracial contact, we examine the extent to which the stress and coping literature can account for the range of behavior that individuals display during interracial interactions. Specifically, we examine the extent to which individuals’ behavior during interracial interactions reflects stress and coping through engagement, antagonism, avoidance, and freezing. We believe that the predictions for when individuals are likely to use particular coping responses, as outlined above, may

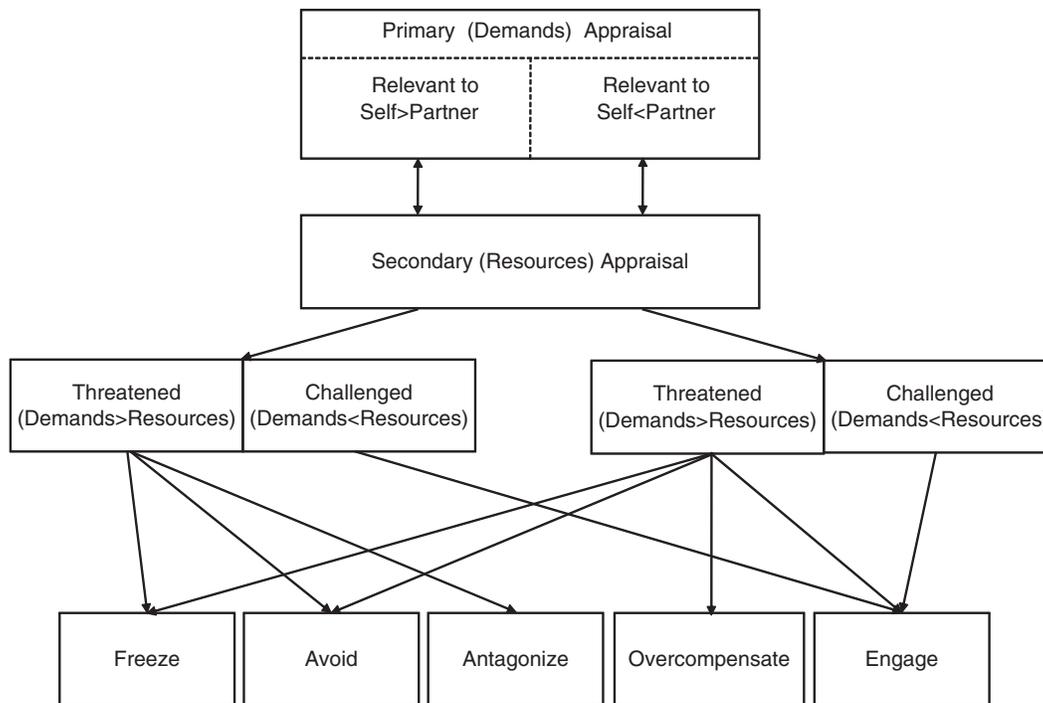


Figure 1 Schematic of the stress and coping framework for the behavioral dynamics of interracial contact

provide useful insight into why behavior during interracial interactions is so variable. These predictions may also shed light on why behavior during interracial interactions is not consistently related to individual differences such as racial attitudes. To investigate this possibility more formally, in the next section, we adapt Lazarus's general model of stress and coping to the special case of interracial contact. We believe that the adapted model will provide a framework for understanding and predicting how individuals behave during interracial interactions.

An Adapted Stress and Coping Framework for Interracial Contact

The tenets of Lazarus's model of psychological stress and coping suggest that the various and often divergent behaviors and outcomes observed in research on interracial interactions may not be surprising. They may even be predictable. With some modifications, this general model can be adapted to apply to behavior during stressful interpersonal interactions such as those that occur across racial lines. A schematic of the adapted model is presented in Figure 1. According to our adapted framework, individuals go through primary and secondary appraisals during interracial interactions. Often, they appraise the interaction demands as high and thus appraise these interactions as a threat.

Consequently, they experience stress and must cope. They can cope in one of four ways. They can positively engage, antagonize, avoid, or freeze, depending on the direction and levels of perceived threat and available resources. If coping is successful, individuals will reduce their stress about the interracial encounter. If coping is unsuccessful, they will continue to experience stress and behave accordingly. Below, we further expound on our framework, from cognitive appraisals to coping behavior during interracial interactions.

Primary Appraisal of Interracial Contact: Extent of the Threat

According to Blascovich and colleagues, individuals typically find interracial interactions more dangerous, demanding, and/or uncertain than same-race interactions (Blascovich et al., 2001; Blascovich et al., 2002; Mendes et al., 2002; Stephan & Stephan, 2000). As a result, primary appraisals of interracial contact are likely to be appraisals of threat. Individual differences and contextual factors are likely and, indeed, have been shown to moderate these primary appraisals of threat. In fact, any variable that affects the extent to which interracial contact is appraised as dangerous, uncertain, and/or demanding should affect primary appraisals of interracial contact (Blascovich et al., 2001; Tomaka et al., 1993).

For both Whites and racial minorities, negative racial attitudes and stereotypes, prejudice-related concerns, and unfamiliarity with interracial contact are variables likely to increase threat appraisals. Specifically, Whites who have negative feelings toward Blacks, who endorse negative racial stereotypes (e.g., “Blacks are lazy and dangerous”), who are concerned about appearing prejudiced, and who are unfamiliar with interracial contact are likely to appraise interracial contact as a threat (e.g., Blascovich et al., 2001; Mendes et al., in press; Page-Gould et al., 2008; Sekaquaptewa, Espinoza, Thompson, Vargas, & von Hippel, 2003; Stephan & Stephan, 2000; Trawalter, Adam, Chase-Lansdale, & Richeson, 2009). Likewise, racial minorities who have negative feelings toward Whites, who endorse negative racial stereotypes (e.g., “Whites are snobby and racist”), who are concerned about being the target of prejudice, and who are unfamiliar with interracial contact are also likely to appraise interracial contact as a threat (e.g., Mendoza-Denton et al., 2002; Page-Gould et al., 2008; Shelton, Richeson, Salvatore, & Trawalter, 2005). Given their numerical minority, however, racial minorities are likely to have extensive interracial contact experience and, therefore, to find interracial contact less threatening than do Whites (see Trawalter & Richeson, 2008). This is certainly true of racial minority college students who compose a large proportion (if not all) of the participant samples in social psychology studies on interracial contact.

In addition, for both Whites and racial minorities, contextual factors are likely to moderate threat appraisals. Specifically, contexts that make negative racial stereotypes salient are likely to increase threat appraisals of interracial contact (e.g., Goff et al., 2008; Steele, Spencer, & Aronson, 2002; Stone, Lynch, Sjomeling, & Darley, 1999), whereas contexts that make racial group membership less salient, such as contexts that forge a common in-group (e.g., social clubs, sports teams, work teams), are likely to decrease threat appraisals (e.g., Gaertner & Dovidio, 2000). Intergroup contexts that provide guidelines (“social scripts”) as to what behaviors are appropriate and expected and contexts that are predictable are likely to reduce threat appraisals (e.g., Avery, Richeson, Hebl, & Ambady, in press; Richeson & Trawalter, 2005). Conversely, contexts that are unstructured, such as getting to know a stranger, are likely to increase threat appraisals (Towles-Schwen & Fazio, 2003).

The content of interactions (e.g., conversation topic) is also likely to moderate threat appraisals. Race-related discussions are likely to be quite threatening, at least for Whites who are not accustomed to thinking and talking about race-related issues and who are concerned about appearing prejudiced (Czopp, Monteith, & Mark, 2006; Johnson, Olson, & Fazio, in press; Trawalter & Richeson, 2008; Tropp & Bianchi, 2007). Moreover,

norm-setting ideologies, be they mandated by the particular context or endorsed by individuals, may shape threat appraisals of interracial contact. A “color-blind” ideology, for instance, may increase threat appraisals insofar as “not seeing” race imposes a difficult if not impossible norm to achieve (Apfelbaum, Sommers, & Norton, 2008; Bonilla-Silva, 2003; Norton et al., 2006; Wolsko, Park, Judd, & Wittenbrink, 2000). Multiculturalism, on the other hand, may provide a more realistic norm (Wolsko et al., 2000). At least for White individuals low in prejudice and racial minorities high in racial identity, noticing and celebrating racial differences (when appropriate) may offer a more sensible norm for interracial contact, thereby reducing threat appraisals of interracial contact.

Primary Appraisal of Interracial Contact: Direction of the Threat

When appraising interracial contact, individuals must not only consider whether the interaction poses a threat but also consider the direction of that threat. Individuals can appraise potential threats as relevant to the self and/or relevant others (e.g., loved ones). In the context of an interracial interaction, a relevant other is one’s interaction partner.⁴ Thus, during interracial encounters, individuals may appraise a threat as relevant to the self and/or their interaction partner. They may be more focused on themselves or their partner.⁵ When individuals have a predominant “self-focus” during interracial interactions, they may be concerned about their self-image and identity (see Crocker & Garcia, 2009; Shelton et al., 2006; Steele et al., 2002) and/or rejection (e.g., Shelton & Richeson, 2005). When individuals have a “partner-focus,” alternatively, they may have relational concerns such as worrying that their partner enjoys the interaction and feels respected and/or understood. In other words, when interracial contact is appraised as a threat, individuals may focus on themselves (on their emotions, thoughts, behaviors, experiences), or they may focus on their interaction partner (on their partner’s emotions, thoughts, behaviors, and experiences) to assess the demands of the interaction and guide their coping response to the threat of the interaction.

Because Whites and racial minorities tend to have different prejudice-related interpersonal concerns during interracial contact, they are likely to have a different focus during their interactions (Bergsieker, Shelton, & Richeson, 2009; Shelton & Richeson, 2006). Although many Whites are concerned about appearing prejudiced (Dunton & Fazio, 1997; Plant & Devine, 1998; Shelton & Richeson, 2006; Vorauer, 2006), many racial minorities are concerned about being the target of prejudice and discrimination (Mendoza-Denton et al., 2002; Piel, 1999; Shelton & Richeson, 2006). As a result,

Whites with prejudice-related concerns are likely to monitor their own behavior for evidence of prejudice—they are likely to be self-focused (Shelton & Richeson, 2006; Vorauer, 2006). Racial minorities with prejudice-related concerns, on the other hand, are likely to monitor their White interaction partners' behavior for evidence of prejudice—they are likely to be partner-focused (Shelton & Richeson, 2006). Given these different foci, Whites and racial minorities are then likely to cope with the threat of an interracial interaction in different ways.

It is worth noting that factors other than prejudice-related concerns may direct White and racial minority individuals' focus during interracial contact. Interaction goals may similarly direct individuals' focus in divergent ways (Murphy, Richeson, & Molden, 2009). "Learning goals" to learn as much as possible about one's partner or the conversation topic at hand, for instance, are likely to decrease self-focus and increase partner-focus, whereas "performance goals" to do well in the interaction and make a good impression may not (see Goff et al., 2008). Interdependence and outcome dependency are also associated with an outward focus (Berscheid, Graziano, Monson, & Dermer, 1976; Fiske, 1993; Fiske & Depret, 1996; Neuberg & Fiske, 1987; Richeson, Dovidio, Shelton, & Hebl, 2007). Research finds, for example, that people attend to others more if their outcomes are dependent on those individuals (e.g., Berscheid et al., 1976; Fiske, 1993). In the case of interracial interactions, recognizing that interaction outcomes and one's outcomes within the context of that interaction depend, at least in part, on one's out-group partner might similarly induce a partner-focus. Regardless of how individuals come to be self-focused or partner-focused, these primary appraisals shape the coping responses individuals will employ in the face of interracial contact threat, depending on the level of perceived available resources.

Secondary Appraisal of Interracial Contact: Level of Resources

To generate a coping response to the threat of interracial contact, White and racial minority individuals must also make secondary appraisals. Recall that during secondary appraisals, individuals consider the physical and psychosocial resources they have at their disposal. In the context of interracial contact, resources might include social scripts, namely, knowing what to say and do during interracial interactions (Goff, Steele, & Davies, 2003; Richeson & Trawalter, 2005). These scripts can come from prior experience or the context. For example, in the corporate world, organizations may encourage employees to "meet and greet" in formal gatherings that provide behavioral scripts (e.g., "Everyone, please discuss three interesting things about yourself") instead of presuming

that employees will get acquainted in more informal ways (e.g., Avery et al., in press). Providing employees with such forums and scripts may provide key resources to meet the demands of interracial contact.

These and other social scripts are helpful resources only insofar as they can be implemented. Thus, resources necessary to implement these social scripts are important. These resources include physical resources (e.g., glucose levels, energy), cognitive resources (e.g., working memory capacity), and psychosocial resources such as social status. Social status can indeed be a useful resource during interracial contact, as it allows control over the course and tenor of the interaction (Cohen & Roper, 1972; Giles & Coupland, 1991; Gregory & Webster, 1996). High-status interaction partners are likely to have more control over an interaction—over what topics are discussed, what behaviors are appropriate, when the interaction can be terminated—in other words, over what scripts are implemented. To the extent that social status in intergroup interactions parallels social status of racial groups in society, White interaction partners are likely to have an advantage. They are likely to have the status (the resources) to set the course and tenor of interracial contact. However, we suspect that there are times when racial minorities are likely to find themselves in a position of higher social status relative to their White interaction partners. Suppose that, in the course of an interracial interaction, the conversation turns to a race-related topic. By virtue of experience with interracial contact in general and race-related discussions in particular, racial minorities, not Whites, are likely to be the "expert." Consequently, they are likely to enjoy the benefits of "expert" status; they are likely to have the status (the resources) to set the course and tenor of the interaction. When and how racial minorities and Whites are likely to have the power to shape the direction and dynamics of interracial contact remains an empirical question. For now, our point is simply that social status in interracial interactions may not be fixed but fluid, depending on the social context. In any given interaction, both Whites and racial minorities have resources conferred by status and/or previous experience with interracial contact. Secondary appraisals of these resources are likely to play a large role in determining how individuals will cope with the perceived threat of interracial contact.

The astute reader has perhaps noticed that secondary appraisals are not entirely independent from primary appraisals. These two processes can occur very rapidly and somewhat iteratively. Secondary appraisals can affect primary appraisals. Namely, having resources can make a threatening situation less threatening. Having resources can make demands less demanding. Therefore, individual differences and contextual factors that affect secondary appraisals can affect primary appraisals too.

Having a social script for an upcoming interracial interaction, for instance, increases secondary (resource) appraisals. It can also decrease primary appraisals. It can reduce the demands of the encounter by providing assurance regarding what to say and/or do (Avery et al., in press; Towles-Schwen & Fazio, 2003). Social status is another apt example. It can be a valuable resource, as just discussed. It can also affect primary appraisals. Dependence on interaction partners can decrease as social status increases, reducing individuals' partner-focus and rendering these interactions less consequential—less demanding. As these two examples illustrate, primary appraisals of threat can be *reappraised* in light of secondary appraisals of resources. Accordingly, delineating the specific inputs of primary and secondary appraisals is a thorny issue that stress and coping researchers have yet to resolve (see Blascovich, Mendes, Tomaka, Salomon, & Seery, 2003; Wright & Kirby, 2001). Nevertheless, like other researchers (e.g., Blascovich et al., 2003), we believe it is the convergent balance between primary and secondary appraisals that determines whether individuals experience threat or challenge and how they cope in response to stress.

Coping With Interracial Contact

As just mentioned, the outcomes of primary and secondary appraisals typically afford one of the four coping responses described previously and shown in Figure 1 and Table 1. Below, we describe conditions under which each coping response is likely to be observed during the course of an interracial interaction.

Engagement. As previously mentioned, when individuals appraise their resources (secondary appraisals) as meeting or exceeding the demands of the interaction (primary appraisals of threat), they feel challenged. In response to challenge, individuals feel stress and positively *engage* the environment to cope with their stress.⁶ We thus predict that individuals who have sufficient resources to meet the perceived demands of an interracial interaction will positively engage in the interaction. Engaged individuals are likely to accommodate their partner by asking questions and affirming their partner's comments during the interaction. They are also likely to display positive, intimacy-building nonverbal behaviors (e.g., smiling, frequent head nods, forward lean).

In general, White and racial minority individuals who have positive racial attitudes and previous experience with interracial contact are most likely to appraise the demands of interracial contact as low and therefore engage. By virtue of their positive racial attitudes and experience with interracial contact, these individuals are also likely to feel capable of making a good impression on

TABLE 1: Coping Responses as a Function of Primary (Self vs. Partner) and Secondary (Resource) Appraisals

	<i>Resources ≥ Demands</i> "Challenged"	<i>Resources < Demands</i> "Threatened"		
		<i>Perceived Resources</i>		
		<i>High</i>	<i>Moderate</i>	<i>Low</i>
Relevant to self	Engage	Antagonize	Avoid	Freeze
Relevant to partner	Engage	Engage/ overcompensate	Avoid	Freeze

Note: Perceived resources are relative, not absolute.

their interaction partner. That is, they are unlikely to have prejudice-related concerns, again increasing the likelihood that they will appraise the demands of interracial contact as low and engage. With respect to resources, as a result of their experience with interracial contact, these individuals are likely to have scripts for these encounters. Accordingly, low-bias White and racial minority individuals with resources, including scripts and the necessary cognitive resources (e.g., working memory capacity) and physical resources (e.g., glucose) to implement those scripts, will appraise interracial contact as a challenge and, consequently, they will engage.

Recall that, sometimes, individuals positively engage in response to threats if they appraise the threat as directed at a relevant other and if resources are relatively high (albeit insufficient to meet or exceed the demands of the stressor). Therefore, we also predict that individuals who do not have sufficient resources to meet the perceived demands of an interracial interaction will positively engage if they appraise the threat of the interaction as being relevant to their interaction partner; that is, if they focus on their interaction partner, away from the self. This idea is similar to Crocker and Garcia's (2009) thesis that "ecosystem" goals—goals that transcend the self and increase compassion toward others—give rise to positive "upward spirals" in intergroup relations.

White individuals who are primarily internally (vs. externally) motivated to respond without prejudice—who wish to be nonprejudiced because it is important to their self-concept (Plant & Devine, 1998)—are most likely to be partner-focused. Therefore, they are more likely to engage in interracial interactions, even while "threatened." These individuals are likely to use their available resources to make their racial minority interaction partner feel comfortable, to show them that this intergroup context is not one in which they will be the target of prejudice and discrimination. Racial minorities who recognize that many Whites are anxious about interracial contact may also be partner-focused and

engage, even while “threatened.” And ironically, racial minorities who are concerned about being the target of prejudice—who are therefore partner-focused—may also respond to the threat of an interracial interaction by engaging. Last, if and when Whites and racial minorities recognize that their interaction outcomes depend on their out-group interaction partner, they are likely to be partner- rather than self-focused and they may engage. For both Whites and racial minorities, then, a threatening interracial encounter need not result in negative behavior. If individuals’ concerns can be directed away from the self and on to their interaction partner, they are likely to engage positively.

Especially when individuals are threatened rather than challenged, it seems possible, perhaps even likely, that they will engage too much or not well enough to make a positive impression at least some of the time. More specifically, these individuals may overcompensate for their intergroup anxiety and behave so positively that they come off as inauthentic and/or even patronizing to their interaction partner (e.g., Mendes & Koslov, 2009). In addition, their exceedingly positive behavior (e.g., friendly verbal behavior) may be tinged with stress (e.g., excessive blinking and fidgeting), sending mixed messages to their interaction partner (e.g., Dovidio et al., 1997; Dovidio et al., 2002). To date, these possibilities have not received systematic attention.

Antagonism. If the interaction elicits concerns for the self and resources are high (albeit not high enough to meet the perceived demands of the encounter), then individuals will antagonize their interaction partner to cope with their stress. In the special case of interracial interactions, we thus predict that individuals who appraise interracial contact as a threat to the self (vs. a threat to their interaction partner) and who appraise their resources as relatively high will antagonize their out-group interaction partner. These individuals can create a hostile environment for their interaction partner by expressing their anger, making prejudiced remarks, and/or attempting to maintain power and control during the interaction.

Individuals with negative racial attitudes and stereotypes as well as relatively high resources are most likely to antagonize. For example, Whites who believe that Black people are demanding too much too fast in their push for equal rights (Brigham, 1993, p. 1941) and who believe that their White racial identity affords them power (e.g., Whites high in social dominance orientation) are likely to antagonize Black interaction partners. Similarly, racial minority group members who have negative racial attitudes about Whites and who have resources (e.g., high status) are also likely to antagonize their White interaction partner. Here, it is important to note

that individuals with negative racial attitudes are not always likely to antagonize out-group interaction partners. Rather, they are likely to antagonize their interaction partner if and only if they appraise the interracial encounter as a self-directed threat and they have sufficient resources to antagonize.

Avoidance. Regardless of whether the threat stems from identity or partner concerns, if resources are moderate and clearly insufficient to meet the demands of an interracial interaction by engagement or antagonism, we predict that individuals will be avoidant during the interaction. In interracial interactions, avoidant individuals may distract themselves with other (race-neutral) thoughts (e.g., “After this, I’ll go grab a cup of coffee”) or engage in wishful thinking (e.g., “Maybe she’ll stop talking soon and go away” or “Maybe she won’t notice that I’m behaving awkwardly”). They may also flee the interaction, avoid stress-related subjects (e.g., circumvent race-related discussions), and/or use avoidant behaviors (e.g., avert eye gaze, give curt responses, and close their body posture) to terminate the interaction as quickly as possible.

White individuals with little previous interracial contact, especially if they have ambivalent racial attitudes (e.g., aversive racists—Dovidio & Gaertner, 2004; modern racists—McConahay, 1986; symbolic racists—Sears, 1988) and/or concerns about appearing prejudiced, are likely to be avoidant during interracial contact. These individuals are likely to appraise interracial contact as a threat to their egalitarian identity. Moreover, their resources are likely to be limited because of inexperience. As a result, they are likely to be avoidant.

Racial minority group members who expect Whites to be prejudiced against them are also likely to be avoidant during interracial contact, if they perceive their resources to be moderate rather than high (Crocker et al., 1998; Ickes, 1984; Major et al., 2002; Shelton & Richeson, 2005). This seems especially likely in novel contexts. Racial minority group members who have interacted with Whites only on the golf course, for instance, might find it threatening to interact with Whites in other social settings. In such settings, they might find that they do not have appropriate scripts—they do not have adequate resources—and therefore they may be avoidant during these interracial interactions.

Interestingly, if resources are deemed lower and/or demands are deemed higher than usual, Whites and racial minorities who usually engage or antagonize during interracial contact are likely to avoid instead. For instance, they are likely to be avoidant during interracial contact if they are cognitively depleted, tired, or low in physical resources (e.g., glucose). They are also likely to be avoidant during interracial contact if the threat of

the interaction is particularly high; if the interaction involves a controversial race-related discussion, for example (e.g., Norton et al., 2006; Trawalter & Richeson, 2008). For these individuals who usually engage or antagonize during interracial contact, fewer resources can thus result in more negative behavior (i.e., from engagement to avoidance) if they are partner-focused or more positive behavior (i.e., from antagonism to avoidance) if they are self-focused. For these individuals who usually engage during interracial contact, fewer resources can thus result in more negative behavior (i.e., from engagement to avoidance). For those who usually antagonize during interracial contact, fewer resources can ironically result in more positive behavior (i.e., from antagonism to avoidance).

Freezing. If resources are perceived to be quite low, in the absence of feasible escape routes and other behavioral coping responses, threatened individuals will simply freeze. Although Lazarus conceptualized this response (which he labeled “inactivity”) as a mix between emotional apathy and psychological helplessness, the current conceptualization is more consistent with the concept of motor inactivity, often labeled “freezing” in animal models of fear (Cannon, 1932; Gallup & Maser, 1977; Levine, 1997). That is, individuals will be relatively immobile and silent during the interaction. Even if this coping response is not socially desirable or even normal (in most cases), freezing does allow individuals to conserve the little resources they have and it may bring them some comfort; at the very least, they are not doing or saying anything wrong. Indeed, they are not doing or saying much of anything.

As interracial contact becomes more and more frequent, individuals are likely to build resources such as social scripts to cope with these stressful encounters. Thus, freezing should become rarer as time goes on and interracial contact becomes more commonplace. However, for White and racial minority individuals who have very little interracial contact experience, freezing is a likely coping response to interracial encounters. Also, for individuals who are cognitively, emotionally, and/or physically depleted, freezing should also be more likely. Freezing represents a last resort. If White or racial minority individuals cannot find resources to cope via engagement or antagonism, and cannot even avoid, they will freeze.

Following one of these four coping responses, each individual involved in the interracial interaction reappraises the encounter. As stress is reduced (as a function of coping response efficacy), cognitive appraisals are adjusted. Revised coping responses are generated, giving way to new reappraisals, stress reactions, and coping responses—cognitive appraisals, affect (e.g., anxiety), and coping responses during interactions are in constant

flux. In other words, although not depicted in Figure 1 or Table 1, our stress and coping framework is recursive. Primary and secondary appraisals give rise to coping, coping can be effective or ineffective at reducing stress, giving rise to reappraisals, modifying stress reactions and coping responses. This recursive process continues until the stress is dealt with or until the interaction is terminated, whichever comes first.

Once the interaction is terminated, each individual can then evaluate the interaction outcome. Regardless of whether the coping responses were “successful” (i.e., reduced or eliminated the stress of the interracial interaction), the evaluative outcome of the interaction can be either positive or negative for the individuals and/or their interaction partner, depending on the individuals’ and their partner’s goals for the interaction. In other words, outcomes for individuals and their partner will depend on both the type of coping response and its effectiveness.

If individuals’ stress is reduced, then their coping responses were effective. Accordingly, individuals will have better personal outcomes—they will experience less stress—the more effectively they cope. However, one’s own coping response also has implications for the experience of one’s interaction partner. If an individual copes via engagement during the interaction, his or her partner is likely to have positive interaction outcomes. Conversely, if an individual copes via antagonism, avoidance, or freezing during the interaction, his or her partner is likely to have negative experiences. As a result, individuals and their interaction partners can have divergent experiences in the same interaction, as we have noted elsewhere (Shelton & Richeson, 2006).

In sum, the proposed framework suggests that behavioral dynamics of interracial interactions reflect coping responses to stressful encounters. The framework predicts that different behavioral responses will be observed during interracial contact as a function of how the interaction is appraised and what coping responses are generated. Consistent with the findings of previous research, racial attitudes, race-related interpersonal motivations, and other individual differences are expected to influence cognitive appraisals of interracial contact and, therefore, moderate behavioral responses. In sum, a stress and coping framework may offer a parsimonious explanation for the behavioral dynamics of interracial interactions. In the next sections, we review the relevant literature on interracial contact dynamics to provide post hoc evidence for the utility of our adapted stress and coping framework.

Evidence for the Utility of a Stress and Coping Framework

For our stress and coping framework to apply to interracial interactions, interracial contact must be appraised

as threat, leading to psychological stress. The notion that individuals often appraise interracial contact as a threat is well documented. As previously noted, numerous theories of intergroup relations posit that out-group members, and intergroup contact in particular, are perceived as threatening (e.g., Blascovich et al., 2001; Major & O'Brien, 2005; Miller & Kaiser, 2001; Stephan & Stephan, 1985, 2000). Realistic and symbolic conflict theories propose that out-group members are threatening insofar as they compete for valuable resources, real or imagined (LeVine & Campbell, 1972; Sherif & Sherif, 1953; Sidanius & Pratto, 1993). For example, Whites who perceive that Blacks are gaining "too much" power or "too many" resources tend to experience feelings of threat. Conversely, Blacks who perceive that Whites control all of the resources tend to experience feelings of threat. According to terror management theory (Navarrete, Kurzban, Fessler, & Kirkpatrick, 2004), out-group members threaten individuals' cultural worldviews and, therefore, endanger their defenses against mortality-related terror. In addition, evolutionary accounts of intergroup conflict propose that out-group members threaten individuals' reproductive and survival success by usurping resources and forming antagonizing coalitions (Kurzban & Leary, 2001). Considered in tandem, this research suggests that contact with out-group members is likely to be appraised as a threat.

Evidence for Stress Reactions During Interracial Contact

The proposition that individuals experience psychological stress during interracial contact is also well documented. According to Lazarus (1966), psychological stress is revealed in four classes of responses: (a) disturbed affect, (b) altered physiological responses, (c) disrupted cognitive functioning, and (d) stress-related, motor-behavioral responses. Consistent with the proposed stress and coping framework, there is considerable evidence that individuals' responses to intergroup encounters reveal each of these four response classes.

Disturbed affect. Theoretical and empirical work suggests that interracial contact elicits negative emotions for Whites and racial minorities. Most models of intergroup contact, including Stephan and colleagues' (2002; Stephan & Stephan, 1985, 1989) model of intergroup anxiety and Fiske and Ruscher's (1993) "interruptive potential" conceptualization of intergroup contact, theorize that Whites and racial minorities experience anxiety and related negative affect during interracial encounters. Empirical studies of interracial interactions corroborate this claim. Interracial interactions often trigger anxiety, fear, and sometimes even anger for Whites and racial minorities (Clark et al., 1999; Crocker

et al., 1998; Devine, Evett, & Vasquez-Suson, 1996; Hyers & Swim, 1998; Littleford, Wright, & Sayoc-Parial, 2005; Mackie, Devos, & Smith, 2000; Monteith, 1993; Pettigrew, 1998; Plant, Butz, & Tartakovsky, 2008; Shelton, 2003; Stephan et al., 2002; Stephan & Stephan, 1985, 1989).

Physiological changes. As previously noted, racial minorities and Whites experience heightened cardiovascular activity and physiological reactions during interracial contact (Blascovich et al., 2001; Clark et al., 1999; Littleford et al., 2005; Mendes et al., 2002; Mendes et al., in press; Mendes, Gray, Mendoza-Denton, Major, & Epel, 2007; Page-Gould et al., 2008; Trawalter et al., 2009; Vrana & Rollock, 1998). In addition, a growing literature finds that Whites and Blacks exhibit different patterns of neural activity in response to Black and White male faces (Hart et al., 2000; Richeson et al., 2003; Richeson, Todd, Trawalter, & Baird, 2008; Wheeler & Fiske, 2005; for reviews, see Dovidio, Pearson, & Orr, 2008; Eberhardt, 2005). Specifically, White participants exhibit increased activity in the amygdala in response to subliminally presented faces of Black individuals, suggestive of a threat appraisal (Cunningham et al., 2004).

Cognitive functioning. Stress has also been linked to changes in the efficiency of cognitive processing (Lazarus, Deese, & Osler, 1952; Searle, Newell, & Bright, 2001). In the context of interracial interactions, research finds that White participants often perform more poorly during interracial than same-race interactions (Blascovich et al., 2001; Hyers and Swim, 1998; Mendes et al., 2002; Mendes et al., in press). There is even evidence that interracial contact can deplete cognitive resources, at least temporarily. In a series of studies, White and Black participants performed more poorly on a cognitive task after interracial compared with same-race contact (Richeson & Shelton, 2003; Richeson & Trawalter, 2005; Richeson, Trawalter, & Shelton, 2005). These cognitive impairments are reminiscent of stereotype threat effects, whereby the threat of confirming negative stereotypes by performing poorly on a stereotype-relevant task can lead to underperformance on that task (Schmader & Johns, 2003; Shapiro & Neuberg, 2007; Steele & Aronson, 1995). Taken together, these findings suggest that interracial contact is stressful, leading to cognitive impairments among Whites and racial minorities.

Motor-behavioral responses. Last, stress has been found to manifest in specific, identifiable, motor-behavioral responses, such as excessive blinking, fidgeting, and self-touch (Beck & Emery, 1985; Feldman & Rime, 1991; Malmo, Shagass, Belanger, & Smith, 1951).

Across a number of studies, White and Black individuals have been found to fidget excessively during interracial contact (McConnell & Leibold, 2001; Shelton, 2003). In addition, Whites with higher levels of racial bias have been found to blink more, make more speech errors, and exhibit more speech hesitations during interactions with Black interaction partners than with White interaction partners (Dovidio et al., 1997; Fazio et al., 1995; McConnell & Leibold, 2001; Word et al., 1974; but also see Olson & Fazio, 2007). The aforementioned behaviors provide good indices of interracial anxiety because they are difficult to control (Crosby, Bromley, & Saxe, 1980; Dovidio et al., 1997; Dovidio et al., 2002; Fazio et al., 1995), and, accordingly, they can be conceptualized as individuals' behavioral stress reactions to interracial contact.

Considered in tandem, this work clearly suggests that interracial contact is often appraised as threat, leading to psychological stress, with each of Lazarus's four main classes of stress reactions observed. This research as such underscores the relevance of a stress and coping framework. Nevertheless, if the proposed framework is to shed light on the behavioral dynamics of interracial interactions, there must also be evidence that the four specific coping responses predicted by the model actually occur during these interactions. Indeed, the primary tenet of the proposed framework is that individuals' behaviors during interracial interactions reflect, in large part, their coping responses. In the next section, we review the body of research on interracial dyadic interactions for evidence of the four proposed coping responses.

Evidence for Coping Responses During Interracial Contact

The research just reviewed suggests that when individuals encounter an interracial interaction, they are likely to appraise the encounter as a threat, which results in affective, physiological, cognitive, and *behavioral* stress reactions. According to the framework, individuals are also likely to employ coping responses to reduce stress. Specifically, our stress and coping framework predicts that individuals will be positively engaged, antagonizing, avoidant, or frozen during interracial contact and these coping responses will be evident in behavior (see again Table 1 and Figure 1).

Engagement. According to the adapted framework, individuals can cope with a stressful interracial encounter through engagement. Consistent with this prediction, research finds that high-status individuals, such as Whites, are often more mindful during social interactions with stigmatized, compared to nonstigmatized, others (Frale, Blackstone, & Scherbaum, 1990; also see Hyers & Swim, 1998). In one study, for instance, high-status

participants recalled more detailed information about their interaction and attempted to take their interaction partner's perspective more when interacting with a stigmatized rather than a nonstigmatized interaction partner (Frale et al., 1990). Other studies provide further corroboration that, sometimes, individuals cope with the stress of interracial contact by positively engaging. As an example, one study found that White participants instructed to "not be prejudiced" during an interaction with a Black partner reported more anxiety compared to those not given any instructions for the interracial interaction; but they also behaved more positively—they engaged—resulting in more positive evaluations from their Black interaction partners (Shelton, 2003). In a similar vein, another study found that White participants smiled more and more intensely during interracial than same-race interactions, and a follow-up study revealed that such positive behavior was especially likely among participants who exhibited greater physiological arousal (i.e., stress) during these interactions (Mendes & Koslov, 2009; also see Littleford et al., 2005). Taken together, these studies suggest that those who find intergroup contact the most stressful may be those who behave the most positively during interracial encounters. We take these findings as evidence that Whites sometimes cope with the stress of interracial contact via engagement (and perhaps overcompensation). Interestingly, such engagement coping may be learned. In an innovative study, White participants trained to approach Blacks by pushing a joystick toward Black targets on a computer screen subsequently displayed increased intimacy while interacting with a Black research confederate; they leaned forward more and sat closer to the Black confederate (Kawakami, Phills, Steele, & Dovidio, 2007).⁷

Like Whites, racial minorities often engage during interracial interactions. In particular, racial minorities often use engagement coping during interracial contact to compensate for and potentially deflect anticipated prejudice from White interaction partners. Research finds, for instance, that Black interaction partners contribute more ideas during interracial interactions the more anxious they feel about the interaction (Hyers & Swim, 1998). In addition, they often smile and talk more during interracial interactions, especially when they are concerned that they will be the target of prejudice and discrimination (Shelton, 2003; Shelton, Richeson, & Salvatore, 2005). We interpret these findings as evidence that racial minorities often cope with the stress of interracial contact by positively engaging in the interaction.

Antagonism. According to the adapted framework, another coping response that individuals use in response to interracial contact is antagonism. In the intergroup

context, individuals are especially likely to antagonize a person who they believe is the source of their identity concerns, especially if that person is from a low-status group. Although few studies have considered and observed hostile acts during actual interracial encounters, some evidence of antagonistic coping can be gleaned from studies on identity threat in interracial relative to same-race contexts. Research finds that Whites are more likely to denigrate women and African Americans who criticize them compared to White males who criticize them or compared to women and African Americans who praise them (Sinclair & Kunda, 1999, 2000). More specifically, in one illustrative study, White participants were more likely to activate negative Black stereotypes after a Black doctor criticized them relative to when the Black doctor praised them (Sinclair & Kunda, 1999). We take this as suggestive evidence that some individuals respond to the threat of interracial contact by antagonizing.

One lone study has provided behavioral evidence for antagonism during interracial interactions in the laboratory. In this study, researchers found that White participants gave a greater number of electric shocks to a Black confederate than to a White confederate if the confederate had previously insulted them (Rogers & Prentice-Dunn, 1981). These behavioral findings are consistent not only with the notion that individuals sometimes antagonize to cope with the threat of interracial contact but also with the premise that antagonism requires relatively high resources. Here, participants had full control over the administration of electric shocks, without fear of retaliation from their partner. These findings are also consistent with the premise that antagonism is a coping response to self-directed threats. Here, participants antagonized when they had been insulted, that is, when their self-worth was called into question. Even though participants in this study were threatened and presumably stressed, they had sufficient resources to antagonize the Black confederate, and so they did.

It should be noted that although antagonism in response to intergroup contact is seldom observed in the laboratory, intergroup conflict is ubiquitous outside of the laboratory. Ethnographic and survey data show that intergroup bullying and racial harassment are prevalent among children (e.g., Junger, 1990; Van Ausdale & Feagin, 2001; Verkuyten & Thijs, 2002), and, sadly, such antagonism is far from being a childhood phenomenon. According to the Southern Poverty Law Center's (2009) intelligence report, hate-group activity in the United States is increasing because of the rise in (non-White) immigration and the presidency of Barack Obama, a Black man. Moreover, war, genocide, and terrorism—extreme acts of intergroup antagonism—are pervasive across time and place. Thus, evidence for

antagonism in response to the threat posed by intergroup contact and the presence of out-group members more generally is not difficult to find outside of the psychology laboratory.

Avoidance. A third coping response individuals may use to cope with interracial contact, according to the proposed framework, is avoidance. And indeed research finds that many individuals display avoidant behaviors during interracial contact. For instance, Whites often show less intimacy-building behaviors while interacting with Black compared to White interaction partners (Crosby et al., 1980; Feldman, 1985; Weitz, 1972; Word et al., 1974). They also make less and briefer eye contact (Dovidio et al., 1997; Fugita et al., 1974; LaFrance & Mayo, 1976) and increase interpersonal distance (Goff et al., 2008; Wilson, Damiani, & Shelton, 1998; Word et al., 1974). These behaviors can facilitate the termination of social contact (e.g., Word et al., 1974), and thus we conceptualize these responses as individuals' avoidant coping responses to the threat of interracial contact.

Although racial minorities often engage during interracial contact, they too may cope with the threat of interracial contact by avoiding. Research finds that racial minority students, especially those who are concerned about being the target of prejudice, avoid interracial contact if possible (Mendoza-Denton et al., 2002; Shelton & Richeson, 2005; Tropp, 2003). In addition, racial minority students who are higher on explicit bias—those who are likely to find interracial contact more stressful—have less contact with their White friends, and, when they do have contact with White friends, they feel less comfortable discussing personal (race-neutral) and race-sensitive issues (Shelton & Richeson, 2006; Shelton, Richeson, Salvatore, & Trawalter, 2005, Study 1). In other words, there is some evidence that racial minorities cope with the threat of interracial contact through avoidance.

Freezing. The fourth coping response that individuals may use in response to the threat of an interracial interaction is freezing. When resources are perceived to be particularly low, individuals may not be able to engage or antagonize, or even avoid. They may simply freeze. Although this type of reaction is often overlooked in the literature and lumped in with negative behavior more generally, the stress and coping framework theorizes that freezing is a distinct reaction to the stress of interracial contact. Some evidence in support of the freezing coping response can be gleaned from a couple of recent studies. In one study (Mendes et al., in press), White participants interacting with an "expectancy-violating" out-group confederate, such as an Asian American

woman with a Southern accent, exhibited greater threat, indexed cardiovascularly. These participants also nodded less, made fewer global movements, and moved their hands, feet, and head less. In other words, these participants froze. In another study, White participants exhibited greater behavioral rigidity during interactions with a Black, compared to a White, interaction partner, especially during race-related discussions (Trawalter & Richeson, 2006; also see Richeson & Shelton, 2003). Perhaps the effect of being videotaped, coupled with the restricted nature of the interaction, elicited a relatively large stress reaction that most individuals appraised to be beyond their available resources. They could not engage or even avoid; hence, they froze.

Taken together, our review of the literature on behavior during interracial interactions offers initial support for our stress and coping framework. Behavior during interracial interactions seems to reflect stress reactions (e.g., excessive blinking and fidgeting) and coping via engagement, antagonism, avoidance, and freezing. Importantly, evidence for stress reactions and the hypothesized coping responses suggests that the mixed and often contradictory findings in the intergroup literature are perhaps not surprising and even predictable. We presume that studies in which participants behave in exceedingly positive ways during interracial interactions have study designs (or participant characteristics) that (a) encourage a partner-focus and/or (b) provide enough resources to meet the demands of interactions, eliciting challenge rather than threat and leading to engagement. Conversely, we suspect that studies in which participants behave in negative ways during interracial contact have designs (or participant characteristics) that (a) elicit a self-focus and (b) fail to provide enough resources to meet the demands of interactions, resulting in psychological threat and negative behavior. Different intergroup behaviors observed in different studies are not necessarily contradictory, in other words. They may be different forms of coping responses, mobilized to reduce stress during interracial contact.

For some individuals, these coping responses may be effective, alleviating the stress of interracial contact altogether. For many individuals, however, these coping responses may reduce the stress of the interaction but fail to completely eliminate (or mask) it. As a result, these individuals are likely to continue to exhibit stress reactions in conjunction with these coping responses. Indeed, this is our interpretation of Dovidio and colleagues' (2002) findings. In this study, White participants displayed positive verbal behavior and negative nonverbal behavior during interracial contact. Perhaps these White individuals used (relatively controllable) verbal behaviors to cope with their interracial anxiety; they engaged. However, their relatively uncontrollable nonverbal behaviors belied these efforts to cope in a

prosocial way and revealed their interracial anxiety. Taken together, Whites' "negative" (i.e., anxious, stress-related) nonverbal and positive verbal behaviors during interracial interactions can be thought of as stress reactions and coping responses to interracial contact.

Individual differences, stress reactions, and coping responses. Although one of our aims is to provide a framework that moves beyond individual differences (e.g., racial attitudes and race-related interpersonal concerns) to predict behavior during interracial contact, it is clear that these individual difference variables are consequential. According to the proposed framework, racial bias and motivations influence behavior during interracial encounters because of their effects on primary and secondary appraisals. Specifically, we propose that individual differences affect the appraisal of threat and perhaps the perception of available resources. In turn, these appraisals yield stress reactions and coping responses, as described.

Negative racial bias is likely to increase the primary appraisal of threat, for example. Consistent with this claim, research has shown that high-bias Whites appraise interracial contact as more threatening and exhibit greater "maladaptive" neuro-endocrine responses to interracial contact than do low-bias Whites (e.g., Mendes, Gray, et al., 2007). Furthermore, high-bias Whites seem more anxious; they blink and fidget more during interracial interactions than do low-bias Whites (McConnell & Leibold, 2001; Mendes, Gray, et al., 2007; Shelton, 2003). Similarly, Whites who are concerned about appearing prejudiced are likely to appraise interracial contact as demanding. Hence, we predict that, during interracial interactions, they are likely to experience stress. Consistent with this prediction, research finds that Whites who are high in external motivation to respond without prejudice—those who are concerned about appearing prejudiced largely because of political correctness norms—exhibit heightened physiological reactivity in response to interracial but not same-race contact (Trawalter et al., 2009). In addition, during interracial interactions, their behavior reveals more anxiety than that of Whites who are not concerned about appearing prejudiced (Trawalter et al., 2009). Consistent with our framework, in other words, data suggest that Whites' racial biases and motivations can make interracial contact more demanding, more threatening, and therefore more stressful—and this stress is revealed in behavior.

Although research has just begun to examine how racial minorities' race-related biases shape their behavior during interracial interactions, some recent work finds that concerns about being the target of prejudice increase racial minorities' stress levels during interracial contact, leading to stress reactions and coping responses. Racial

minorities who expect to be the target of prejudice during interracial contact report more negative affect (Plant & Butz, 2006; Tropp, 2006), exhibit heightened physiological reactivity (Page-Gould et al., 2008), and fidget more (Shelton, 2003) than those who do not expect to be the target of prejudice. In other words, concerns about being the target of prejudice increase the threat of interracial interactions for racial minorities, and, as a result, they experience more stress—stress that gets manifested in their emotions, physiology, and behavior. For both Whites and racial minorities, then, race-related individual differences such as racial attitudes and motivations increase primary appraisals of threat and are revealed in stress-related behaviors, as predicted by a stress and coping framework.

Our framework also predicts that primary and secondary appraisals jointly produce coping responses. Accordingly, individual differences that affect primary appraisals of threat can lead to different coping responses depending on individuals' secondary appraisals. Recall that some work finds that low-bias Whites behave more positively during interracial contact (Dovidio et al., 1997; Fazio et al., 1995; McConnell & Leibold, 2001), whereas other work finds that high-bias Whites behave more positively during interracial contact (Carney, 2009; Shelton, Richeson, Salvatore, & Trawalter, 2005; for a conceptual replication, also see Gonsalkorale, von Hippel, Sherman, & Klauer, 2009). According to our framework, compared to low-bias Whites, high-bias Whites find interracial contact more stressful, and, subsequently, they must cope with that stress. They can antagonize, avoid, or freeze, or they can engage. That is, they can reduce their stress by behaving more negatively or more positively depending on their appraisals of the encounter.

It is possible, for instance, that White participants in Dovidio and colleagues' (1997) study were particularly self-focused. They were being interviewed and videotaped by White and Black research assistants—a situation that likely heightened self-presentational concerns and, hence, self-focus. Such a self-focus, according to our framework, leads to negative behaviors (antagonism, avoidance, or freezing depending on resources) if individuals are experiencing threat rather than challenge. Conversely, it is conceivable that White participants in Shelton, Richeson, Salvatore, and Trawalter's (2005) study were more partner-focused. In this study, participants were not being interviewed by a research assistant. Instead, they were asked to engage in one-on-one discussions about race-related topics. The dyadic nature of the exchange may have encouraged a more relational, partner-focused approach. In addition, it is possible that Black interaction partners were able to provide positive feedback and guidance to White

participants, thereby reducing White participants' perceptions of threat—something confederates in other studies (e.g., Dovidio et al., 1997) could not do. Taken together, perceptions of decreased threat and a partner-focus may have resulted in engagement on the part of White participants. In sum, our framework predicts that high-bias participants experience more stress during interracial contact, leading to more negative behavior if participants are self-focused or more positive behavior if participants are partner-focused and/or challenged rather than threatened. These behaviors can be characterized as coping responses, deployed to reduce stress associated with interracial encounters.

Research has also yielded some surprising findings when considering the effect of concerns about appearing prejudiced and intergroup behavior. Some work has found that Whites who are concerned about appearing prejudiced behave more positively than those who are not (Shelton, 2003). In contrast, other work has found that, compared to low-bias Whites who are less concerned about appearing prejudiced, those who are more concerned behave more negatively during intergroup contact (Norton et al., 2006; Vorauer & Turpie, 2004). Based on our framework, we suspect that participants in these studies differed in their appraisals of the interactions. Perhaps Shelton's instructions to not *be* prejudiced against their interaction partner heightened participants' concerns for their racial minority partner; they induced a partner-focus. In contrast, Vorauer and Turpie's paradigm—in which an out-group member voiced expectations and concerns about being the target of discrimination on campus—perhaps heightened participants' concerns about *appearing* prejudiced. Consequently, these participants were vigilant for what not to do and say. They self-monitored their speech and behavior. They were self-focused. Again, a stress and coping framework can make sense of these divergent behaviors. Our framework suggests that Whites' concerns about appearing prejudiced increase both stress and coping behaviors (e.g., positive engagement or avoidance) during interracial contact. However, when individuals are more partner-focused, they behave more positively. They engage. When they are more self-focused, they behave more negatively. They avoid or perhaps even antagonize given sufficiently high resources.

Racial minorities' prejudice-related concerns similarly affect their coping responses. Specifically, racial minorities who expect to be the target of prejudice are often more engaged during interracial interactions compared to those who do not expect to be the target of prejudice (e.g., Shelton, 2003; Shelton, Richeson, & Salvatore, 2005). Although surprising at first glance, these findings are consistent with a stress and coping framework. Our framework predicts that racial minorities who are

concerned about being the target of prejudice will be more stressed about interracial contact. Furthermore, they will cope with that stress by positively engaging if (a) they are partner-focused and/or (b) they have sufficient resources. It is possible that racial minority participants in Shelton's studies were focused on their White interaction partners. Their concerns about being the target of prejudice imply beliefs that Whites can control racial minorities' outcomes. Perhaps participants felt dependent on their White interaction partners and therefore attended to them. However, we think it is more likely that these racial minority participants had sufficient resources to meet the demands of the interactions—they were challenged, not threatened. As previously mentioned, racial minorities often have a great deal of experience with interracial contact. They are "experts" at interracial interactions (see Trawalter & Richeson, 2008). This is especially true of racial minority students on predominantly White college campuses. In other words, racial minority participants in this and other studies likely appraised interracial contact as a challenge, and, hence, they engaged in response to the threat of interracial contact.

IMPLICATIONS OF A STRESS AND COPING APPROACH FOR RESEARCH

As just reviewed, a preponderance of data suggests that racial minorities and Whites often appraise interracial contact as a threat. Consequently, they experience stress and must cope with this stress. Their behavior seems to reflect their stress and efforts to cope. Whites and racial minorities often behave anxiously. At other times, they behave pleasantly—they engage. On other occasions, they behave relatively negatively—they avoid or even antagonize. Still at other times, they are unable to do much of anything—they freeze. The proposed stress and coping framework can make sense of these different and even divergent behaviors by underscoring the complex relation among cognitive appraisals, behavior, and outcomes of interracial contact. Specifically, threat appraisals can result in prosocial, *engaged* behavior or in socially negative, *antagonizing*, *avoidant*, or *frozen* behavior, depending on the direction and extent of the threat and available resources. A stress and coping framework thus provides a finer-grained analysis of behavior during interracial contact. Although previous work conceptualizes behavior as one dimensional (i.e., positive–negative, anxious–not anxious), the current framework partitions negative behavior into four theoretically meaningful and distinct forms: anxious stress reactions and antagonizing, avoidant, and frozen coping responses.

These negative coping responses and engagement coping can lead to positive or negative outcomes for the self and one's interaction partner. If individuals cope effectively, reducing threat appraisals and stress, they will feel better; they will enjoy a "positive" outcome. However, depending on their coping response, their interaction partner may or may not fare so well. If they cope by engaging in the interaction, their partner is likely to enjoy positive outcomes too. If they cope by antagonizing, avoiding, or freezing, however, their partner is not likely to enjoy positive outcomes. The stress and coping framework can make sense of why and when Whites and racial minorities have divergent interaction experiences.

In sum, the stress and coping framework provides a focused analysis on behavior while maintaining a broad psychological perspective. It focuses on proximal determinants of behavior—namely, cognitive appraisals—without losing sight of important distal determinants such as racial attitudes, prejudice-related concerns, and previous experience with interracial contact. It posits that appraisals are multiply determined, the result of a complex appraisal process that integrates these distal variables. Though the computations and mechanics of that appraisal process have yet to be specified (Blascovich et al., 2003), a stress and coping framework highlights the importance of factors that are likely to moderate appraisals. Here, we discuss three factors worthy of methodological consideration (also see Shelton & Richeson, 2006).

Who is in the interaction? As just noted, according to the stress and coping framework, cognitive appraisals shape behavior during interracial contact. Considering the differing and sometimes diverging cognitive appraisals of Whites and racial minorities is, therefore, crucial to understanding the dynamics of interracial contact. Indeed, to the extent that Whites' and racial minorities' concerns, attitudes, motivations, and resources differ, their appraisals and behaviors will differ too. Consistent with this claim, we have found that Black college students' behavior during interracial contact revealed less anxiety than White college students' behavior, especially during race-related discussions (Trawalter & Richeson, 2008). We posit that interracial contact and race-related discussions, in particular, were more demanding for these White than Black students because these White students are, on average, less familiar with interracial contact and race-related discussions, especially given that the college campus is predominantly White. As a result, interracial contact and race-related discussions were more threatening and, thus, more stressful for White than Black participants, as revealed in their behavior. Hence, considering the appraisals of

both Whites and racial minorities is critical to understanding the dynamics of interracial contact because these appraisals may often differ.

Moreover, considering the cognitive appraisals of both Whites and racial minorities requires more precise conceptualizations, manipulations, and assessments of Whites' and racial minorities' attitudes, motivations, and concerns—factors that are thought to shape cognitive appraisals of interracial contact. In the literature on intergroup behavior, for instance, Whites' concerns about *appearing* prejudiced have not been well distinguished from concerns about *being* prejudiced (Richeson & Trawalter, 2005; Shelton, 2003; Vorauer & Turpie, 2004). However, according to the stress and coping approach, these two sets of concerns may operate very differently in the context of interracial contact. To the extent that concerns about *appearing* prejudiced are mostly self-focused and identity related, they are predicted to result in negative behavior during interracial contact (i.e., antagonism, avoidance, and freezing, depending on the level of the threat and available resources; e.g., Vorauer & Turpie, 2004). In contrast, to the extent that concerns about actually *being* prejudiced are more partner-focused and foster concerns for one's partner's experiences during the interaction, these concerns are predicted to result in more positive behavior, namely, engagement if sufficient resources are available (e.g., Shelton, 2003). In other words, prejudice-related concerns may come in various forms (e.g., self- or partner-focused), only some of which are predicted to result in positive behavior and positive outcomes for one's racial minority interaction partner (for a similar distinction, see Vorauer, 2006). Conceptualizing, manipulating, and assessing these concerns more carefully might reveal interesting differences in behavior and reconcile contradictory findings that Whites' prejudice-related concerns lead to increased negative or positive behavior during interracial interactions.

What are they doing? Another methodological issue for researchers to consider is the content of interactions. In many studies, White participants and racial minority partners are asked to discuss race-neutral topics (e.g., what to bring to college; Dovidio et al., 1997; Dovidio et al., 2002; McConnell & Leibold, 2001). In others, participants are asked to discuss race-related topics (e.g., Gailliot et al., 2007; Richeson & Trawalter, 2005; Trawalter & Richeson, 2008). Still in other studies, participants are asked to play interactive games and they do not have a discussion per se (e.g., Blascovich et al., 2002; Hyers & Swim, 1998; Mendes et al., 2002; Sekaquaptewa et al., 2003). According to the stress and coping framework, behavior during these various interactions will differ to the extent that appraisals of these interactions

differ. Race-related discussions, for instance, may activate prejudice-related concerns (e.g., concerns about appearing prejudiced for Whites and concerns about being the target of prejudice for racial minorities) to a much greater extent than game playing. Game playing may activate one set of goals for Whites (e.g., "I want my partner to like me!") but activate another set of goals for racial minorities (e.g., "I want my partner to respect me!"); for evidence and a discussion of these divergent goals in interpersonal interracial interactions, see Bergsieker et al., 2009). The appraised demands of each interaction and the resources necessary to meet those demands may, therefore, vary. Accordingly, behavior during these interactions may vary as well. A race-related discussion that is appraised as too demanding and threatening to one's identity will result in negative behavior—antagonizing, avoidant, or frozen behavior—whereas game playing that is appraised as challenging rather than threatening will result in positive behavior, for instance.

In addition to considering what participants are doing in the interaction (broadly speaking), researchers might also consider what participants are doing behaviorally. According to a stress and coping framework, not all negative behaviors are analogous. Negative behaviors can differ in psychologically meaningful ways and affect interaction outcomes differentially. That is, according to the stress and coping framework, appraising interracial contact as an identity-relevant threat may result in distinct negative behaviors, depending on the level of available resources. If resources are minimal, people will freeze. If resources are moderate, people will avoid. And if resources are relatively high (albeit insufficient to meet the demands of the interaction), then people will antagonize. In our review, we have attempted to classify participants' negative behavior in studies of interracial contact into these discrete coping response categories. However, generally, studies lump all negative behaviors into a single category. Moreover, studies often consider stress-related behavior (e.g., excessive blinking, fidgeting) as negative behavior (Dovidio et al., 1997; Fazio et al., 1995; McConnell & Leibold, 2001). We propose that these behaviors are distinct, reflecting different cognitive and motivational states. Furthermore, these behaviors have different implications for interaction outcomes. Antagonistic behaviors should be more harmful to an interaction partner than frozen behaviors, for instance. Considering the nuances of behavior (negative behavior especially) will enable researchers to better understand the antecedents and consequences of interracial contact.

How long is this interaction? A final methodological issue for researchers to consider is the duration of the contact experience. The literature has primarily focused

on interracial contact that lasts just a few minutes and take place on a single occasion (Dovidio et al., 2002; McConnell & Leibold, 2001; Gailliot et al., 2007; Richeson & Trawalter, 2005; Trawalter & Richeson, 2008; Vorauer & Kumhyr, 2001). Research on repeated interracial interactions across longer periods of time has been rare (cf. Page-Gould et al., 2008; Shelton, Richeson, & Salvatore, 2005; West, Shelton, & Trail, 2009). These varying time courses may affect appraisals and, consequently, behavior. Indeed, the stress and coping framework underscores the importance of temporal dynamics during stressful encounters. As individuals experience stress and cope with the stress of an interracial encounter, they can appraise and reappraise the encounter. If coping reduces stress, then the encounter can be reappraised as less threatening. As the encounter is reappraised, coping responses can be modulated—coping responses can be fine tuned, substituted, or terminated altogether. In other words, threat appraisals and, subsequently, coping behavior can change across the interaction. If the interaction is quite short, individuals may have time to experience (and hence exhibit) only stress; they may not have the time to cope. If the interaction lasts a bit longer, however, individuals may have the opportunity to cope, and their behavior should reflect these efforts. In other words, given sufficient time, appraisals and, consequently, behaviors may shift quite drastically over the course of an interracial interaction. Considering the time courses of Whites' and racial minorities' behavior during interracial interactions may help us to understand why these interactions are often uncoordinated (Pearson et al., 2008).

IMPLICATIONS OF A STRESS AND COPING APPROACH FOR INTERGROUP RELATIONS

In addition to these methodological implications, the proposed stress and coping framework also offers new ground from which to make predictions regarding the conditions under which individuals will behave positively or negatively during interracial interactions. For instance, to positively engage rather than antagonize during interracial contact, the framework predicts that individuals could focus on their interaction partner rather than on themselves during the interactions. In other words, although improving racial attitudes might moderate the magnitude of threat appraisals, resulting in less negative (i.e., antagonizing, avoidant, or frozen) behavior, improving racial attitudes is not the only way to foster more positive behavior during interracial interactions. Providing goals and motivations that encourage concerns for one's partner, irrespective of racial attitudes, should also enable positive interracial

contact. Consider, for example, an interaction between a White teacher and a Black student who is not performing well. The interaction could pose a threat to the teacher's identity insofar as it might signal his or her incompetence or perhaps even his or her racial bias. According to the stress and coping framework, such an identity threat is likely to preclude engagement coping on the part of the White teacher. If, however, the teacher can focus on the students' needs and achievements, then he or she will likely cope through positive engagement (see Harber & Gorman, 2009; Jussim & Harber, 2005).

Another way to encourage positive engagement in interracial interactions, according to the stress and coping framework, is to increase individuals' resource appraisals. Many individuals experience stress because they do not have the resources to meet the perceived demands of interracial contact. As a result, they often avoid, freeze, or antagonize. If resources were available, however, they might engage. Based on this logic, efforts to increase individuals' resources to navigate interracial contact (e.g., multicultural education and more frequent, positive interracial contact) should result in more engagement coping rather than antagonizing, avoidance, and freezing. Such experiences are likely to increase individuals' available resources by providing scripts and norms for interracial contact, thus enabling positive encounters. Consistent with this hypothesis, research finds that Whites with greater interracial contact experience are less likely to reveal physiological threat reactions during interracial interactions in the laboratory compared with Whites with less interracial contact experience (Blascovich et al., 2001; Page-Gould et al., 2008). Likewise, research finds that racial minorities who have increased contact with a White interaction partner exhibit less and less physiological reactivity (i.e., stress) over time as they become friends with their White interaction partner (Page-Gould et al., 2008).

When interracial interactions are perceived to be unmanageable, perhaps because of low resources, decreasing individuals' appraisal of threat would also lead to less negative (albeit not necessarily positive) interracial interactions, according to our stress and coping framework. One way to alleviate individuals' threat appraisals is to allow them to affirm their identity prior to or during the interaction (Steele, 1988; Steele et al., 2002). For example, allowing White individuals to affirm their egalitarian values and/or allowing racial minorities to affirm their competence is likely to reduce threat appraisals in the context of an interracial encounter. In addition, recent research has also found that inducing learning rather than performance goals attenuates the extent to which Whites experience social identity threat in anticipation of interracial interactions (Goff et al.,

2008). In this research, Whites asked to approach interracial interactions with the goal of learning about the interaction and the interaction topic activated fewer social identity concerns and chose to sit significantly closer to their Black interaction partners than those asked to approach interracial interactions with the goal of doing well in the interaction. Nevertheless, the extent to which these threat inoculations result in more positive interracial interactions for both participants should be examined within the context of our stress and coping framework to ascertain whether reductions in threat appraisal and, in turn, stress reactions mediate behavior and interaction outcomes, as we have suggested.

We should note, however, that decreasing primary appraisals of threat and/or increasing secondary appraisals of resources may not always lead to engagement. According to our framework, increased resources may actually lead to more negative behavior if resources are relatively high but not high enough to exceed the demands of the interaction. More precisely, increased resources may lead to antagonism if individuals continue to appraise interracial contact as a self-directed threat. Consequently, interventions aimed at improving interracial contact may need to gauge the extent to which individuals feel threatened during interracial contact to determine what resources and how much of these resources to provide. Otherwise, interventions run the risk of enabling individuals to antagonize. For this reason, the most promising avenue for interventions may be to encourage people to have a partner-focus during interracial encounters, thereby precluding antagonism as a coping response to interracial contact.

In sum, the proposed framework offers a number of opportunities to foster positive interracial interactions. The overarching premise is that threat appraisals of interracial contact result in different coping responses, only one of which—engagement—is positive for the interaction partner. Undermining and/or reappraising the threat and providing individuals with relevant cognitive and affective resources are all important pathways through which interracial interactions can proceed as positively as same-race interactions. Specifically, perceptions that one can manage the interaction through positive engagement can result from (a) a reduction of the threat appraisal; (b) a reframing of the threat appraisal, away from the self and, instead, on concerns for one's interaction partner; or (c) an increase in perceived resources. Our framework suggests that efforts to foster positive interracial interactions could focus on these processes, exploring how more distal variables such as individual differences in racial attitudes feed into these processes. Interestingly, recent research on the contact hypothesis (Allport, 1954) suggests that intergroup contact reduces intergroup bias by attenuating intergroup

anxiety (Pettigrew & Tropp, 2007), consistent with predictions of the proposed stress and coping framework. In other words, attempting to foster positive intergroup interactions by focusing on threat appraisals and subsequent stress reactions is likely to reduce racial bias as well.

FUTURE DIRECTIONS FOR RESEARCH

Given the importance of cognitive appraisals in shaping coping responses, experimental research on the cognitions that give rise to the behavioral dynamics described above is essential before the merits of the framework can be known. Future studies could explore the effects of primary appraisals, for instance, by manipulating identity threat. Individuals could be provided with identity threatening, affirming, or no information prior to an interracial interaction. According to the model, affirmed participants should perceive less threat to their identity (leading to fewer identity concerns) and, therefore, cope with engagement. Hence, their behavior should be more positive than that of participants who were not affirmed. Threatened participants, on the other hand, should perceive greater threat to their identity (leading to more identity concerns) and, therefore, cope using antagonism, avoidance, or freezing, depending on available resources. Hence, their behavior should be less positive than that displayed either by affirmed participants or by control participants (i.e., participants who were neither affirmed nor threatened). Furthermore, the identity threat manipulation is especially likely to result in antagonizing behavior, compared to control, given sufficiently high resources.

Similarly, future work could examine the effects of secondary appraisal processes on subsequent behavior by providing individuals with resources for an upcoming interracial interaction or, alternatively, by depleting their (self-control) resources prior to the interaction. When resources are increased, individuals should be more likely to cope with engagement if they have partner concerns and more likely to cope with antagonism if they have identity concerns. When resources are depleted, individuals should be more likely to cope by freezing (cf. Apfelbaum & Sommers, 2009). Thus, the stress and coping framework makes specific predictions about what coping responses will transpire from combinations of threat appraisals and resource appraisals that require systematic experimental investigation.

Although much of the previous literature in support of the current theoretical framework focused largely on White Americans, the proposed framework should apply equally to racial minorities' behaviors and experiences during interracial interactions as well as to participants of intergroup interactions more generally. In fact, this

framework may apply to any “high-maintenance” interaction (Finkel et al., 2006). Future studies will need to examine the extent to which behavior during interracial interactions, of both Whites and racial minorities, can be reliably predicted by the stress and coping framework. In addition, future research will need to move beyond interactions in a laboratory setting to extend and test the ecological validity of the framework.

Last, although not central to the present thesis, future work should attempt to integrate Blascovich and colleagues’ (2001; Blascovich et al., 2002) model of motivated performance situations more fully with the framework proposed herein. Specifically, research is needed that considers physiological reactivity during interracial interactions in tandem with individuals’ behavioral responses (as in Mendes et al., in press; Mendes & Koslov, 2009; Trawalter et al., 2009). Furthermore, both physiological reactivity and behavioral stress reactions and coping responses should be examined over the course of an interaction rather than at one or two snapshots in time. These considerations will allow us to discern the extent to which and how Blascovich’s “threatened” and “challenged” motivational states map on to the four different coping responses. Although cardiovascular reactivity indicative of challenge should be positively correlated with engagement, it is not clear how cardiovascular reactivity indicative of threat could dissociate among antagonism, avoidance, and freezing. Regardless of the results, such integration will provide valuable insight into processes of brain, mind, body, and behavior that shape and reflect interracial contact dynamics.

CONCLUDING REMARKS

The current theoretical work offers a stress and coping framework for understanding the behavioral dynamics of interracial interactions. Specifically, the adapted framework and available empirical evidence suggest that behavior during interracial interactions may be reconceptualized as stress reactions and coping responses to stressful encounters. We believe that this framework provides important insight into the behavioral dynamics of intergroup interactions, and, thus, it is worthy of substantive subsequent investigation. In addition, the present theoretical work introduces a basis from which to make predictions regarding when interracial contact will be relatively positive and when it will be relatively negative, moving beyond the effects of racial attitudes and prejudice concerns. In so doing, the framework suggests viable ways for improving interracial interactions, beyond improving racial attitudes. Given the long-term stability of negative racial attitudes, especially at the implicit

level, this potential contribution of the stress and coping framework is especially noteworthy. Without a doubt, finding ways to improve interracial interactions will continue to be a pressing and necessary endeavor, especially as racial diversity increases in the United States. Reconceptualizing behavior during interracial contact as coping responses to stressful encounters can help social scientists, educators, and lay people alike approach interracial interactions in more positive and constructive ways, which, in time, may yield tangible improvements in race relations more generally.

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NOTES

1. Lazarus’s concepts of “primary appraisal (of threat)” and “secondary appraisal” are similar to Blascovich and colleagues’ concepts of “demand” and “resource” appraisals, respectively.

2. We do not take a stand on whether coping is or may be automatic. Contemporary work suggests that self-regulation may be unconscious (Dijksterhuis, Bos, Nordgren, & van Baaren, 2006; Fishbach & Shah, 2006) and that it is resource depleting (Engle, 2002; Muraven & Baumeister, 2000). Therefore, depending on one’s definition of automaticity, coping may be automatic. If automaticity implies only unconscious processing, then coping may be automatic; it may be initiated automatically, though perhaps not sustained automatically. If automaticity implies unconscious as well as effortless processing—processing that does not require resources—then coping may not be automatic. For now, whether coping is or may be automatic remains an empirical question, worthy of further investigation.

3. Interestingly, the outcomes of both successful and unsuccessful coping can be either positive or negative. That is, coping is not confounded with the valence of the outcome. Consider, for example, a math test as a stressful encounter. Individuals can minimize test anxiety by avoiding test-related thoughts or by studying. In both cases, coping may be successful because stress is reduced. However, a positive outcome results in the latter case only. Similarly, unsuccessful coping may result in positive or negative outcomes. Consider, for instance, a first date as a stressful encounter. Suppose attempts to be charming to cope with the stress are unsuccessful and, therefore, stress is not reduced. Unabated stress will result in an awkward, unpleasant date (a “negative” outcome). However, consider a different first date. Suppose now that attempts to flee the date to cope with the stress are unsuccessful. Again, stress is not reduced, but at least the person in

question will be on a date he or she presumably sought out (a “positive” outcome). These scenarios highlight the complexities involved in evaluating whether the outcomes of successful and unsuccessful coping will be positive or negative.

4. A “relevant other” could also be someone invested in the interaction, not the interaction partner per se. For example, if a friend introduces two unacquainted friends to one another, these two individuals may be motivated to have a pleasant interaction. They may be focused on their mutual friend, who clearly wishes for them to get along, and behave accordingly.

5. Here, it is worth noting that our stress and coping framework seems to impose categorical “judgments.” Individuals are either self-focused or partner-focused, threatened or challenged. We recognize that these judgments are likely not categorical. Many, if not most, individuals are probably self- and partner-focused during interracial contact, for instance. Still, individuals are likely to be more self-focused or more partner-focused. We believe that the dominant focus will determine how individuals proceed in the interaction. Likewise, individuals are likely to appraise their resources as relatively high or low; these resource appraisals are unlikely to be precise and/or certain. In other words, the judgments in our model are probabilistic and graded, not categorical, in nature. For ease of presentation, however, we articulate these differences as categorical.

6. It is important to note, however, that we make these predictions with the assumption that individuals’ goals are to have smooth and positive interactions. Different coping responses may be employed to deal with interracial contact given different goals. For example, highly prejudiced individuals who are unmotivated to have positive interracial interactions will likely antagonize out-group members when they are challenged or not experiencing any stress. Likewise, individuals motivated to denigrate an out-group member (perhaps to fit in with others who have negative racial attitudes) will likely antagonize, even when they are challenged or not experiencing any stress.

7. People may also learn strategies to engage that are ineffective, even counterproductive. For instance, research finds that many White Americans learn to manage their concerns about appearing prejudiced by attempting to appear “color-blind” (Apfelbaum, Pauker, Ambady, Sommers, & Norton, 2008). However, when these individuals attempt to appear “color-blind” during race-related discussions, they can seem more prejudiced, not less prejudiced (Apfelbaum et al., 2008; Norton, Sommers, Apfelbaum, Pura, & Ariely, 2006). Individuals may be better off not having the cognitive and/or physical resources to implement a misguided strategy in that case (Apfelbaum & Sommers, 2009). For individuals to positively engage, they need a confluence of resources including the cognitive and physical resources to implement appropriate and effective strategies. Using inappropriate or ineffective strategies (e.g., attempting to be color-blind during a race-related discussion) may not reduce stress and/or improve behavior during interracial contact (Apfelbaum & Sommers, 2009). Given an effective strategy, appropriate for the context (e.g., embracing multiculturalism during a race-related discussion in an intergroup context), we maintain that participants with resources will fare better than those with fewer resources (e.g., those who are depleted). One caveat is in order, however: If resources are high but not sufficiently high to result in challenge, then more resources can lead to more negative behavior (e.g., antagonizing rather than avoiding). In this case, depletion can indeed result in more positive behavior if it leads individuals to avoid or freeze rather than antagonize.

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