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Using Affirmation Theory to Further Understand the Distinction between the Individual Self and the Collective Self

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Abstract

Research in social psychology points to a discontinuity between the individual self and the collective self such that operating at the collective level of identity leads one to be more biased, defensive, and hostile than when operating at the individual level of identity. One area of research where this distinction is particularly apparent is that of identity threat and affirmation theory. Although affirming the self has been shown to reduce individual-level biases in the face of threat, affirming the group in response to a collective-level threat has been shown to accentuate biased tendencies. This may be a result of the inherent inflexibility of the collective self. Unlike self-affirmation, group-affirmation may induce a focus on a specific social identity and activate the psychological attributes (e.g., attitudes, stereotypes, and norms) pertinent to that identity which then guide subsequent thoughts, judgments, motivations, and behaviors. This raises the question, if the collective self is construed in this manner, are there certain contexts in which affirming the group can in fact lead to a reduction in bias and defensiveness in the face of threat? Two potential contexts are addressed in this research: (a) if the threat is to one’s individual-level identity (Study 1) and (b) if having unbiased attitudes are a component of the affirmed group’s psychological identity (Study 2). Affirming the group did not affect participants’ attributional tendencies following a self-threatening task performance. Group-affirmation did, however, increase positive attitudes towards certain out-groups for low-identifying group members. Also, unlike affirming the self, affirming the group did not protect participants’ self-esteem from either an individual-level threat or a collective-level threat, providing further support for the notion that self- and group-affirmation are distinct processes. The theoretical and practical implications of these findings are discussed.
USING AFFIRMATION THEORY TO FURTHER UNDERSTAND THE DISTINCTION BETWEEN THE INDIVIDUAL SELF AND THE COLLECTIVE SELF

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Using Affirmation Theory to Further Understand the Distinction between the Individual Self and the Collective Self

The relationship between the individual self and the collective self is a topic that has guided research in the field of social psychology for decades. In fact, Floyd Allport (1962) classifies the question of how best to conceptualize the nature of the individual and the group as the “master problem of social psychology” (p. 7). Although his analysis primarily refers to performance differences in individual and group settings (i.e., social facilitation effects), other researchers have reformulated this “problem” as the study of how the self is fundamentally defined at the individual and collective levels and the effects that these levels of representation have on interindividual and intergroup psychological processes and behavior (Brewer & Gardner, 1996). Many lines of research, for instance, seem to demonstrate that there is a fundamental distinction between individual-level processes and collective-level processes such that, when operating at the collective level of identity, one becomes more biased, hostile, and beholden to group-based norms and stereotypes than when operating at the individual level of identity (see Wildschut & Insko, 2007; Yzerbyt and Demoulin, 2010)

One area of research in which this distinction has become particularly manifest is identity threat and affirmation theory. Although it has been demonstrated that affirming one’s individual-level identity can be an effective strategy for reducing defensiveness and hostility in the face of self-threats (Sherman & Cohen, 2002), affirming a collective-level identity tends to be ineffective at countering group-level threats, sometimes even accentuating intergroup biases and hostility (Cehajic-Clancy, Effron, Halperin, Liberman, & Ross, 2011; Ehrlich & Gramzow, 2015). I posit that this distinction occurs because the collective self is inherently less flexible than the individual self, thus constraining one’s response to threat at that level of identity. Rather
than buffering against the threat, group-affirmation activates the attitudes and biases associated with the affirmed group’s identity, often leading to even more defensiveness. One question that arises from this perspective is whether there are any instances in which operating at the collective level of identity can actually reduce biased tendencies. For instance, under what circumstances might the group-level mind-set inspired by group-affirmation lead one to become less defensive, biased, and hostile in the face of threatening information? This question is explored in two studies. First, the effect of group-affirmation on the tendency to engage in individual-level biases in response to a self-threat is tested. Then, the question of whether affirming a group membership can lead to a reduction in bias at the collective level of identity is assessed in a specific context: namely, when being unbiased (e.g., having favorable attitudes towards certain out-groups) is a part of the affirmed group’s psychological identity.

The Individual Self and the Collective Self

When people engage with their social world, they act not just as individuals, but also as members of collectives with shared identities, goals, and perceptions (Abrams & Hogg, 2004). Social identity theorists (SIT; Tajfel & Turner, 1984) define the collective self (social identity) as the aspects of a person’s self-concept that are derived from his/her membership in various groups. In contrast, one’s individual self (personal identity) is composed of the idiosyncratic components of the self that differentiate oneself from other specific individuals (Brewer, 1991). SIT was formulated to explain the processes underlying intergroup behavior and is based on the notion that people continually strive to enhance or maintain positive self-images and, further, that group memberships are often central and important components of the self-concept (Tropp & Wright, 2001). Group members receive both material and psychological support from the in-
group (e.g., a sense of security and belonging), and these resources contribute to an individual’s overall sense of self-worth (Correll & Park, 2005).

The theoretical relationship between one’s personal and social identities was elaborated on by Turner, Hogg, Oakes, Reicher, and Wetherell (1987) in their development of self-categorization theory (SCT). SCT posits that the self can be categorized at different levels of abstraction, and that it is the social context that determines the level that is most salient at any given time. These levels range from the self as a unique individual to the self as the embodiment of an important in-group. When one’s individual identity is salient, personal needs, motives, and beliefs drive behavior. When a social identity is salient, a process of depersonalization occurs in which people begin to see themselves as “interchangeable exemplars” of their social category, and collective needs, motives, and beliefs become primary. It is at this social level of identity that group processes emerge (Turner, Oakes, Haslam, & McGarty, 1994). Brewer and Gardner (1996) further explore the nature of these levels of identity or “self-representations,” and argue that, when operating at the individual level, people tend to define themselves in terms of unique personal traits and use other in-group members as the basis for social comparison processes. When operating at the collective level, on the other hand, people define themselves in accordance with group prototypes and use intergroup differences as the basis for social comparison. Furthermore, shifting between levels of self-representation is a fluid and dynamic process, and people can readily alternate between operating as an individual and operating as a group member depending on the current social context.

Although the study of the collective self and intergroup processes requires a different level of explanation than the study of the personal self and interindividual processes (Hogg, 2003), it is often implied in the reasoning of social identity theorists that the psychological
processes taking place at these two levels of identity should be similar and operate in a parallel
fashion. In fact, Turner et al. (1994) state that the personal self and the collective self “arise from
the same general processes, and both are aspects of the normal variation of the self, a variation
built into its function (p. 460). For these researchers, the personal self and the collective self
represent the opposing ends of a “functionally antagonistic” continuum. In other words, as one’s
identification with a group becomes more and more salient, a corresponding functional decrease
in the salience of one’s personal self and its associated attributes takes place (and vice-versa).
The essential differences, then, between these two ends of the continuum are (a) what constitutes
“the self” (the individual versus a group prototype), (b) one’s frame of reference (interpersonal
versus intergroup comparisons), and (c) one’s basic social motivation (self-interest versus
collective interest) (Brewer & Gardner, 1996). Thus, according to this theoretical perspective, the
psychological processes themselves that occur at the individual level and collective level should
be similar.

This mind-set is echoed by researchers who have taken certain psychological constructs
traditionally studied at the individual level of identity and applied them to the collective level.
Luhtanen and Crocker (1992), for instance, developed a measure of collective self-esteem in an
effort to extend this individual-based personality variable to the collective level of identity. They
argue that, just as personal self-esteem is enhanced by making positive interpersonal
comparisons and engaging in positive biases that favor the self (Taylor & Brown, 1988),
collective self-esteem can be enhanced through positive intergroup comparisons (Crocker, Blain,
& Luhtanen, 1993). A similar extension has recently been put forth for the construct of
narcissism. Collective narcissism refers to an “emotional investment in an unrealistic belief
about the unparalleled greatness of an in-group” (Golec de Zavala, Cichocka, Eidelson, and
Jayawickreme (2009) p. 1074). Thus, collective narcissism is essentially an extension of the narcissistic trait to the collective level of identity in that it involves idealizing an in-group rather than the individual self. Additionally, similar relationships between narcissism and other personality traits, such as aggressiveness, have been shown to emerge at the individual and collective levels of identity. For example, as is the case with narcissism and individual-level threats, collective narcissism coupled with a threat to the in-group has been shown to produce aggressive, hostile, and derogatory reactions directed towards the group responsible for the threat (Golec de Zavala, Cichocka, & Bilewicz, 2013).

In addition to trait-level variables, researchers have begun to explore the applicability of various emotional processes typically analyzed at the individual and interpersonal level to that of the collective. For example, there is growing evidence that people can experience self-conscious emotions such as guilt and shame when operating as a group member (as opposed to as an individual). In other words, they report experiencing these emotions in response to acts committed (either in the past or present) by members of groups to which they belong even if they personally did not participate in such behavior (Tangney & Tracy, 2012). Furthermore, the factors that affect the experiencing of these collective emotions seem to parallel those that affect the experiencing of those emotions at the individual level (Allpress, Brown, Giner-Sorolla, Deonna, and Teroni, 2014). As is the case with interpersonal guilt, for instance, feelings of collective guilt stem from the committing of harmful acts perceived to be unjustified or illegitimate (Branscombe, Doosje, & McGarty, 2002).

A Discontinuity between the Individual Self and Collective Self

Despite the growing trend in the literature to take individual-level psychological constructs and apply them in a parallel fashion to the collective level of identity, I argue that this
transfer of process is not as clear-cut as some have posited (see Turner et al., 1994). Indeed, many lines of research in social psychology point to a fundamental distinction in how people think, feel, and behave when operating at the collective as opposed to the individual level of identity. In general, these lines of research indicate that a group-level mind-set seems to result in more aggressive and defensive responding and greater adherence to group-based norms and biases than an individual-level mind-set. Research on the interindivudual-intergroup discontinuity effect, for instance, reveals that there is a tendency for people to behave in a more competitive (and less cooperative) fashion when in intergroup situations than when in interpersonal situations (Insco, Schopler, Hoyle, Dardis, & Graetz, 1990). Using laboratory-based mixed-motive games such as the prisoner’s dilemma, researchers have discovered a distinct pattern such that participants tend to adopt more cooperative strategies and use more cooperative language when involved in one-on-one interactions than when the interactions involve groups of two or more (Insko et al., 1994). In fact, the number of people in each group has not been found to be a powerful determinant in the competitiveness of the behavior. The primary distinction comes when an interaction between individuals is compared to an interaction between groups, no matter the size (Schopler & Insko, 1992). The explanation for this effect which seems to have gained the most traction states that people are more prone to feelings of fear and greed when operating as a group member than when operating as an individual (Wildschut & Insko, 2007). This is attributed to the inherent sense of distrust that people tend to experience in intergroup situations, as well as to the influence of such depersonalizing factors as individual anonymity and adherence to in-group norms which foster antisocial tendencies.

Research from the perspective of appraisal theory and intergroup emotions (Smith, 1993) also emphasizes a discontinuity in terms of how people process their social environments at the
individual and collective levels of identity. Essentially, when operating as an individual, situations are appraised in terms of their relevance to one’s personal interests, whereas when operating as a group member, situations are appraised in terms of their relevance to the in-group as a whole. Thus, when a group identity is salient, people use it as a filter through which they assess the situation, react emotionally to it, and decide on a course of action. In their analysis, Yzerbyt and Demoulin (2010) argue that there is often a contrast in how these emotional appraisals affect one’s behavior. When operating at the personal level, they argue, individual emotional reactions to an event or situation shape behavior and attitudes. In contrast, when operating at the collective level, “people’s beliefs and actions are aligned with their understanding of those features that define their group as opposed to a salient outgroup” (p. 1048). Thus, the inherent comparative nature of the collective level of analysis has an indelible influence on how one interprets information and experiences a situation. For example, when asked to indicate their emotional reactions to out-group members as individuals, people’s ratings tend to be quite varied (containing both positive and negative elements) and based on their individual experiences and encounters with members of those groups (Dijker, Koomen, van den Heuvel, & Frijda, 1996). Conversely, when a specific social identity is made salient, people tend to appraise out-group members in terms of the content and characteristics associated with that particular intergroup relationship (e.g., differences in core values and perceived power dynamics) which often translate to negative attitudes and anti-social behavioral intentions towards out-groups (Mackie, Devos, & Smith, 2000; Ray, Mackie, Rydell, & Smith, 2008).

The distinction between individual and group-level processes is also emphasized by Brewer (1998) in her model of social categorization and person perception. She argues that, although social categorization, in general, is a process of partitioning “the multidimensional
variability among human begins into discrete subsets, accompanied by accentuation of perceived intracategory similarities and intercategory differences” (p. 695), distinct factors come into play when that categorization process involves social identities to which one belongs. She thus differentiates between “hot cognition” and “cold cognition” based on whether the in-group, and all its associated emotional significance, is involved in the person perception process. In cases of cold cognition, social categorization and differentiation occur when category prototypes, perceived trait distributions, and notions of the social meaning of categories are assigned based on experience and social learning, devoid of reference to the self-concept or any in-group. However, when the elements of self-referencing and social comparison become involved, and in-group-out-group differentiation occurs alongside categorization, cognition becomes “hot” and biased into “us-not us” terms based on the stereotypes and biases associated with one’s salient social identity. Thus, categorizing at the level of the collective tends to result in more bias and hostility than categorizing at the level of the individual.

**Self-Affirmation and Group-Affirmation**

One area of research in which the distinction between the individual and collective selves has received more recent attention is that of identity threat and affirmation. According to self-affirmation theory, people can counter threats to the individual-level self-concept and maintain a sense of integrity by affirming a valued domain of the self that is unrelated to the threat (Spencer, Fein, & Lomore, 2001; Steele, 1988). This can be accomplished, for example, by reflecting on a positive aspect of one’s self-concept or engaging in an activity that makes such an aspect salient, such as writing about an important self-relevant value (Crocker, Niiya, & Mischkowski 2008). While doing this, individuals experience a boost to their self-worth and become more confident and secure, enabling them to evaluate potentially self-threatening information in a less defensive
and biased manner. For example, people tend to interpret ambiguous self-relevant information in a manner that is consistent with their preexisting beliefs and desires (Nisbett & Ross, 1980). After affirming the self, however, people are more likely to consider evidence that contradicts their own beliefs or view an issue from perspectives other than their own (Sherman & Cohen, 2002). This self-affirmation effect extends to group-based threats and biases. If the motivation to protect the self is satisfied through self-affirmation, one can respond to information and threats relevant to one’s group memberships (other domains of the self) in a more objective way, thus making the group-serving biases normally exhibited following a threat less necessary. This bias-reducing pattern has been found in several group-based contexts, including group-serving attributions made by intramural sports teams (Sherman & Kim, 2005), perceptions of racism exhibited by in-group members (Adams, Tormala, & O’Brien, 2006), and self-reported ethnic prejudice (Zarate & Garza, 2002).

Because a plethora of studies have shown that affirming the self at the individual level can bolster the self-concept, reduce defensiveness, and mitigate self-serving biases (see McQueen & Klein, 2006), it has been posited that one should similarly be able to counter threats to one’s social identity and mitigate collective-level biases by affirming that group identity (such as reflecting on a value important to that group; Sherman, Kinias, Major, Kim, & Prenovost, 2007). Additionally, Derks, van Laar, and Ellemers (2009) argue that, to the extent that one’s personal identity and social identity overlap and are highly connected, it could be reasoned that group-affirmation should be just as effective at countering group-related threats as is self-affirmation. Thus, it might be expected that affirming a group identity will bolster one’s sense of self-integrity, making one more open to possible group-threatening information and mitigating the need to make group-serving judgments. Such an effect has not been produced consistently,
however. Although Gunn and Wilson (2011) did find that men (Experiment 1) and Canadians (Experiment 2) who performed a group-affirmation task were more willing to express feelings of collective guilt and shame after reading about historical in-group transgressions against women and Canadian Aboriginals, respectively, the bias-reducing effect of group-affirmation has not been reproduced in different contexts. Cehajic-Clancy et al. (2011), for instance, found that Israeli students who performed a self-affirmation task were more willing to express group-based guilt, acknowledge responsibility for wrongdoing, and support reparative measures with respect to the Israeli-Palestinian conflict. Students who performed a group-affirmation task, however, did not show this reparatory shift and continued to demonstrate a significant bias favoring the in-group.

In fact, some empirical findings seem to indicate that affirming a social identity can even exacerbate the tendency to exhibit group-level biases. Glasford, Dovidio, and Pratto (2009) found that students who were given the opportunity to affirm their American identities showed no increase in collective guilt after reading a report describing a bombing run made by American soldiers in which many foreign civilians were killed. Additionally, participants who affirmed their nationality exhibited less psychological discomfort after reading the report than did those who did not group-affirm, and this pattern was especially strong for those highly identified with their nationality. The authors explain this decrease in psychological discomfort following group-affirmation as a reduction in “intragroup dissonance.” This finding also suggests an increased willingness to tolerate in-group transgressions (and thus a greater tendency to exhibit biases favoring the in-group) among the group-affirmed. Additionally, I have found in my own research that affirming one’s political identity not only fails to reduce group-level political biases, but even intensifies them (thus having the opposite effect of self-affirmation; Ehrlich & Gramzow,
Specifically, I found that participants tended to evaluate members of the opposing political party more negatively than they evaluated members of their own party. This group-serving evaluative bias was magnified when participants first affirmed a value endorsed by the group (i.e., group-affirmation) compared to when they endorsed a personally held value (i.e., self-affirmation). Thus, rather than behaving in a concurrent fashion, self- and group-affirmation seem to have distinct effects on how one responds to identity threats such that affirming the collective self can lead to greater defensiveness and the strengthening of in-group biases.

**Affirmation Processes and the Nature of the Individual and Collective Selves**

Along with research on the discontinuity effect, intergroup appraisals and social categorization, I posit that the distinction between self- and group-affirmation effects reflect a fundamental difference between the nature of the individual and collective selves. Structurally, the individual self-concept is generally presented as being composed of a set of basic-level “self-aspects” encompassing various attributes, emotional states, roles, activities, and relationships (Markus & Wurf, 1987; Oyserman, Elmore, & Smith, 2012). The individual self is thus “inherently flexible in content and organization” (DeSteno and Salovey, 1997, p. 396) with the activation of one’s various attributes and roles being dependent upon one’s social context. Markus and Wurf use the example of having multiple tennis-related selves. Some situations, such as playing tennis against a friend, may activate one’s “good sport self,” whereas other contexts, such as playing in a competitive tournament, may activate one’s “win at all costs self.” Thus, the structure of the individual self lends itself to flexibility and malleability in terms of content and process.

The structure of the collective self, on the other hand, is more ambiguous. Brewer (1991), for instance, refers to the collective self and social identity as simply an “extension of the self”
beyond the level of the individual” (p. 476). Other researchers seem to fold specific group memberships into the same category as social roles and thus present social identities as relational aspects of the individual self-concept (e.g., McConnell, 2011). I suggest that the collective self can be construed as more or less a combination of those two ideas. Rather than as role-based components of one’s individual-level self, one’s multiple social identities can be conceived of as independent (although sometimes overlapping) branches extending out from one’s overall self-concept. When one group membership, or “branch,” becomes salient, one is more likely to think and behave in line with the attributes and guiding norms of that group (and intergroup situations in general). This notion fits in with the logic of Simon (1997) who posits that the individual self and the collective self differ in terms of the number of self-aspects that compose each of those selves. Whereas the collective self consists of one single, dominant self-aspect, the individual self is based on a comprehensive, non-redundant set of one’s total self-aspects. Additionally, research by Lowell Gaertner and colleagues (Gaertner, Sedikides, Vevea, & Iuzzini, 2002; Sedikides, Gaertner, Luke, O’Mara, & Gebauer, 2013) has shown that the individual self can be characterized as being “primary” as compared to the collective self (such that people tend to think more deeply about the individual self and defend and enhance it to a greater degree than the collective self). If the individual self is indeed one’s “psychological home base,” then it makes sense that it would be more complex and flexible than the individual branches representing various collective identities.

Conceptualizing the collective self in this manner implies that, when operating as a group member, one can become constrained by the norms and biases associated with that particular social identity, thus limiting one’s cognitive, affective, and behavioral flexibility. When operating as an individual, on the other hand, the self-concept is more malleable as one can
experience and respond to his/her social environment independent of any group-based frame. The rigidity which characterizes psychological processing at the collective level of identity is manifested in the findings discussed earlier with respect to self- and group-affirmation. A self-affirmation manipulation may provide a boost to the self by inducing a focus on positive aspects of one’s global (individual-level) sense of self, or “overall self-concept of worth” (Steele, 1988, p. 266), thus making aspects of the self that are related to certain group memberships less salient and mitigating the need to defend those identities. In fact, Critcher and Dunning (2015) demonstrate that affirming the self reduces defensiveness in the face of threat precisely because it expands the working self-concept, takes advantage of the flexible nature of the individual self, and directs attention away from the threatened domain.

On the other hand, it is possible that affirming the group does not produce the consistent, bias-reducing effect that affirming the self does because group-affirmation induces a focus on a specific social identity and activates the psychological attributes (e.g., attitudes, stereotypes, norms, behavioral tendencies, intergroup comparisons) pertinent to that identity. Once activated, this group-specific mindset guides subsequent thoughts, judgments, motivations, and behaviors. A by-product of this mindset would be an increase in biases that serve to establish, protect, and enhance the worth and integrity of the in-group. Thus, when the individual self is threatened in a specific domain, one can address that threat directly (such as by psychologically devaluing the importance of that domain) or indirectly by focusing on positive aspects of the self in other domains. At the collective level, however, this malleability may not be possible, resulting in greater defensiveness, competitiveness and adherence to group norms.

Furthermore, the distinct processes underlying self- and group-affirmation point to a larger psychological domain in which the enhanced flexibility of the individual self in
comparison to the collective self is especially evident: self-protection strategies and threat response. When one’s self-concept is threatened or devalued at either the individual level or the collective level, one becomes motivated to protect the self and engage in “affective, cognitive, and behavioral strivings that counteract threat, aiming to reestablish equanimity” (Sedikides, 2012, p. 328). At the individual level of identity, self-protection can take a multitude of forms. For instance, one can address the threat directly by altering how the threat (or the presumed implications of the threat) is construed (Campbell, Sedikides, Reeder, & Elliot, 2000), derogating or rejecting the source of the threat (Bourgeois & Leary, 2001), or shifting social comparison strategies to make oneself appear more favorable (Jordan & Monin, 2008). One can also protect the self through more indirect methods. These may include affirming the self-concept in a domain unrelated to the threat (as previously discussed), disengaging from a particularly threatening context (Leitner, Hehman, Deegan, & Jones, 2014), or strategically forgetting potentially self-threatening information (Shu, Gino, & Bazerman, 2011). Thus, people can be quite flexible in terms of how they react to individual-level threats to their self-concepts and self-affirmation is one manifestation of that flexibility.

Although self-protection is a malleable process when operating at the individual level of identity, potential responses to group-level threats tend to be constrained by the group-based norms and intergroup comparisons relevant to the threatened social identity. Hogg (2003) argues that social identities acquire meaning because in-groups are different from, and compared against, out-groups (although see Gaertner, Iuzzini, Witt, & Orina, 2006). Because of this, any sort of threat response or group-enhancing strategy (such as group-affirmation) is inherently based on this intergroup comparison process. Additionally, when identifying as a group member, “a person is influenced by group norms, behaves in line with those norms, and shares the
concerns and interests of the group” (Abrams & Hogg, 2004). Thus, one’s response to group-level threats will be constrained by the norms associated with that group. This limits the number of strategies one can use when countering threats at the intergroup level. For example, Ellemers and van Rijswijk (1997) posit that one can use either an “individual-level” or a “group-level” identity management strategy when confronted with a threat to one’s social identity. Essentially, they argue that one can either leave the threatened group (physically or psychologically) or engage in cognitive and behavioral processes “aimed at challenging the source of the threat and changing the present status configuration insofar as it is unfavorable to the in-group” (Ellemers, Spears, and Doosje, 2002, p. 176). Thus, when one affirms a collective identity in response to group-level threat, he/she is simply reinforcing the norms and intergroup comparisons associated with that group, making it even more likely he/she will challenge the threat by becoming more defensive and biased.

The Current Research

Research on the distinction between the individual and collective selves, particularly within the context of affirmation theory, suggests that, because of its inherent inflexibility, operating at the collective level of identity generally leads to the expression of thoughts, feelings, and behaviors that are defensive, biased, and even hostile in nature. Indeed, there is a substantial dearth of research touting the positive effects a group-level mind-set can have on one’s attitudes and behaviors. This raises the question of whether there are certain situations in which operating at the collective level of identity can, in fact, reduce, rather than exacerbate, biased tendencies. With respect to affirmation theory, are there contexts in which affirming the group can “work” such that it leads to a reduction in defensiveness and bias as does self-affirmation?
The current research explores two scenarios in which affirming one’s collective identity may buffer against threat and reduce defensiveness. The first is if the threat occurs at the individual level of identity. Just as affirming an aspect of the individual self can decrease bias following a threat to one’s collective identity (Ehrlich & Gramzow, 2015; Sherman & Kim, 2005), perhaps affirming an aspect of the collective self can reduce bias following a threat to one’s personal identity. In this context, the sense of belonging and other social resources (Correll & Park, 2005) one receives from his/her group membership can be used to bolster one’s feelings of self-worth in the face of the individual-level threat (Shnabel, Purdie-Vaughns, Cook, Garcia, & Cohen, 2013). Additionally, because there is no intergroup comparison process taking place at the individual level of identity, any attitudes and biases that affirming the group might activate are not likely to be relevant at that level. However, there is also research which suggests that affirming the group may not be an effective way to reduce individual-level biases. Work on the motivational primacy of the individual self (Gaertner et al., 2002; Sedikides et al., 2013), for instance, suggests that people are more reactive to threats and enhancements of the individual self than the collective self. Thus, a group-affirmation may not be potent enough to bolster the self in response to an individual-level threat. This question is explored in Study 1, which tests if affirming one’s collective identity (in comparison to one’s personal identity) provides a boost to the self-concept and reduces the tendency to make self-serving attributional biases following a poor performance on an intelligence task.

A second scenario in which affirming the group may have a bias-reducing effect is if being unbiased is a part of the affirmed group’s psychological identity. For instance, one may be a part of a group in which it is the norm to have favorable, unbiased attitudes towards certain out-groups. Thus, affirming that collective identity following a threat may activate those
favorable attitudes and reduce bias towards members of those groups. Some tangential evidence for this argument can be found in previous research. For example, the Israeli students in Cehajic-Clancy et al. (2011)’s study who affirmed their nationality may have shown no increase in collective guilt or responsibility because the biases and motives associated with their collective identities as “Israelis” had become more salient (presuming that, given the historical and ongoing intergroup tension, Israelis and Palestinians are not “supposed” to feel guilty or responsible for the suffering of the other group). On the other hand, Gunn and Wilson (2011) may have found an increase in feelings of collective guilt and shame for an in-group’s historical mistreatment of an out-group (men’s mistreatment of women and Canadians’ mistreatment of aboriginal tribes) after group-affirmation because that type of behavior is no longer considered socially acceptable. Thus, one’s “male” and “Canadian” identities may contain the sentiment that mistreatment of women and aboriginals, respectively, is wrong and that guilt and shame are the proper emotions to exhibit towards such transgressions. Study 2 tests this hypothesis directly and assesses whether affirming one’s political identity can simultaneously decrease biased attitudes towards those out-groups one’s political party considers favorable and increase biased attitudes towards groups considered unfavorable.

In addition to being the first known studies to directly test the effects of group-affirmation on defensiveness and bias in these two scenarios, this research also seeks to address two other theoretical issues relevant to the affirmation process. The first issue is the relationship between identity affirmation and self-esteem. Self-esteem is rarely mentioned directly in research on affirmation theory. Rather, self-affirmation is characterized as boosting one’s “sense of self-integrity” (Steele, 1988) or “general feelings of worth” (Sherman et al., 2007). It is unclear whether these descriptions refer to self-esteem or to a more abstract self-evaluative construct.
Generally, when self-esteem is included in a study on affirmation theory, it is conceptualized as a categorical moderator of affirmation effects (see McQueen and Klein, 2006). Very little work has tested whether affirming the self (or affirming the group) can protect one’s self-esteem in the face of identity threats. Koole, Smeets, van Knippenberg, and Dijksterhuis (1999) did find that affirming the self reduced ruminative tendencies and led to more positive name-letter evaluations (a general measure of self-worth) following a self-threat. More recently, Spencer-Rogers, Major, Forster, and Peng (2016) found that identity affirmation bolstered self-esteem following a threat to participants’ gender identities. The current studies test whether affirming the self and affirming the group can boost self-esteem following both an individual-level threat (Study 1) and a collective-level threat (Study 2).

The second issue relates to the timing of the affirmation manipulation. There is some ambiguity in the literature regarding whether people should be affirmed before or after a threat in order to effectively bolster the self-concept and reduce defensiveness. Because positive affirmation results have been reported in both scenarios, McQueen and Klein (2006) conclude that the timing of the affirmation is not a pertinent factor when it comes to assessing its effectiveness, especially considering the quickness with which experimental protocols proceed in most laboratory settings. More recent research by Critcher, Dunning, and Armor (2010), however, suggests that affirmation manipulations are most effective when they precede the threat (or at least precede the defensive conclusion that results from a threat). In the current research, the presentation order of threat and affirmation were counterbalanced to assess if this variable moderates the effectiveness of the manipulation.
STUDY 1

Study 1 serves as an initial test of whether affirming the collective self can bolster the self-concept and reduce bias in the face of a threat to the individual self. Specifically, it examines the effects of both self-affirmation and group-affirmation on the tendency of participants to respond defensively to poor performances on a word association test. It also directly tests the impact of self- and group-affirmation on participants’ self-esteem following this individual-level threat.

Defensiveness in the context of task performance can be conceptualized in several ways. One way is through the expression of self-serving attributional biases. People tend to make self-serving causal attributions for success and failure, such that when they succeed or perform well, they attribute their performances to internal causes, whereas when they fail or perform poorly, they attribute the outcome to external factors not under their control (Campbell & Sedikides, 1999). For example, following a poor task performance, people are more likely to attribute that performance to factors such as luck and task difficulty than to factors such as their own individual ability and effort (Snyder, Stephan, & Rosenfield, 1976). Defensiveness can also be conceptualized as the extent to which an individual “disengages” him/herself from the poor task performance. When feeling defensive after a threat, people tend to distance themselves from the threatening domain and report that performing well on such tasks is not an important component of who they are as individuals (Major, Spencer, Schmader, Wolfe, & Crocker, 1998). Finally, poor task performance can result in the experience of defensive mental states. “Challenge” and “threat,” for instance, are motivational states that reflect one’s perceptions of situational demands and personal resources in a given evaluative context (Blascovich & Mendes, 2000; Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001). When an individual perceives demands as
outweighing resources, a threat experience results, whereas when personal resources meet or exceed situational demands, a challenge experience results. Thus, when feeling defensive, individuals may experience more threat-related motivations and less challenge-related motivations. The current study assesses whether self-affirmation and group-affirmation can mitigate these defensive response tendencies.

**Group-Affirmation Selection Process**

The specific social identities to be affirmed in Study 1 were determined, in part, by the results of a pilot study in which undergraduate students from a participant pool were asked to indicate the most important groups to which they belonged. The results revealed that political party membership was the social identity selected most frequently behind only athletic team affiliation. Given the accessibility of political partisans on a college campus and the applicability of political affiliation to a broad range of people (as opposed to identification with a particular team or sport), political identity was selected as a group-affirmation context.

However, it could be argued that political affiliation is a unique social identity such that it is, by its very nature, divisive and bias-ridden (Ware, 2011). In fact, just the act of thinking about politics has been shown to increase peoples’ feelings of threat, hostility, and defensiveness (Ehrlich & Gramzow, 2015). It is quite possible, then, that affirming a political identity may behave differently from affirming other more “neutral” social identities. Because of this, a second group identity was introduced into the Study 1 protocol to ascertain if any potential group-affirmation effects are due to the nature of the group being affirmed or to the group-affirmation process more generally. The second social identity selected was national identity (e.g., “American”). The purpose of selecting this identity was to use a group membership that a wide range of participants would be able to identify with, but one that would not necessarily
have the potential to activate the hostility and bias so characteristic of the political context. Thus, participants in Study 1 completed either a self-affirmation task, a political party-affirmation task, a nationality-affirmation task, or a non-affirming control task.

**Hypotheses**

Based on previous research documenting a reduction in defensiveness following self-affirmation (e.g., Sherman & Cohen, 2002), it was hypothesized that participants who affirmed the individual self would be less likely to make defensive attributions for their poor performances on a word association task than participants who did not affirm at all. Specifically, it was predicted that self-affirmation would increase the tendency of participants to attribute their performances to the internal factors of individual ability and effort and decrease their tendency to attribute performances to the external factors of luck and task difficulty. Additionally, it was hypothesized that participants who affirmed the self would experience less threat-related emotions and more challenge-related emotions following the threat, report more engagement with the task domain, and demonstrate higher levels of self-esteem (a boost to their overall feelings of self-worth), relative to those who did not affirm.

Due to the lack of research exploring the link between group-affirmation and individual-level processes, no specific hypotheses were made regarding the effects of group-affirmation on performance attributions, challenge/threat, task engagement, and self-esteem. Based, on the “in-group as a social resource” model (Correll & Park, 2005), it could be predicted that affirming the group might behave in a similar fashion as affirming the self with respect to individual level biases. However, because the collective self is not primary (Gaertner et al., 2002), group-affirmation may not be as effective as affirming the self at countering individual-level threats.
Method

Participants and Design

A total of 415 undergraduate students in an introductory psychology course received partial course credit for participating in this study. The sample consisted of 262 women and 153 men aged 18 to 30 ($M = 18.64, SD = 1.13$). In terms of race/ethnicity, 76.4% of the sample identified as White, 8.9% as Asian, 5.3% as Black, 5.1% as Hispanic, 0.5% as Native American, and 0.5% as Pacific Islander. Another 3.1% identified as another race or as mixed race. Nearly all participants spoke English as a first language (95.3%).¹

Participants were randomly assigned to either the self-affirmation, nationality-affirmation, political party-affirmation, or non-affirmation (control) condition. This resulted in 104 participants being assigned to the self-affirmation condition, 105 participants to the nationality-affirmation condition, 104 to the political party-affirmation condition, and 102 to the non-affirmation condition. Sample size was determined using the general guideline of 100 participants per condition/cell, which results in 80% power to detect an effect size of $d = .40$ (the average effect size in social/personality psychology; see Funder et al., 2014).

Procedure and Measures

Participants completed an online questionnaire containing four sections. The first section consisted of informed consent and general demographic questions. The second section consisted of the affirmation manipulation. The third section consisted of the word-association task and self-threatening feedback, and the fourth section consisted of the reaction and attribution measures. These sections are described below.

Importantly, the presentation order of the affirmation manipulation task and the self-threatening task (the second and third sections) was counterbalanced across participants.
**Affirmation Manipulation.** Participants in the self-affirmation condition and the two group-affirmation conditions completed the standard values-affirmation task adapted from previous research (Cohen, Aronson, & Steele, 2000; Fein & Spencer, 1997; Gunn & Wilson, 2011). Participants were presented with 13 values (e.g., “Art/music,” “Social life,” “Concern for others”). Participants in the self-affirmation condition were asked to select the value that they thought was most important to them as individuals and to write a paragraph explaining how that value pertained to them and why they thought it was so important. Participants in the group-affirmation conditions were asked to select the value that they thought was most important to either their nationality or political party as a group. They were then instructed to write a paragraph explaining how that value pertained to their group and why members of that group thought it was important. Participants in the non-affirmation (control) condition were asked to list everything they had eaten or drank in the previous 48 hours. The non-affirmation instructions were taken from Cohen et al., who argue that participants can turn any values-based task (such as writing about an un-important value) into a self-affirming task and, thus, something completely irrelevant and arbitrary should be used as a control. The full text of the affirmation manipulation can be found in Appendix A.

**Self-Threatening Task.** All participants completed a difficult version of the Remote Associates Test (RAT; McFarlin & Blascovich, 1984), which is a word association task consisting of ten trials. For each trial, participants were presented with a series of three stimulus words and asked to think of a fourth word that, when combined with each of the stimulus words, resulted in word pairs that made up common compound words or phrases. In one trial, for example, participants were presented with the words “reading,” “service,” and “stick.” The correct answer for this item was “lip” because it could have been combined with each of the
stimulus words to create a new compound word/phrase (“lip reading,” “lip service,” and “lipstick”). Instructions for the RAT and all items that were used can be found in Appendix B. After completing all ten trials, participants were given their actual scores on the test (e.g., “You got three out of ten questions correct”).

Because of the difficulty of the RAT (and anticipated poor performance of the participants), the process of completing the test and receiving performance feedback was intended to be a source of threat. This task was selected specifically because it allowed participants’ self-concepts to be threatened without any deception or presentation of misinformation (as the performance feedback was accurate). The RAT used in this study was compiled by selecting three items categorized as easy and seven items categorized as difficult by McFarlan and Blascovich (1984). This was done to prevent participants from being completely overwhelmed by the difficulty of the task (as would likely be the case if all ten of the items were categorized as difficult).

**Dependent Measures.** Following the affirmation procedure and self-threatening task, all participants completed a series of dependent measures assessing their reactions to the RAT. One set of dependent measures assessed participants’ task performance attributions. Specifically, participants were presented with four possible causes that may have contributed to their performance on the RAT: Their effort, their ability, luck, and the difficulty of the task (see Snyder, Stephan, & Rosenfield, 1976). They then ranked these factors in the order in which they thought they had a significant impact on their performance (with a value of 1 being assigned to the most impactful factor and a value of 4 being assigned to the least impactful factor). Additionally, each of these primary factors was broken down into two separate unipolar sub-factors, resulting in eight attributional items (“Good luck,” “Bad luck,” “The task being easy,”
“The task being difficult,” “Ability to do well,” “Inability to do well,” “Putting in a lot of effort,” “Not putting in a lot of effort”). On a scale of 1 (not at all) to 7 (very much so), participants were asked to indicate the extent to which they thought that their performance was determined by each of these sub-factors.

Participants also completed a series of measures assessing their emotional reactions, engagement with the task domain, and state self-esteem following the RAT. Emotional reactions were assessed with a measure of participants’ experiences of challenge- and threat-related emotions (see Blascovich et al., 2001). Participants were asked to indicate the extent to which they felt three emotions related to a challenge motivational state (“Eager,” “Hopeful,” “Excited”) and three emotions related to a threat motivational state (“Fearful,” “Worried,” “Anxious”) on a scale from 1 (not at all) to 7 (extremely). Participants’ responses for the challenge emotions and threat emotions were averaged to produce one overall challenge variable (α = .74) and one overall threat variable (α = .82).

Engagement with the task domain was assessed with the disengagement subscale of the Intellectual Orientation Inventory (IOI; Major et al., 1998) which is a six-item measure assessing the extent to which people disengage themselves from negative feedback on intelligence tests. On a scale of 1 (not at all) to 7 (very much so), participants indicated the extent to which they agreed with statements such as, “Being good at tasks like this is an important part of who I am,” and “Doing well on intelligence tasks like this is very important to me.” Participants’ responses to these items were averaged to produce one overall task engagement variable (α = .76).

Finally, state self-esteem was assessed using Rosenberg’s (1965) self-esteem scale (with the instructions adapted to indicate how participants felt “right now”). On a scale of 1 (not at all) to 7 (very much so), participants indicated the extent to which they agreed with statements such
as, “I take a positive attitude toward myself,” and “On the whole, I am satisfied with myself.” Participants’ responses to these items were averaged to produce one overall state self-esteem variable (α = .85). The order of all dependent measures was counterbalanced. (See Appendices C-F for a complete list of dependent measures.)

**Analysis Plan**

The primary analyses for Study 1 consisted of a series of one-way ANOVAs exploring the effect of affirmation condition (self-affirmation vs. nationality-affirmation vs. political party-affirmation vs. non-affirmation) on participants’ task performance attributions, challenge/threat experiences, task domain engagement, and state self-esteem. Additionally, several exploratory tests were run based on the results of these primary analyses.

**Results**

**RAT Performance**

As intended, participants generally performed poorly on the RAT ($M = 2.89; SD = 1.95$). Nevertheless, a small number of participants performed well. Those who did well presumably would not experience the intended self-esteem threat and, thus, would have little need to engage in self-serving attributions or disengage from the task. Thus, participants who correctly answered eight or more of the ten items correctly ($n = 14$) were removed from subsequent analyses. Of the remaining 401 participants, 99 had been randomly assigned to the non-affirmation condition, 102 to the self-affirmation condition, 102 to the nationality-affirmation condition, and 98 to the political party-affirmation condition.

**Affirmed Values**

There was some variation across affirmation condition in terms of the specific values that participants chose to write about. The majority of participants who self-affirmed ($n = 102$)
selected either “Family” (37.3%) or “Relationships” (15.7%) as their most important value. The next most-selected values were “Honesty” (9.8%) and “Independence” (8.8%), with all other values being selected by less than five percent of those who self-affirmed. Participants who affirmed their nationality \( (n = 102) \) tended to affirm on either “Family” (32.4%) or “Independence” (25.5%). The next most-selected values for these participants were “Physical Attractiveness” (8.8%), “Social Life” (7.8%), and “Relationships” (6.9%). Finally, for participants who affirmed their political party, there was a dichotomy between those who identified as Democrats and those who identified as Republicans. For Democratic participants who affirmed their party \( (n = 70) \), a majority selected “Concern for Others” (55.5%) as their party’s most important value. The next most-selected values were “Independence” (15.7%) and “Social Life” (7.1%). For Republican participants \( (n = 28) \), a majority selected “Independence” (53.6%) as their party’s most important value, with “Family” (17.9%) and “Religion/Spirituality” (17.9%) being the next most-selected values.

**Task Performance Attributions**

Correlations among each of the individual performance attribution measures can be found in Table 1. A general linear model (GLM) procedure was used to examine the effects of affirmation condition on the extent to which participants attributed their performance on the RAT to specific internal and external factors (see Table 2 for means and standard deviations within each condition).

Overall, participants tended to attribute their performance on the RAT to the task being difficult \( (M = 4.82, SD = 1.46) \) to a greater extent than to the task being easy \( (M = 2.21, SD = 1.20) \), their ability to do well \( (M = 3.48, SD = 1.47) \), their inability to do well \( (M = 3.80, SD = 1.53) \), their effort \( (M = 3.33, SD = 1.41) \), their lack of effort \( (M = 3.45, SD = 1.57) \), good luck \( (M \)
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= 2.12, SD = 1.33), and bad luck (M = 2.43, SD = 1.45). Importantly, there was no difference across affirmation conditions for any of these performance attributions: the task being difficult (F(3, 397) = .92, p = .43), the task being easy (F(3, 397) = .90, p = .44), participants’ ability (F(3, 397) = .15, p = .93), participants’ lack of ability (F(3, 397) = 1.40, p = .24), participants’ effort (F(3, 397) = 1.40, p = .24), participants’ lack of effort (F(3, 397) = 1.22, p = .30), good luck (F(3, 397) = .89, p = .45), and bad luck (F(3, 397) = .32, p = .81).

This trend played out with the attribution rankings as well, with task difficulty being ranked most impactful overall (M = 1.79, SD = .92), followed by effort (M = 2.34, SD = .95), ability (M = 2.35, SD = .96), and luck (M = 3.52, SD = .87). There was also no difference across affirmation conditions for participants’ rankings of these four primary attributions: task difficulty (F(3, 397) = 1.48, p = .22), ability (F(3, 397) = .78, p = .51), effort (F(3, 397) = .50, p = .69), and luck (F(3, 397) = 1.59, p = .19).

**Challenge/Threat, Task Engagement, and Self-Esteem**

Correlations among challenge emotions, threat emotions, task engagement, and state self-esteem following the self-threatening task can be found in Table 3. A GLM procedure was used to examine the effects of affirmation condition on each of these variables (see Table 4 for means and standard deviations within each condition).

There was no difference across affirmation condition for participant experiences of challenge-related emotions, (F(3, 397) = 1.23, p = .30), or threat-related emotions, (F(3, 397) = .97, p = .41). There also was no difference across affirmation condition for task engagement, (F(3, 397) = 1.55, p = .20). Overall, participants did not experience much challenge (M = 2.80, SD = 1.30) or threat-related emotions (M = 2.57, SD = 1.42) after completing the RAT.
Participants also reported feeling relatively disengaged from the task domain \((M = 2.98, SD = 1.19)\). These descriptive statistics reflect responses on a seven-point scale.

For state self-esteem, however, there was a significant difference across affirmation conditions, \(F(3, 397) = 2.86, p = .037, \eta^2_{\text{partial}} = .021\). Contrast analyses revealed that this pattern was driven by participants in the self-affirmation condition (see Figure 1). Participants who self-affirmed \((M = 5.46, SD = .94)\) reported significantly higher levels of state self-esteem than participants who affirmed their political party \((M = 5.04, SD = 1.06; F(1, 397) = 8.27, p = .004, \eta^2_{\text{partial}} = .02)\). Self-affirmed participants also reported marginally higher levels of state self-esteem than those who affirmed their nationality \((M = 5.19, SD = 1.08; F(1, 397) = 3.53, p = .061, \eta^2_{\text{partial}} = .01)\) and those who were not affirmed at all \((M = 5.21, SD = 1.05; F(1, 397) = 2.92, p = .089, \eta^2_{\text{partial}} = .007)\). Finally, participants who self-affirmed reported significantly higher levels of state self-esteem compared to participants in all other conditions combined, \(F(1, 397) = 7.01, p = .008, \eta^2_{\text{partial}} = .017\).

The state self-esteem of participants in the two group-affirmation conditions did not differ significantly from one another, \(F(1, 397) = 1.03, p = .31\). Additionally, participants who group-affirmed did not differ from those who were not affirmed at all, \(F(1, 397) = .59, p = .45\). Thus, although self-affirmation protected participants’ self-esteem following a threat to the individual self, affirming a group identity (either nationality or political party) did not have this same buffering effect.

**Affirmation/Threat Order**

The previous analyses were re-run with affirmation-threat order included as a potential moderator. The order in which participants completed the affirmation manipulation (before or after the self-threatening task) did not have an impact on task performance attributions,
threat/challenge emotions, task engagement, or self-esteem. Order also did not moderate the effect of affirmation condition on any of the dependent measures.

**Exploratory Analyses**

Because the comparison between participants in the self-affirmation condition and those in the other affirmation conditions produced a distinct pattern with respect to self-esteem, this relationship was further analyzed with several exploratory tests. Specifically, after examining the pattern of means for each dependent variable, the comparison between self-affirmed participants and all other participants was tested for the task engagement variable. Although there was no omnibus effect of affirmation condition on engagement ratings, contrast analyses revealed that participants who self-affirmed reported less engagement with the task domain than participants in all other conditions combined, $F(1, 397) = 4.53, p = .034, \eta^2_{partial} = .011$).

From this analysis, the link between task engagement and self-esteem, based on affirmation condition, was explored. Specifically, it was hypothesized that, when comparing self-affirmed participants to all other participants, task engagement might mediate the relationship between affirmation condition and state self-esteem. A simple mediation analysis using Hayes’ (2013) PROCESS macro was used to test this pattern. As can be seen in Figure 2, participants in the self-affirmation condition reported being less engaged with the RAT performance domain than participants in all other affirmation conditions ($b = .29, t(399) = 2.13, p = .034, 95\% \text{ C.I.} [0.02, 0.56]$). Additionally, controlling for affirmation condition, the less engagement participants expressed, the greater was their state self-esteem, ($b = -.28, t(398) = -6.75, p < .001, 95\% \text{ C.I.} [-0.36, -0.20]$). A bias-corrected bootstrap confidence interval for the indirect effect ($b = -.08, SE = .04$) based on 10,000 bootstrap samples did not include zero (-0.17 to -0.004). The direct effect of affirmation condition on self-esteem remained significant, however, ($b = -.23,$
\( t(398) = -2.05, p = .041, 95\% \text{ C.I. } [-0.45, -0.01] \). Thus, task disengagement partially mediated the effect of self-affirmation (compared to all other conditions) on participant state self-esteem.

Discussion

Study 1 explores the previously untested question of whether affirming the collective level of identity can counter threats and reduce bias at the individual level of identity. This was not found to be the case. In terms of attributional biases, neither self-affirmation nor group-affirmation affected the extent to which participants attributed self-threatening task performances to internal (ability, effort) or external (luck, task difficulty) factors. Additionally, affirmation condition did not have an overall effect on participants’ experience of challenge or threat-related emotions. The lack of an affirmation effect on task attributions was especially surprising given the wealth of research demonstrating the effectiveness of self-affirmation at mitigating self-serving biases (McQueen & Klein, 2006; Sherman & Cohen, 2002). It may be the case that the RAT was simply too difficult to elicit any variation in attributions across conditions. On both the specific attribution items and the rank-ordering of importance, participants across the board indicated that task difficulty was the most important determinant in how they performed. Thus, task difficulty may have overwhelmed any affirmation effect that may have been taking place.

However, there was an overall effect of affirmation condition on participants’ self-esteem following the threat. This effect was driven by self-affirmation, such that the self-esteem of self-affirmed participants was buffered following the threat, whereas those who affirmed a group identity (or did not affirm at all) did not exhibit a self-esteem boost. Thus, there was a discrepancy between the process of affirming the individual self and the process of affirming the collective self. Self-affirmation protected self-esteem from an individual-level threat, whereas group-affirmation did not. This pattern supports my underlying hypothesis that affirming the self
and affirming the group are theoretically distinct processes, and suggests that group-affirmation may not be an effective means of protecting the individual self from threat. Additionally, because the collective self is not “primary” (Gaertner et al., 2002), affirming at that level of identity may not produce an effect that is potent enough to translate to the individual level of identity (as is the case when one self-affirms to counter group-level threats).

Finally, exploratory analyses were run assessing the relationship between self-affirmation, task engagement, and self-esteem. When comparing self-affirmation to all other affirmation conditions, it was found that engagement partially mediated the effect of self-affirmation on state self-esteem. Participants that self-affirmed became less engaged with the self-threatening task domain than those who did not self-affirm, and this resulted in higher levels of state self-esteem. This pattern of results does not support the hypothesis that affirming the self reduces defensiveness by leading participants to become more engaged with the threatening task domain. However, this finding does make sense within the context of recent research on the cognitive mechanisms underlying self-affirmation. Critcher and Dunning (2015), for instance, argue that self-affirmation “works” because it expands the working self-concept and reduces focus on the threatened domain, thus allowing one’s sense of self-worth to realign with a broader dispositional view of the self. Less task engagement could be a manifestation of this broadening process. It should be emphasized, however, that these analyses were exploratory in nature, and thus need to replicated before a definitive conclusion can be drawn. Additionally, because these data are cross-sectional, and the order of the dependent variables was counterbalanced, one cannot be certain whether this model reflects the true causal path.
STUDY 2

Whereas Study 1 tests whether affirming the collective self can bolster self-esteem and reduce bias at the individual level of identity, Study 2 addresses the question of whether affirming the group can reduce bias while still operating at the collective level of identity. According to my theoretical model of the collective self, this might be the case if a reduction in bias corresponds with the psychological attributes (e.g., attitudes, behavioral tendencies) that define or are otherwise pertinent to the specific group identity that is affirmed. For example, in the context of American political parties, it might be considered a part of one’s party identity to possess favorable, benevolent attitudes towards some groups of people and unfavorable, hostile attitudes towards others. For instance, it might be part of one’s Republican identity to view Palestinians or undocumented immigrants negatively but Israelis or gun enthusiasts positively. On the other hand, it might be a part of one’s Democratic identity to demonstrate the opposite attitudinal pattern. Thus, although people may have a general tendency to be hostile and biased when operating in a group-level mind-set, I argue that these tendencies can be kept in check if there is a group-based norm in place that promotes positivity.

Study 2 was designed to test whether affirming one’s political identity can decrease collective-level bias, as defined by a greater expression of favorable attitudes towards out-groups one’s political party is “supposed” to view favorably, following a group-level threat. If group-affirmation activates the psychological attributes associated with the affirmed identity, then those positive attitudes towards favorable out-groups should be more prevalent for those that group-affirm than those that do not. Additionally, Study 2 tests whether a group-affirmation procedure can also increase group-level bias, as defined by a decrease in the expression of favorable attitudes towards out-groups one’s political party is not “supposed” to view favorably, following
a threat. Thus, group-affirmation should simultaneously decrease and increase out-group biases based on what is prescribed by one’s political identity.

**Out-Group Selection Pilot Study**

In order to determine which groups of people the Republican and Democratic parties find to be more and less favorable, and thus which groups would be used as the out-groups in Study 2, a pilot study was conducted. In this study, a sample of political partisans was presented with a list of groups (e.g., Evangelical Christians, Muslims, illegal immigrants, police officers) and asked to indicate how favorably they viewed members of those groups on a scale from 1 (*not at all favorably*) to 7 (*extremely favorably*). The list of groups was taken from Chambers, Schlenker, and Collisson’s (2013) analysis of political intolerance. They argue that there are certain groups which people tend to identify as being more liberal-leaning or conservative-leaning, and that people tend to be less tolerant of those groups that they perceive as leaning towards the opposing political ideology.

Group selection was based on two criteria. First, there needed to be sufficient spread between Republican and Democratic participants’ ratings of the group in the pilot study. In practice, this meant that favorability ratings needed to be above the mid-point for participants from one party and below the mid-point for participants from the other party in order to be considered “favorable” and “unfavorable,” respectively. Additionally, the selected groups needed to be considered out-groups by most potential participants. For instance, although “people who are pro-choice” received highly polarized ratings, it was likely that any sample collected for Study 2 would include a substantial proportion of people that consider themselves pro-choice. Thus, that group was not selected.
From this list of groups, four were chosen to be included as the out-groups in Study 2. Two of those groups were Republican-leaning: police/law-enforcement officers and gun-rights activists. Two of those groups were Democratic-leaning: welfare recipients and undocumented/illegal immigrants.

Hypotheses

Participants in Study 2 were presented with a group-threatening stimulus (an article presenting threatening information about the political party with which they identified) and either affirmed the self, affirmed their political party, or did not affirm at all. They then completed a series of measures assessing their attitudes towards the favorable and unfavorable out-groups selected in the pilot study. Finally, the individual-level factors of challenge/threat experiences and state self-esteem were assessed following the threat and affirmation.

In order to capture a broad swath of participants’ overall attitudes towards the out-groups, three distinct constructs were assessed: positive and negative emotional reactions towards out-group members, general evaluations (e.g., positive versus negative) of out-group members, and prosocial behavioral intentions towards out-group members. Additionally, because a number of studies have shown that group identification predicts greater levels of intergroup bias (e.g., Aberson, Healy, & Romero, 2000; Ehrlich & Gramzow, 2015), participants’ identification with their political party was also assessed.

Based on previous research documenting the power of self-affirmation to reduce collective-level biases (e.g., Sherman & Kim, 2005), it was hypothesized that participants who affirmed the self would demonstrate an increase in positive emotional reactions, evaluations, and behavioral intentions towards members of all four out-groups, regardless of their own political affiliation. Thus, even for out-groups with which they are “supposed” to view unfavorably, the
general bias-reducing effect of self-affirmation should make participants view them more positively. Crucially, however, it was hypothesized that participants who affirmed their political party would show a boost in positive attitudes only towards members of the groups they are “supposed” to have favorable attitudes towards (based on their political affiliation). In fact, it was predicted that participants who group-affirmed would demonstrate a decrease in positivity towards unfavorable out-groups. Additionally, it was hypothesized that political party identification would moderate any effect of affirmation condition on out-group attitudes.

Finally, as was the case with the individual-level threat from Study 1, it was hypothesized that those who self-affirmed would exhibit higher levels of state self-esteem (a boost to their overall feelings of self-worth) following the group-level threat, whereas those who group-affirmed (or did not affirm at all) would not show this boost.

**Method**

**Participants and Design**

A total of 533 participants took part in Study 2. This sample size was based on a formal power analysis that accounted for the inclusion of a continuous-level moderating variable (viz., party identification). Rather than relying on the general recommendation of Funder et al. (2015) to recruit 100 participants per cell, GPower was used to determine an appropriate sample size. With one three-level factor (affirmation: control, self, group) and one continuous moderator (party identification), and assuming a small effect size for the affirmation by identification interaction ($\eta^2_{\text{partial}} = .02$), a sample size of roughly 480 would be required to achieve .80 power for this design. In order to guard against loss of data due to partial completion of the survey, total recruitment was set to include an additional 50 participants.
In an effort to get a diverse sample, participants were recruited from both a university participant pool and from Amazon’s Mechanical Turk. The sample consisted of 129 undergraduate students in an introductory psychology course and 404 Amazon Mechanical Turk workers currently residing in the United States. Undergraduate participants received partial course credit for participating, whereas Mechanical Turk workers received $1. Overall, 268 men and 265 women aged 18 to 74 ($M = 31.87$, $SD = 12.10$) participated. In terms of race/ethnicity, 77.7% of the sample identified as White, 9.6% as Asian, 6.0% as Hispanic, 4.7% as Black, 0.9% as Native American, and 0.2% as Pacific Islander. Another 0.9% identified as another race or as mixed race. Nearly all participants were United States citizens (96.6%) and spoke English as a first language (95.3%).

Participants were randomly assigned to either the self-affirmation, political party-affirmation, or non-affirmation (control) condition. This resulted in 174 participants being assigned to the self-affirmation condition, 168 participants to the political party-affirmation condition, and 191 to the non-affirmation condition.

**Procedure and Measures**

Participants completed an online questionnaire containing four sections. The first section consisted of informed consent, general demographic questions, and a measure of political party identification. The second section consisted of the affirmation manipulation. The third section consisted of the group-threatening stimulus, and the fourth section consisted of the out-group evaluation measures. These sections are described below.

Importantly, the presentation order of the affirmation manipulation and group-threatening information (the second and third sections) was counterbalanced across participants.
**Political Party Identification.** Participants first indicated whether they were a Democrat, a Republican, or an Independent. If participants indicated that they were Independents, they were asked if they saw themselves as closer to the Republican or Democratic Party. This selection of political party affiliation determined which political party was threatened as well which out-groups were classified as favorable and unfavorable for each participant. Overall there were a total of 248 Democrats, 116 Republicans, and 169 Independents. When Independents were collapsed across the party in which they felt closest to, the final sample consisted of 351 Democrats and 182 Republicans.

Additionally, as an index of party identification, participants were asked to indicate how strongly they identified with both the Republican and Democratic parties on a seven-point scale ranging from 1 (not at all) to 7 (extremely).

**Affirmation Manipulation.** The affirmation procedure was identical to that of Study 1 for participants in the self-affirmation condition, political party-affirmation condition, and non-affirmation (control) condition. The nationality-affirmation condition was not central to the current set of hypotheses and thus was not included in Study 2.

**Group-Threatening Information.** All participants read a brief article summarizing the results of a recent study that assessed the relative intelligence of Democrats and Republicans. Participants read that, using a variety of tests, analysts from an independent research group found that their political party was less intelligent than the opposing party. They also read that this difference was quite significant and held up even when controlling for demographic factors such as race, gender, age, and socioeconomic status (see Appendix G for the full text of the article). The article was taken from an online source (Last, 2015) and edited slightly for content, grammar, and flow. Democratic and Republican participants read articles that were identical in
content, except for the name of the political party described as less intelligent. Democratic participants read that Democrats were less intelligent, whereas Republican participants read that Republicans were less intelligent. This threat-inducing method was chosen because it focused on a specific aspect of participants’ political identities (their group’s intelligence), thus providing an avenue for them to affirm a different, unrelated dimension of their political identities.

Additionally, it has been demonstrated that receiving negative feedback about the intelligence of one’s group as a whole is a reliable way to induce a threat response from individual members (Hunter, Platow, Bell, & Kypri, 1997; Martiny, Kessler, & Vignoles, 2011).

**Dependent Measures.** Following the affirmation manipulation and group-threatening stimulus, all participants completed a series of dependent measures assessing their attitudes towards the four out-groups that were determined by the group-selection pilot test: police/law enforcement officers, gun-rights activists, people on welfare, and undocumented/illegal immigrants. For each of the four out-groups, these measures consisted of items assessing specific emotional reactions towards members of that out-group, a general out-group evaluation measure, and a measure of behavioral intentions towards that out-group.

Out-group emotional reactions were assessed with the group-based Anger/Fear/Respect Index (Mackie et al., 2000; Rey et al., 2008). For this measure, participants indicated the extent to which they felt various negative emotions (e.g., “Afraid,” “Furious”) and positive emotions (e.g., “Admiring,” “Appreciative”) towards members of each out-group on a scale ranging from 1 (*not at all*) to 7 (*very much so*). Participants’ responses for the negative emotions and the positive emotions were averaged for each group producing eight outcome variables: negative emotions regarding police/law-enforcement officers (α = .94), positive emotions regarding police/law-enforcement officers (α = .90), negative emotions regarding gun-rights activists (α =
.96), positive emotions regarding gun-rights activists (α = .92), negative emotions regarding welfare recipients (α = .91), positive emotions regarding welfare recipients (α = .90), negative emotions regarding undocumented/illega immigrants (α = .94), and positive emotions regarding undocumented/illega immigrants (α = .89).

General out-group evaluations were assessed with a six-item measure adapted from Voci and Hewstone (2003). Participants rated their general attitudes towards each out-group on several evaluative dimensions using a 7-point semantic differential scale (e.g., “cold-warm,” “positive-negative,” “hostile-friendly”). Participants’ ratings were averaged for each group producing four outcome variables: police/law enforcement officer evaluations (α = .95), gun-rights activist evaluations (α = .96), welfare recipient evaluations (α = .94), and undocumented/illega immigrant evaluations (α = .96).

Finally, behavioral intentions towards out-group members were assessed with a 5-item measure adapted from Husnu and Crisp (2010). On a scale ranging from 1 (highly unlikely) to 7 (highly likely), participants indicated the likelihood that they would engage in various contact-promoting behaviors with members of each out-group in the near future. Such behaviors included interacting with members of those groups and donating money to organizations that support those groups. Participants’ responses to the behavioral items were averaged for each group producing four outcome variables: behavior towards police/law enforcement officers (α = .89), behavior towards gun-rights activists (α = .89), behavior towards welfare recipients (α = .88), and behavior towards undocumented/illega immigrants (α = .90). A full list of the out-group attitudinal measures can be found in Appendices H-J.

Participants also completed the same challenge/threat reaction scale and state self-esteem scale from Study 1. Participants’ responses for the challenge emotions, threat emotions, and state
self-esteem were averaged to produce one overall challenge variable (α = .84), one overall threat variable (α = .86), and one overall self-esteem variable (α = .94). The presentation order of all dependent measures was counterbalanced across participants.

**Analysis Plan**

The primary analyses for Study 2 consisted of a series of general linear model (GLM) procedures testing the effects of affirmation condition (self-affirmation vs. political party-affirmation vs. non-affirmation), political party identification (a centered continuous variable), and the Affirmation X Identification interaction on participants’ emotional reactions, general evaluations, and behavioral intentions towards favorable and unfavorable out-groups. Regression analyses were then run to break down any interaction effects at low and high levels of party identification. Additionally, one-way ANOVAs exploring the effect of affirmation condition on participants’ challenge/threat experiences and state self-esteem were also conducted.

**Results**

**Affirmed Values**

As was the case in Study 1, there was some variation across affirmation condition in terms of the specific values that participants chose to write about. The majority of participants who self-affirmed (n = 174) selected either “Family” (27.6%), “Independence” (15.5%) or “Relationships” (12.1%) as their most important value. The next most-selected values were “Honesty” (8.0%) “Art/Music” (7.5%) and “Sense of Humor” (7.5%), with all other values being selected by less than five percent of those who self-affirmed. For participants who affirmed their political party, there was a dichotomy between those who identified as Democrats and those who identified as Republicans. For Democratic participants who affirmed their party (n = 106), a majority selected “Concern for Others” (70.8%) as their party’s most important value. The next
most-selected values were “Independence” (10.4%) and “Social Life” (5.7%). For Republican participants (n = 62), a majority selected either “Independence” (33.9%) or “Family” (24.2%) as their party’s most important value, with “Religion/Spirituality” (17.7%) being the next most-selected value.

**Out-Group Attitudinal Measures**

For each out-group attitudinal measure (negative emotions, positive emotions, general evaluations, and behavioral intentions), participants’ responses were averaged for the two groups that their political party views as favorable and the two groups that their party views as unfavorable. Thus, for Republican participants, responses for police/law-enforcement officers and gun-rights activists were averaged to create favorable group measures, and responses for welfare recipients and undocumented/illegal immigrants were averaged to create unfavorable group measures. This resulted in a total of eight variables assessing participants’ attitudes towards out-groups: negative emotions towards unfavorable groups, negative emotions towards favorable groups, positive emotions towards unfavorable groups, positive emotions towards favorable groups, general evaluations of unfavorable groups, general evaluations of favorable groups, behavioral intentions towards unfavorable groups, and behavioral intentions towards favorable groups. Correlations among each of these variables can be found in Table 5.

**Out-Group Emotions.** A general linear model (GLM) procedure was used to examine the effects of affirmation condition (Affirmation: self, group, control), political party identification (Identification: centered continuous predictor), and the Affirmation X Identification interaction on participants’ emotional reactions towards members of favorable out-groups and unfavorable out-groups. Analyses were run separately for favorable groups and unfavorable groups as well as for negative emotions and positive emotions.
For the negative emotions towards unfavorable groups, only the party identification main effect was significant, $F(1, 527) = 13.83, p < .001, \eta^2_{\text{partial}} = .026$. Overall, the more participants identified with their political party, the stronger their negative emotional reactions towards unfavorable out-group members. There was not a significant affirmation condition main effect, $F(2, 527) = 1.14, p = .32$, nor a significant interaction between party identification and affirmation condition, $F(2, 527) = .88, p = .42$. For the negative emotions towards favorable groups, the party identification main effect, $F(1, 527) = 1.28, p = .24$, affirmation condition main effect, $F(2, 527) = .85, p = .43$, and Identification x Affirmation interaction all failed to reach significance, $F(2, 527) = 1.32, p = .27$.

For the positive emotions towards unfavorable groups, the party identification main effect was marginally significant, $F(1, 527) = 3.32, p = .069, \eta^2_{\text{partial}} = .006$. There was not a significant affirmation condition main effect, $F(2, 527) = .65, p = .52$, nor a significant interaction between party identification and affirmation condition, $F(2, 527) = .53, p = .59$.

For the positive emotions towards favorable groups, the party identification main effect was significant, $F(1, 527) = 14.01, p < .001, \eta^2_{\text{partial}} = .026$. Overall, the more participants identified with their political party, the stronger their positive emotional reactions towards group members. There was also a significant affirmation condition main effect, $F(2, 527) = 6.40, p = .002, \eta^2_{\text{partial}} = .024$. This was qualified by a significant interaction between party identification and affirmation condition, $F(2, 527) = 6.18, p = .002, \eta^2_{\text{partial}} = .023$.

In order to specify the precise pattern contributing to the overall interaction, a series of regression analyses were run to examine the effects of affirmation condition (a between-subjects factor) on positive emotions towards favorable out-group members at low and high levels of political party identification (a continuous variable). High and low levels of identification were
defined as one standard deviation above and below the mean, respectively. As shown in Figure 3, the effect of party identification on positive group emotions was significant only for participants in the non-affirmation condition, $b = .36$, $SE = .07$, $t(527) = 5.17$, $p < .001$, 95% C.I. [0.22, 0.50]. There was no effect of identification on emotional reactions for participants in the self-affirmation condition, $b = .06$, $SE = .07$, $t(527) = .87$, $p = .39$, or the political party-affirmation condition, $b = .05$, $SE = .08$, $t(527) = .63$, $p = .53$. Additionally, the identification effect was significantly stronger in the non-affirmation condition than in both the self-affirmation condition, $b = .30$, $SE = .10$, $t(527) = 3.05$, $p = .002$, 95% C.I. [0.12, 0.49] and the party-affirmation condition, $b = .31$, $SE = .11$, $t(527) = 2.98$, $p = .003$, 95% C.I. [0.11, 0.52]. The identification effect in the self- and party-affirmation conditions did not differ significantly from one another, $b = .01$, $SE = .10$, $t(527) = .11$, $p = .92$. Thus, only for participants who did not affirm, the more they identified with their political party, the stronger their positive emotional reactions to favorable out-groups.

Looking specifically at participants with low levels of party identification, the predicted mean of positive emotional reactions was significantly lower in the non-affirmation condition than in either the self-affirmation condition, $b = .51$, $SE = .23$, $t(527) = 2.24$, $p = .026$, 95% C.I. [0.06, 0.95] or party-affirmation condition, $b = .71$, $SE = .24$, $t(527) = 3.01$, $p = .003$, 95% C.I. [0.25, 1.17]. Predicted means for the self- and party-affirmation conditions did not differ from one another, $b = .20$, $SE = .23$, $t(527) = .88$, $p = .38$. At high levels of identification, the predicted mean was significantly higher in the non-affirmation condition than in the self-affirmation condition, $b = .46$, $SE = .22$, $t(527) = 2.03$, $p = .042$, 95% C.I. [0.02, 0.90], but not the party-affirmation condition, $b = .29$, $SE = .23$, $t(527) = 1.25$, $p = .21$. Once again, predicted means for
the self- and party-affirmation conditions did not differ from one another, $b = .17$, $SE = .24$, $t(527) = .70$, $p = .49$.

**General Out-Group Evaluations.** A general linear model (GLM) procedure was used to examine the effects of affirmation condition (Affirmation: self, group, control), political party identification (Identification: centered continuous predictor), and the Affirmation X Identification interaction on participants’ general evaluations of members of favorable out-groups and unfavorable out-groups. Analyses were run separately for favorable groups and unfavorable groups.

For the general evaluations towards unfavorable groups, neither the party identification main effect, $F(1, 527) = .73$, $p = .39$, affirmation condition main effect, $F(2, 527) = 1.48$, $p = .23$ nor Identification x Affirmation interaction were significant, $F(2, 527) = 1.21$, $p = .30$. For the general evaluations towards favorable groups, however, the party identification main effect was significant, $F(1, 527) = 17.12$, $p < .001$, $\eta^2_{partial} = .031$. Overall, the more participants identified with their political party, the more favorable their out-group evaluations. There was also a significant affirmation condition main effect, $F(2, 527) = 5.93$, $p = .003$, $\eta^2_{partial} = .022$. This was qualified by a significant interaction between party identification and affirmation condition, $F(2, 527) = 5.73$, $p = .003$, $\eta^2_{partial} = .021$.

In order to specify the precise pattern contributing to the overall interaction, a series of regression analyses were run to examine the effects of affirmation condition (a between-subjects factor) on general evaluations towards favorable out-group members at low and high levels of political party identification (a continuous variable). High and low levels of identification were defined as one standard deviation above and below the mean, respectively. As shown in Figure 4, the effect of party identification on general evaluations was significant only for participants in
the non-affirmation condition, $b = .27$, $SE = .05$, $t(527) = 5.30$, $p < .001$, 95% C.I. [0.17, 0.37].

There was no effect of identification on evaluations for participants in the self-affirmation condition, $b = .06$, $SE = .05$, $t(527) = 1.19$, $p = .24$, or the political party-affirmation condition, $b = .05$, $SE = .06$, $t(527) = .86$, $p = .39$. Additionally, the identification effect was significantly stronger in the non-affirmation condition than in both the self-affirmation condition, $b = .21$, $SE = .07$, $t(527) = 2.92$, $p = .004$, 95% C.I. [0.07, 0.35] and the party-affirmation condition, $b = .22$, $SE = .08$, $t(527) = 2.89$, $p = .004$, 95% C.I. [0.07, 0.37]. The identification effect in the self- and party-affirmation conditions did not differ significantly from one another, $b = .01$, $SE = .08$, $t(527) = .15$, $p = .88$. Thus, only for participants who did not affirm, the more they identified with their political party, the more positive their evaluations of favorable out-groups.

Looking specifically at participants with low levels of party identification, the predicted mean of general evaluations was significantly lower in the non-affirmation condition than in either the self-affirmation condition, $b = .33$, $SE = .16$, $t(527) = 2.04$, $p = .042$, 95% C.I. [0.01, 0.66] or party-affirmation condition, $b = .51$, $SE = .17$, $t(527) = 2.98$, $p = .003$, 95% C.I. [0.17, 0.84]. Predicted means for the self- and party-affirmation conditions did not differ from one another, $b = .17$, $SE = .17$, $t(527) = 1.03$, $p = .30$. At high levels of identification, the predicted mean was significantly higher in the non-affirmation condition than in the self-affirmation condition, $b = .33$, $SE = .16$, $t(527) = 2.04$, $p = .042$, 95% C.I. [0.01, 0.65], but not the party-affirmation condition, $b = .20$, $SE = .17$, $t(527) = 1.16$, $p = .25$. Once again, predicted means for the self- and party-affirmation conditions did not differ from one another, $b = .14$, $SE = .17$, $t(527) = .79$, $p = .43$.

**Out-Group Behavioral Intentions.** A general linear model (GLM) procedure was used to examine the effects of affirmation condition (Affirmation: self, group, control), political party
identification (Identification: centered continuous predictor), and the Affirmation X Identification interaction on participants’ prosocial behavioral intentions towards members of favorable out-groups and unfavorable out-groups. Analyses were run separately for favorable groups and unfavorable groups.

For behavioral intentions towards unfavorable groups, neither the party identification main effect, $F(1, 527) = .01, p = .95$, affirmation condition main effect, $F(2, 527) = .75, p = .47$ nor Identification x Affirmation interaction were significant, $F(2, 527) = 1.17, p = .31$. For behavioral intentions towards favorable groups, however, the party identification main effect was significant, $F(1, 527) = 31.66, p < .001, \eta^2_{partial} = .057$. Overall, the more participants identified with their political party, the more favorable their behavioral intentions towards out-group members. Although there was not a significant affirmation condition main effect, $F(2, 527) = 2.26, p = .11$, there was a significant interaction between party identification and affirmation condition, $F(2, 527) = 3.17, p = .043, \eta^2_{partial} = .012$.

In order to specify the precise pattern contributing to the overall interaction, a series of regression analyses were run to examine the effects of affirmation condition (a between-subjects factor) on behavioral intentions towards favorable out-group members at low and high levels of political party identification (a continuous variable). High and low levels of identification were defined as one standard deviation above and below the mean, respectively. As shown in Figure 5, the effect of party identification on behavioral intentions was significant for participants in the non-affirmation condition, $b = .34, SE = .06, t(527) = 5.41, p < .001, 95\% \text{ C.I.} [0.22, 0.47]$, the self-affirmation condition, $b = .13, SE = .06, t(527) = 2.05, p = .04, 95\% \text{ C.I.} [0.006, 0.25]$. and the political party-affirmation condition, $b = .17, SE = .07, t(527) = 2.39, p = .017, 95\% \text{ C.I.} [0.03, 0.31]$. However, the identification effect was significantly stronger in the non-affirmation
condition than in the self-affirmation condition, $b = .21$, $SE = .09$, $t(527) = 2.37$, $p = .017$, 95% C.I. [0.04, 0.39] and marginally stronger than in the party-affirmation condition, $b = .18$, $SE = .10$, $t(527) = 1.84$, $p = .067$, 95% C.I. [-0.36, 0.01]. The identification effect in the self- and party-affirmation conditions did not differ significantly from one another, $b = .04$, $SE = .10$, $t(527) = .41$, $p = .68$. Thus, for all participants, the more they identified with their political party, the stronger their prosocial behavioral intentions towards favorable out-groups. However, this effect was stronger for those who did not affirm.

Looking specifically at participants with low levels of party identification, the predicted mean of behavioral intentions in the non-affirmation condition was not significantly different than the predicted means in either the self-affirmation condition, $b = .13$, $SE = .21$, $t(527) = .63$, $p = .53$, or the party-affirmation condition, $b = .34$, $SE = .21$, $t(527) = 1.58$, $p = .12$. Predicted means for the self- and party-affirmation conditions also did not differ from one another, $b = .21$, $SE = .21$, $t(527) = .99$, $p = .32$. At high levels of identification, the predicted mean was significantly higher in the non-affirmation condition than in the self-affirmation condition, $b = .55$, $SE = .20$, $t(527) = 2.72$, $p = .007$, 95% C.I. [0.15, 0.95], but not the party-affirmation condition, $b = .22$, $SE = .21$, $t(527) = 1.05$, $p = .29$. Once again, predicted means for the self- and party-affirmation conditions did not differ from one another, $b = .33$, $SE = .22$, $t(527) = 1.53$, $p = .13$.

All of the previous analyses were re-run with affirmation/threat order included as a potential moderator. It was found that the order in which participants completed the affirmation manipulation (before or after the group-threatening stimulus) did not have an impact on any of the out-group attitudinal measures.
Individual-Level Reactions and Order Effects

A GLM procedure was also used to examine the effects of affirmation condition on participants’ experience of challenge and threat related emotions and state self-esteem following the group-level threat (see Table 6 for means and standard deviations broken down by condition).

There was no difference across affirmation condition for participant experiences of challenge-related emotions, $F(2, 530) = .81, p = .45$, or threat-related emotions, $F(2, 530) = 1.66, p = .19$.

Overall, there was no main effect of affirmation condition on participants’ state self-esteem, $F(2, 527) = .92, p = 0.40$. However, there was a marginally significant interaction between self-esteem and presentation order, $F(2, 527) = 2.87, p = 0.058, \eta^2_{\text{partial}} = 0.011$. Simple effects analyses revealed that this pattern was driven by participants in the self-affirmation condition (see Figure 6). For participants who self-affirmed, those who affirmed before the threat ($M = 5.82, SD = 1.20$) reported significantly higher levels of state self-esteem than those who affirmed after the threat ($M = 5.35, SD = 1.27$; $F(1, 527) = 5.02, p = .025$). There was no such effect of order for participants in either the non-affirmation condition, $F(1, 527) = .54, p = .46$, or party-affirmation condition, $F(1, 527) = 1.36, p = .24$. Additionally, among those who affirmed before the threat, there was a significant affirmation effect, such that those who affirmed the self ($M = 5.82, SD = 1.20$) reported higher levels of self-esteem than those who affirmed their political party ($M = 5.27, SD = 1.44$) or did not affirm at all ($M = 5.57, SD = 1.29$; $F(2, 527) = 3.03, p = .033$). There was no effect of affirmation condition on self-esteem among participants who affirmed following the threat, $F(2, 527) = .33, p = 0.72$. Thus, although self-affirmation
protected participants’ self-esteem following a threat to the collective self (although this effect was marginal), affirming one’s political party identity did not have this same buffering effect.

Discussion

Study 2 tests whether group-affirmation can reduce collective-level biases if certain unbiased attitudes are a core component of the affirmed group’s identity. Specifically, it tests the hypothesis that, in contrast to affirming one’s individual self which should lead to a general increase in positive attitudes towards all out-groups, regardless of political leaning, affirming one’s political party identity should only lead to an increase in positivity towards out-groups one’s party views favorably. Additionally, affirming one’s political party should lead to a decrease in positivity towards out-groups one’s party views unfavorably. Partial support was found for this hypothesis. Although affirmation condition did not affect participants’ attitudes towards unfavorable out-groups, it did interact with political party identification to influence positive emotional reactions, general evaluations, and prosocial behavioral intentions towards favorable out-groups. Specifically, affirming the group boosted positive out-group attitudes, particularly for those who did not identify strongly with their political party (although this effect was much weaker for the measure of behavioral intentions). Thus, for those who affirmed their political party, the relationship between party-identification and out-group attitudes was weakened, such that all participants responded more like highly identified group members. A similar bias-reducing pattern (although not quite as strong) was found for participants who self-affirmed.

This finding of a general de-coupling of party-identification from positive out-group attitudes following affirmation fits in with the notion that while affirming the self can lead to a general reduction in bias, affirming the group can also reduce bias if it is a part of that group’s
identity. However, the lack of an affirmation effect (or affirmation-identification interaction) on participants’ attitudes towards unfavorable out-groups is surprising. In fact, there seemed to be a lack of movement in general with respect to the unfavorable out-group attitudes such that even the party-identification main effects were weak and inconsistent. This is somewhat unexpected, especially given previous research documenting the hostility and negativity that tends to characterize politically-relevant attitudes (e.g., Ware, 2011). One explanation is that participants may have been hesitant to express negativity towards the specific out-groups used in this study for fear of coming across as “politically incorrect” or “bigoted” (seeing as all of the groups are associated with sensitive political issues). It also might be the case that, although attitudes towards the favorable out-groups are a core component of one’s political identity (and thus can be influenced by identification and affirmation), attitudes towards the unfavorable groups are not. For instance, an important part of one’s Democratic identity may be feelings of positivity and support for welfare recipients and undocumented immigrants, whereas negativity towards police officers and gun-rights activists may not be a core part of this identity.

Study 2 also assessed the effect of self- and group-affirmation on participants’ individual-level responses to the collective-level threat. Although affirmation condition had no effect on challenge/threat experiences, a distinction did emerge between self-affirmation and group-affirmation with respect to participants’ levels of state self-esteem. Only participants who affirmed their individual selves before the threat received a boost to their self-esteem (although this interaction effect was marginal). Those who affirmed their political party did not receive this boost, regardless of when they affirmed.
GENERAL DISCUSSION

Research in a multitude of social psychological domains points to a fundamental distinction between individual-level processes and collective-level processes. One overarching finding is that when operating at the collective level of identity, people tend to behave in a more aggressive and defensive manner and adhere to group-based norms and biases to a greater extent than when operating at the individual level of identity. I posit that this occurs because a collective-level mind-set limits one’s psychological flexibility, causing one to think, feel, and behave more in line with the norms, attitudes and biases of a specific group identity (as well as the intergroup context as a whole). The distinction between the individual self and the collective self is particularly apparent in research on identity threat and affirmation theory. Although affirming the individual self consistently reduces defensiveness and bias in the face of individual-level threats (Cohen et al., 2000; Fein & Spencer, 1997), affirming the collective self does not consistently reduce, and in some cases exacerbates, bias in the face of collective-level threats (Cehajic-Clancy et al., 2011; Ehrlich & Gramzow, 2015). I argue that this distinction occurs because self-affirmation capitalizes on the flexible nature of the individual self (allowing one to bolster the overall self-concept in a different domain), whereas group-affirmation induces a focus on a specific social identity, activating its associated psychological attributes and increasing one’s susceptibility to defensiveness and bias.

However, it is possible that affirming the collective self need not necessarily make one more biased. Indeed, the purpose of the current research is to provide a direct test of whether there are certain situations in which affirming a group identity can actually decrease defensiveness and bias. One potential situation is if the group-affirmation is in response to a threat to the individual self. Theoretically, it may be hypothesized that, just as affirming the
individual self can reduce collective-level biases (Sherman & Kim, 2005), affirming the collective self should reduce individual-level biases. This question was explored in Study 1. Participants completed a self-threatening word association task and either affirmed their individual selves, affirmed their collective selves, or did not affirm at all. They then completed a series of measures assessing task performance attributions, challenge/threat experiences, engagement with the task domain, and state self-esteem. Neither self- nor group-affirmation had an impact on performance attributions, challenge/threat emotions, and task engagement. However, there was an effect of affirmation condition on self-esteem, such that participants who affirmed their individual selves reported higher levels of state self-esteem following the self-threat than participants who affirmed their collective selves (or did not affirm at all). Additionally, an exploratory mediation analysis revealed that this effect of self-affirmation on self-esteem was partially mediated by participants’ disengagement from the self-threatening task domain.

The lack of an effect of affirmation condition on performance attributions is surprising. It was predicted that, based on a large body of research touting the effectiveness of self-affirmation (McQueen & Klein, 2006; Sherman & Cohen, 2002), participants who affirmed their individual selves would be more willing to make self-threatening attributions for their poor performances on the RAT than those who did not affirm. This outcome is potentially a result of the nature of the task. It may have been the case that the difficulty of the word associations overwhelmed participants’ experiences to the point that any sort of affirmation may have been ineffective. Indeed, it was found that, regardless of affirmation condition, participants attributed their performance to the difficulty of the task more so than any other factor. Despite not having an effect on performance attributions, affirming the individual self did bolster participants’ state
self-esteem following the self-threat. Affirming the collective self, however, did not have this self-bolstering effect. This points to a distinction between affirming at the individual level as opposed to the collective level of identity.

A second situation in which affirming the collective self may decrease bias is if certain unbiased attitudes are core components of the affirmed group’s identity. It may be the case, for example, that an important part of a particular group identity (such as a political party) is having positive, benevolent attitudes towards certain out-groups. If it is the case that group-affirmation activates the psychological constructs associated with that particular identity, then less biased attitudes (in this case, positive out-group attitudes) should become more prevalent after the affirmation. This hypothesis was tested in Study 2. Participants read an article that presented threatening information about their political party and completed either a self-affirming, political party-affirming, or a non-affirming task. They then completed a series of measures assessing their attitudes towards two out-groups that members of their political party tend to view favorably and two out-groups that members of their political party tend to view unfavorably. Although affirmation condition did not affect attitudes towards unfavorable out-groups, it did interact with party identification to alter emotional reactions, general evaluations, and positive behavioral intentions towards favorable out-groups. Specifically, affirming the group boosted positive out-group attitudes, particularly for those participants who did not identify strongly with their political party. Thus, for those who group-affirmed, the relationship between group identification and out-group attitudes was weakened, such that all participants behaved more like high-identifiers. A similar pattern of results was found for those who self-affirmed.

Additionally, a distinction between self-affirmation and group-affirmation emerged with respect to participants’ state self-esteem following the group-level threat. Only participants who
affirmed their individual selves before the threat received a boost to their self-esteem (although this interaction effect was marginal). Those who affirmed their political party did not receive this boost, regardless of when they affirmed. Thus, a similar dichotomy between self- and group-affirmation was found in both Study 1 and Study 2. Self-affirmation protected the self from both individual-level threats and collective-level threats, but group-affirmation did not.

To summarize, affirming the collective self did not lead to a self-concept boost and reduction in bias in response to an individual-level threat (although affirming the individual-self also did not reduce bias). However, group-affirmation did reduce bias in response to a collective-level threat when unbiased attitudes (defined as positive emotional reactions, evaluations, and prosocial behavioral intentions towards out-groups) were a component of the affirmed group’s psychological identity.

**Theoretical Implications**

The findings from Study 1 and Study 2 have implications for affirmation theory as well as for the theoretical nature of the individual and collective selves more broadly.

**Affirmation Theory.** Although some researchers operate under the assumption that self- and group-affirmation should behave analogously in the face of threats to the individual and collective selves, respectively (Derks et al., 2009; Sherman et al., 2007), a substantial amount of research seems to indicate that affirming the self and affirming the group are two distinct processes (Cehajic-Clancy et al., 2011; Ehrlich & Gramzow, 2015; Glasford et al., 2009). When focused on the personal self, an affirmation task consistently reduces both self and group-serving biases. Research suggests that this occurs because self-affirmation broadens one’s focus away from the threatened domain and onto one’s overall self-concept of worth, rendering judgments and biases related to other specific self-aspects or identities less psychologically relevant.
(Critcher & Dunning, 2015). Support for this process was found in the current research. Although affirming the self did not have an impact on self-serving attributional biases, it did bolster the self-esteem of participants in response to both an individual-level threat (Study 1) and a collective-level threat (Study 2). The notion that self-affirmation broadens one’s focus was also supported by the exploratory results of Study 1’s mediation model. Although definitive conclusions from this analysis cannot be reached due to the cross-sectional nature of the data and post-hoc reasoning, it was found that participants who self-affirmed tended to be less engaged with their task performance than those in all other affirmation conditions. This disengagement, in turn, predicted higher levels of state self-esteem. Thus, participants tended to be less focused on the specific domain of their self-concept associated with the threat, and this was related to a tendency to feel better about themselves overall.

Rather than inducing a broader focus on the overall self-concept, I argue that group-affirmation narrows one’s focus onto a specific group-level identity. In doing so, group-affirmation activates the psychological attributes (e.g., attitudes, stereotypes, norms, behavioral tendencies, intergroup comparisons) pertinent to that group membership. Once activated, this group-specific mindset guides subsequent thoughts, judgments, motivations, and behaviors. In many instances, a by-product of this mindset would be an increase in biases that serve to establish, protect, and enhance the worth and integrity of that group. In the case of the current research, however, when positive out-group attitudes were a part of the affirmed group’s psychological make-up, group-affirmation increased that out-group favorability (specifically for those who were not already highly identified with the in-group). Additionally, if group-affirmation does indeed narrow one’s focus onto a particular social identity (as opposed to one’s
overall feelings of worth), then it makes sense that affirming the group did not provide a boost to participants’ self-esteem in response to threat.

Three other issues related to affirmation theory are worth further discussion in light of these findings. The first is the relationship between identity affirmation and self-esteem. The direct link between self-affirmation and state self-esteem has not been assessed very often in the literature. Generally, when self-esteem is included in a study on affirmation theory, it is treated as a moderator of affirmation effects rather than an outcome (e.g., Creswell et al., 2005). The current research builds off of the limited work exploring the effect of self-affirmation on self-esteem (Koole et al., 1999; Spencer-Rogers et al., 2016), by reinforcing the notion that self-affirmation can bolster self-esteem following both an individual-level and collective-level threat. It also emphasizes the distinction between affirming the individual self as opposed to affirming the collective self, such that group-affirmation was not effective at bolstering the self following threat.

The second theoretical issue relates to the timing of the affirmation manipulation. Although some researchers have concluded that whether the affirmation is administered before or after the threat is not a pertinent factor when it comes to assessing its effectiveness (McQueen & Klein, 2006), I found that order did play a minor role. Although self-affirmation bolstered participants’ self-esteem after an individual-level threat in Study 1 regardless of order, it only buffered against the collective threat in Study 2 if it was performed before participants were exposed to the group-threatening information. This discrepancy could be due to the nature of the threat. Critcher et al. (2010) argue that self-affirmation is most effective at providing a boost to the self-concept if it occurs before a defensive threat-response is initiated. The RAT performed by participants in Study 1 was a long, difficult task that likely consumed a considerable amount
of cognitive resources. It may have taken those participants longer to process the threat and initiate a response than the participants in Study 2 who were only exposed to a quick, direct group-level threat. Thus, those who self-affirmed after the threat in Study 2 may have already initiated their defensive processes by the time they began the manipulation, whereas for those participating in Study 1, this was not the case.

The final issue relates to what constitutes an affirmation process. Specifically, these findings (and the findings in the affirmation theory literature more generally) seem to question the notion that one can truly be affirmed at the collective level of identity. If performing a group-affirmation task does not bolster one’s self-concept and triggers a process that is qualitatively distinct from performing a self-affirmation task (as is being posited here), is it even possible to “affirm” the collective self? Perhaps the group-affirmation process differs depending on the nature of the affirmation procedure. Although this research employed the traditional and commonly used values-affirmation manipulation, it may be the case that a less immersive manipulation (such as receiving positive feedback about the in-group) will be able to provide a boost to self-worth without necessarily “activating” the collective-level mind-set and making attitudes and biases associated with that group identity psychologically predominant.

**Nature of the Individual and Collective Selves.** I believe that the findings from the current research fit within a theoretical model in which the collective self is conceptualized as a collection of multiple, independent social identities, or “branches” extending out from one’s overall self-concept. When a specific group membership, or “branch,” becomes salient (as is likely the case when one affirms a group identity), one becomes psychologically constrained and thus more prone to thinking and behaving in line with the attributes and guiding norms of that group. In Study 2, for example, participants who affirmed their political party identity exhibited
a relatively high level of favorability towards out-groups they were “supposed” to feel favorable towards based on their political party membership. When operating as an individual, on the other hand, (such as following an affirmation of the personal self) the self-concept becomes more malleable as one can experience and respond to his/her social environment independent of any group-based frame. Thus, participants in both Study 1 and Study 2 who self-affirmed showed a boost in self-esteem following threat, whereas those who group-affirmed did not. These findings also fit in with the notion that the individual self is motivationally primary (as compared to the collective self; Gaertner et al., 2002; Sedikides et al., 2013). Indeed, if the individual self is one’s “psychological home base,” then it would be expected that affirming at that level of identity would be more effective at countering threats, maintaining self-esteem, and decreasing bias than affirming the collective level of identity.

One finding that seemingly runs counter to the notion that affirming the individual self and affirming the collective self are qualitatively distinct processes is the similar effect of self- and group-affirmation on positive out-group attitudes in Study 2. However, although affirming the self and affirming the group led to the same outcome, it is possible that it was through different mechanisms. In fact, it was initially hypothesized that, because self-affirmation tends to bolster feelings of overall self-worth and lead to a reduction in bias across domains, those who self-affirmed would exhibit positive attitudes towards out-group members. I would argue that group-affirmation, on the other hand, led to this similar result through an activation of the group enhancing attitudes consistent with participants’ specific political identities.

**Practical Implications**

Although the current research has a heavy theoretical focus, there are also practical implications of these findings. One implication is the comparative effectiveness of self- and
group-affirmation to effect change. Research shows that affirming the individual self can be used as an effective intervention for a variety of social purposes, such as enhancing academic achievement, reducing stereotype threat, and improving health outcomes (Cohen & Sherman, 2014). The current research suggests that affirming the collective identity, however, may not have these same benefits. If group-affirmation does not adequately boost feelings of self-worth or reduce bias and defensiveness in response to self-threats, interventions that target this level of identity may not have the potency to produce the desired results. Thus, when attempting to improve academic achievement of minority students or encourage college students to heed messages promoting safe sex, for example, affirmation interventions should target the individual level of identity rather than the collective.

An affirmation of one’s collective identity may be especially detrimental when the goal is to effect change at the intergroup level. In situations of group-based competition and conflict, for example, events that affirm one’s group membership may further intensify the conflict, rather than mitigate it. It might be expected, for instance, that if a group achieves success (such as a political party winning an election), the affirmation that results from that success will bolster group members’ feelings of self-worth, thus making them more amenable to compromise and working with out-groups. The group-affirmation effects found in the current and previous research, however, seem to indicate that this would not be the case. Rather, reminders of group success and importance are likely to create even more division and ingroup-favoring tendencies by reinforcing the ideals, goals, and attributes that make the “affirmed” group unique. This activation of the group’s psychological attributes would subsequently guide future behavior towards out-groups. If performing a short affirmation task can have a significant effect on intergroup attitudes, it is not a stretch to believe that naturally occurring group-affirming
mechanisms or events (such as subtle reminders of group distinctions or important values) could be a detriment to peaceful intergroup interactions.

Finally, this research raises the practical question of whether it is possible to bolster the self-concept and reduce intergroup bias while still operating at the collective level of identity. Some of the most effective strategies for reducing intergroup bias and conflict rely on processes that break down group boundaries and detach individuals from their collective identities. This can be done directly through interventions that seek to alter the identity level at which individuals categorize themselves and out-group members (e.g., Rey et al., 2008) or indirectly through processes such as intergroup contact, which involves breaking down group boundaries through a personalization of individual out-group members (Pettigrew & Tropp, 2006). Even self-affirmation reduces group-level bias by shifting one’s focus away from the threatening group-level domain (Ehrlich & Gramzow, 2015). In many group-based contexts, however, this escape from the collective mind-set is not possible. Based on the current findings, one potential strategy for reducing biased thinking while still operating as a group member might be to make unbiased attitudes a core component of the in-group’s psychological identity. For example, interventions designed to reduce partisan political conflict may find success by framing controversial policy positions or intergroup dialogue in a manner that fits in with the group’s existing goals and values.

Limitations

Although this work has some interesting theoretical and practical implications, there are also some limitations to these studies that should be addressed. First, as discussed above, the individual-level threat used in Study 1 may have overwhelmed participants, making it difficult to draw any definitive conclusions regarding the effects of self- and group-affirmation on self-
serving attributional biases. It cannot be confirmed, for instance, if affirming the group failed to reduce individual-level biases because of the nature of the threat or because of a general lack of effectiveness of group-affirmation. I believe that this study should be re-run with a new threat that has the power to elicit differences across affirmation condition. This could be done in the context of a threatening health message. There is ample evidence that affirming the individual self makes people more willing to acknowledge health risks associated with harmful behaviors such as smoking and excessive alcohol consumption (Armitage, Harris, & Arden, 2011; Sweeney & Moyer, 2015). A future study should assess whether affirming the collective identity can also reduce defensiveness in the face of such health-related threats.

A second limitation relates to how collective-level bias was conceptualized in Study 2. One of the underlying questions of this research is whether group-affirmation might reduce collective-level bias if a reduction in bias is a core component of the affirmed group’s identity. In the current research, reduction in collective-level bias was defined as an increase in positive attitudes towards out-groups that participants’ political parties tend to view favorably. It could be argued, however, that harboring more favorable attitudes towards groups one is supposed to like is actually an exemplification of increased bias (such that individuals become more biased towards the groups they are already supposed to view favorably). I think it would be useful to replicate the conceptual findings of Study 2 with a more direct definition of bias. For example, perhaps there is a particular group identity (such as being a scientist) in which evaluating information in an objective, unbiased way is a core component of that identity. Based on the theoretical reasoning discussed earlier, it would be predicted that affirming one’s scientist identity would lead one to interpret new information in a more objective manner, even if there was a personal incentive not to.
Finally, although the findings of the current research support the theoretical distinction between affirming the individual self and affirming the collective self, these studies do not directly test the proposed mechanisms underlying the self- and group-affirmation processes. For instance, although I propose that affirming a particular group identity activates the norms, attitudes, and biases associated with that group’s psychological make-up, that activation process was not tested directly. Thus, the observed affirmation effects could still be a result of extraneous factors characteristic of the particular groups being studied. McQueen and Klein (2006) state that it is even difficult to trace a specific cause-effect mechanism for self-affirmation processes and admit that it is quite possible that different mechanisms might be at work in different contexts. Further research should specifically differentiate the disparate mechanisms underlying self-affirmation and group-affirmation in these specific contexts.

**Future Directions**

Despite these limitations, this work creates some avenues for potentially fruitful areas of future research. These studies are based on a fundamental theoretical distinction between the individual self and the collective self. One question that arises from this is how these affirmation processes would play out when this distinction between the individual and collective selves is blurred. For example, how might people with more interdependent views of the self, such as individuals from Eastern, collectivist cultures, respond to a group-affirmation as opposed to self-affirmation task? Would they show a pattern of results similar to the one shown by participants in the current studies? Perhaps affirming at the collective level of identity would be more effective at boosting self-worth and reducing bias for those with more interdependent selves, seeing as their self-concepts tend to be defined more by relationships than by individual traits and attributes (Markus & Kitayama, 1991). There is some evidence that this might be the case.
Heine and Lehman (1997), for instance, found that affirming the individual self was an effective method of reducing post-decision dissonance for a group of Canadian participants but not for a group of Japanese participants. Additionally, performing a familial affirmation (affirming one’s family as a unit rather than oneself as an individual) was found to successfully improve academic performance among struggling Latino students (Covarrubias, Herrmann, and Fryberg, 2016) and reduce stereotype threat among a sample of Chinese women (Cai, Sedikides, & Jiang, 2012). These findings seem to indicate that an important factor in determining whether an affirmation manipulation will “work,” is if one is affirming an identity that is central to one’s self-definition (i.e., one’s personal identity in individualist cultures and one’s familial identity in collectivist cultures). Future research should test whether affirming a more interdependent identity can lead to a reduction in group-based bias for those with an interdependent self-concept (just as affirming an individual-level self-aspect does for those with an individualist self-concept).

Additionally, whether affirming a group identity that is not necessarily the central piece of one’s self-concept (such as political or religious affiliation) would play out the same way across cultures should be explored. For example, would affirming a political identity activate the norms/attitudes/biases associated with that identity regardless of whether one has an independent or interdependent sense of self?

Another theoretical question related to self-definition has to do with the relationship between group-affirmation and social identity complexity. Social identity complexity refers to the degree of overlap one perceives among their multiple social identities (Roccas & Brewer, 2002). If one perceives a great deal of overlap between multiples identities (such as their political, religious, occupational, and educational identities), for instance, one’s identity structure becomes more simplified, resulting in stronger levels of in-group identification and less tolerant
attitudes towards out-groups than those with high levels of social identity complexity (Miller, Brewer, & Arbuckle, 2009). It would be interesting to test whether social identity complexity moderates the effect of group-affirmation on defensiveness and bias. If one shares a number of interrelated identities (and thus is low in social identity complexity), would affirming one of these social identities have a similar result as affirming the individual self (and potentially reduce bias) because that identity would presumably be more central to one’s overall self-concept? Or would affirming the collective identity lead to even stronger biased tendencies because it would be activating the norms, attitudes, and biases associated with all of the overlapping groups (as opposed to just one)?

Future research should also assess the boundary conditions of the affirmation effects observed in these studies. It may be the case, for instance, that the idiosyncrasies of the social identity context that was used may have been driving some of the observed effects. Political identity is unique in that it is a highly competitive and bias-ridden intergroup context. It has been found, for instance, that American political identities are extremely susceptible to perceived threats (Crawford & Pilanski, 2014) and that sociopolitical concepts are especially “hot,” or affectively charged, such that people tend to behave in a more biased, hostile manner in political contexts than in other collective-level domains (Lodge & Taber, 2005). I posit that this is an advantage when it comes to testing for affirmation effects on bias. The political context provides a potent source of bias with which to explore the nuances of self- and group-affirmation. This may not be the case in collective-level contexts not defined as much by this intergroup dynamic, such as university affiliation or nationality. That being said, future work should test if the observed affirmation effects are limited to contexts in which there are clearly-defined biases and salient out-groups. Also, would a similar pattern of results be found if these studies were
conducted in the context of a group where members do not have a choice in membership, such as ethnicity? Additionally, would the results hold in a minimal-groups setting, or does group-affirmation only have an effect on bias if the groups are well-established?

Finally, the current research deals exclusively with affirmation processes at the individual and collective levels of identity. However, researchers often present the self-concept as containing three levels of identity: the individual self, the collective self, and the relational self (Brewer and Gardner, 1996; Sedikides et al., 2013). One question worth exploring is how the psychological processes that take place when one is operating at the relational level of identity map on to the other two levels. Specifically, does affirming the relational self function in a similar fashion to affirming the collective self? Or do important relationships merge with the individual self to the extent that affirming oneself as an individual and affirming one’s relationship become one and the same process?

CONCLUSION

It could be argued that it is the distinction between the individual self and the collective self which forms the backbone of social psychology. Research on the relationship between these two levels of identity point to a fundamental distinction in how people think, feel, and behave when operating at the collective level of identity as opposed to the individual level of identity. I posit that when operating as a group member, one becomes constrained by the norms and biases associated with that particular social identity, thus limiting one’s cognitive, affective, and behavioral flexibility. When operating as an individual, on the other hand, the self-concept becomes more malleable as one can experience and respond to his/her social environment independent of any group-based frame. Because of its inherent inflexibility, operating at the
collective level of identity generally leads to the expression of thoughts, feelings, and behaviors that are defensive, biased, and even hostile in nature. This may not always be the case, however.

The current research uses the context of identity threat and affirmation theory to test whether operating at the collective level of identity (via group-affirmation) can, in fact, lead to a reduction in defensiveness, hostility, and bias. Although affirming the group did not affect participants’ attributional tendencies following the completion of a self-threatenning task (Study 1), group-affirmation did bolster positive out-group attitudes for low-identifying group members (Study 2). Specifically, those who affirmed their political party demonstrated a boost in positivity towards out-groups that their party tends to view favorably. Also, unlike affirming the self, affirming the group did not protect participants’ self-esteem from either an individual-level threat or a collective-level threat (Studies 1 and 2). Together, these findings lend further support to the notion that affirming the self and affirming the group are two distinct processes. However, they show that operating at the collective level of identity can, in fact, lead to greater intergroup positivity, provided that positivity is a core part of the in-group’s psychological identity.
Endnotes

1.) Because the self-threatening task involved making associations between common English words and phrases, analyses were also run with non-native English speakers removed from the sample. This did not result in any changes to the pattern of results, so all reported analyses include those participants.

2.) Previous research documents the self-threatening nature of the RAT (e.g., Critcher & Dunning, 2015; McFarlin & Blascovich, 1984). In addition, a pilot test was conducted to ensure that participants would feel threatened when they attempted the specific version of the RAT used in Study 1. Undergraduate participants (N = 146) rated their performance on the RAT as “below average” (M = 2.19, SD = 0.77) on a 5-point scale (1 = bottom 10%, 2 = blow average, 3 = average, 4 = above average, 5 = top 10%). This mean self-performance rating of 2.19 was significantly below the “average” perceived performance option of 3, t(145) = -12.63, p < .001. Participants also were asked how “intelligent,” “competent,” and “good” the task made them feel on a scale from 1 (not at all) to 7 (extremely). Participants reported feeling well below scale the mid-point of 4 on each of these items: “Intelligent” (M = 2.61; SD = 1.38); “Competent” (M = 2.83; SD = 1.34); “Good” (M = 2.83; SD = 1.47); ts(145) > 16, ps < .001.

3.) The Anger/Fear/Respect Index (Mackie et al., 2000) is a scale comprised of three dimensions. Because the items that composed the “anger” and “fear” dimensions followed the same pattern in all analyses, they were combined into one “negative” dimension.

4.) All GLM analyses were also run using attitudinal measures towards individual out-groups as opposed to combining both favorable groups and both unfavorable groups into
single variables (i.e., classifying just police/law-enforcement officers as the favorable group for Republicans and welfare recipients as the favorable group for Democrats). The same pattern of results that was found when combining groups was found when each group was analyzed individually.
Table 1

*Bivariate correlations among RAT performance attribution measures (Study 1).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bad luck</td>
<td>1.00</td>
<td>.09</td>
<td>.00</td>
<td>.15*</td>
<td>.31*</td>
<td>.20*</td>
<td>.06</td>
<td>.09</td>
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<tr>
<td>2. Difficult task</td>
<td>--</td>
<td>1.00</td>
<td>.25*</td>
<td>.09</td>
<td>-.01</td>
<td>-.25*</td>
<td>.07</td>
<td>.18*</td>
</tr>
<tr>
<td>3. Lack of ability</td>
<td>--</td>
<td>--</td>
<td>1.00</td>
<td>-.07</td>
<td>-.04</td>
<td>-.03</td>
<td>.29*</td>
<td>.17*</td>
</tr>
<tr>
<td>4. Lack of effort</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.00</td>
<td>.04</td>
<td>.10</td>
<td>.05</td>
<td>-.17*</td>
</tr>
<tr>
<td>5. Good luck</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1.00</td>
<td>.35*</td>
<td>.15*</td>
<td>.26*</td>
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<td>6. Easy task</td>
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<td>--</td>
<td>--</td>
<td>1.00</td>
<td>.21*</td>
<td>.22*</td>
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<td>7. Ability</td>
<td>--</td>
<td>--</td>
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<td>--</td>
<td>--</td>
<td>--</td>
<td>1.00</td>
<td>.15*</td>
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<tr>
<td>8. Effort</td>
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<td>--</td>
<td>--</td>
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<td>1.00</td>
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*Note. N = 401.*

*p < .05.*
Table 2

Means (standard deviations) of performance attribution measures within affirmation condition (Study 1).

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Self-Affirm</th>
<th>Nation-Affirm</th>
<th>Party-Affirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad luck</td>
<td>2.37 (1.45)</td>
<td>2.35 (1.54)</td>
<td>2.46 (1.38)</td>
<td>2.53 (1.45)</td>
</tr>
<tr>
<td>Difficult task</td>
<td>4.84 (1.57)</td>
<td>4.86 (1.44)</td>
<td>4.94 (1.33)</td>
<td>4.61 (1.50)</td>
</tr>
<tr>
<td>Lack of ability</td>
<td>3.95 (1.51)</td>
<td>3.54 (1.49)</td>
<td>3.88 (1.51)</td>
<td>3.82 (1.62)</td>
</tr>
<tr>
<td>Lack of effort</td>
<td>3.20 (1.51)</td>
<td>3.60 (1.49)</td>
<td>3.50 (1.55)</td>
<td>3.51 (1.71)</td>
</tr>
<tr>
<td>Good luck</td>
<td>2.24 (1.41)</td>
<td>2.10 (1.40)</td>
<td>2.18 (1.39)</td>
<td>1.95 (1.09)</td>
</tr>
<tr>
<td>Easy task</td>
<td>2.08 (1.08)</td>
<td>2.18 (1.18)</td>
<td>2.35 (1.21)</td>
<td>2.21 (1.31)</td>
</tr>
<tr>
<td>High ability</td>
<td>3.43 (1.49)</td>
<td>3.47 (1.45)</td>
<td>3.45 (1.46)</td>
<td>3.56 (1.51)</td>
</tr>
<tr>
<td>High effort</td>
<td>3.48 (1.37)</td>
<td>3.31 (1.41)</td>
<td>3.42 (1.27)</td>
<td>3.10 (1.56)</td>
</tr>
</tbody>
</table>

**Rankings**

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Self-Affirm</th>
<th>Nation-Affirm</th>
<th>Party-Affirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luck</td>
<td>3.60 (0.78)</td>
<td>3.42 (0.97)</td>
<td>3.63 (0.70)</td>
<td>3.43 (0.97)</td>
</tr>
<tr>
<td>Task difficulty</td>
<td>1.71 (0.85)</td>
<td>1.84 (0.93)</td>
<td>1.70 (0.82)</td>
<td>1.93 (1.06)</td>
</tr>
<tr>
<td>Ability</td>
<td>2.42 (0.95)</td>
<td>2.41 (0.99)</td>
<td>2.25 (0.96)</td>
<td>2.32 (0.96)</td>
</tr>
<tr>
<td>Effort</td>
<td>2.27 (0.96)</td>
<td>2.32 (0.97)</td>
<td>2.43 (0.98)</td>
<td>2.33 (0.89)</td>
</tr>
</tbody>
</table>

*Note. N = 401. Values for individual attributions range from one to seven. Values for attribution rankings range from one to four.*
Table 3

_Bivariate correlations among challenge/threat experiences, task engagement, and state self-esteem (Study 1)._  

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Challenge</td>
<td>1</td>
<td>.37*</td>
<td>.14*</td>
<td>-.02</td>
</tr>
<tr>
<td>2. Threat</td>
<td>--</td>
<td>1</td>
<td>.23*</td>
<td>-.23*</td>
</tr>
<tr>
<td>3. Task engagement</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>-.33*</td>
</tr>
<tr>
<td>4. Self-esteem</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. N = 401.*

*p < .05.*
Table 4

 Means (standard deviations) of challenge/threat experiences, task engagement, and state self-esteem within affirmation condition (Study 1)

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Self-Affirm</th>
<th>Nation-Affirm</th>
<th>Party-Affirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge</td>
<td>2.65 (1.39)</td>
<td>2.73 (1.32)</td>
<td>2.99 (1.17)</td>
<td>2.81 (1.32)</td>
</tr>
<tr>
<td>Threat</td>
<td>2.47 (1.31)</td>
<td>2.53 (1.44)</td>
<td>2.77 (1.46)</td>
<td>2.49 (1.44)</td>
</tr>
<tr>
<td>Task engagement</td>
<td>3.04 (1.18)</td>
<td>2.76 (1.22)</td>
<td>3.02 (1.13)</td>
<td>3.08 (1.20)</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>5.21 (1.05)</td>
<td>5.46 (0.94)</td>
<td>5.19 (1.08)</td>
<td>5.04 (1.06)</td>
</tr>
</tbody>
</table>

*Note. N = 401.*
Table 5

*Bivariate correlations among out-group attitudinal variables broken down by favorable and unfavorable groups (Study 2).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Favorable Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Negative Emotions</td>
<td>1</td>
<td>-.06</td>
<td>-.49*</td>
<td>-.24*</td>
<td>.35*</td>
<td>.31*</td>
<td>.12*</td>
<td>.16*</td>
</tr>
<tr>
<td>2. Positive Emotions</td>
<td>--</td>
<td>1</td>
<td>.73*</td>
<td>.57*</td>
<td>.26*</td>
<td>-.09*</td>
<td>-.21*</td>
<td>.001</td>
</tr>
<tr>
<td>3. General Evaluations</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>.65*</td>
<td>.10*</td>
<td>-.17*</td>
<td>-.18*</td>
<td>-.06</td>
</tr>
<tr>
<td>4. Behavioral Intentions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>.20*</td>
<td>.03</td>
<td>-.07</td>
<td>.32*</td>
</tr>
<tr>
<td><strong>Unfavorable Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Negative Emotions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>-.07</td>
<td>-.51*</td>
<td>-.22*</td>
</tr>
<tr>
<td>6. Positive Emotions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>.73*</td>
<td>.63*</td>
</tr>
<tr>
<td>7. General Evaluations</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
<td>.62*</td>
</tr>
<tr>
<td>8. Behavioral Intentions</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note. N = 533.*

*p < .05.
Table 6

*Means (standard deviations) of challenge/threat experiences and state self-esteem (when participants were affirmed either before or after the threat) broken down by affirmation condition (Study 2)*

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Self-Affirm</th>
<th>Party-Affirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenge</td>
<td>3.46 (1.67)</td>
<td>3.67 (1.70)</td>
<td>3.48 (1.67)</td>
</tr>
<tr>
<td>Threat</td>
<td>2.04 (1.35)</td>
<td>2.08 (1.39)</td>
<td>2.29 (1.43)</td>
</tr>
<tr>
<td>Self-esteem (affirm first)</td>
<td>5.57 (1.29)</td>
<td>5.82 (1.20)</td>
<td>5.27 (1.44)</td>
</tr>
<tr>
<td>Self-esteem (threat first)</td>
<td>5.53 (1.37)</td>
<td>5.35 (1.27)</td>
<td>5.50 (1.53)</td>
</tr>
</tbody>
</table>

*Note. N = 533.*
Figure 1. Effect of affirmation condition on participants’ state self-esteem following a threat to the individual self (Study 1). Error bars indicate 95% confidence intervals around the means.
Figure 2. Exploratory model demonstrating that task disengagement partially mediates the effect of self-affirmation (compared to all other affirmation conditions) on state self-esteem (Study 1). Numbered paths reflect unstandardized regression coefficients (\(b\)). Indirect effect: \(b = -0.08, SE = 0.04, 95\% C.I. [-0.17, -0.004]\).

\(*p < 0.05. **p < 0.01. ***p < 0.001.\)
Figure 3. Party identification predicting positive emotional reactions towards favorable out-group members in the non-affirmation (control) condition, self-affirmation condition, and political party-affirmation condition (Study 2). “High” and “low” levels of party identification refer to 1 SD above and below the mean, respectively.
Figure 4. Party identification predicting general evaluations towards favorable out-group members in the non-affirmation (control) condition, self-affirmation condition, and political party-affirmation condition (Study 2). “High” and “low” levels of party identification refer to 1 SD above and below the mean, respectively.
*Figure 5.* Party identification predicting behavioral intentions towards favorable out-group members in the non-affirmation (control) condition, self-affirmation condition, and political party-affirmation condition (Study 2). “High” and “low” levels of party identification refer to 1 SD above and below the mean, respectively.
Figure 6. Effect of affirmation condition and presentation order on participants’ state self-esteem following a threat to the collective self (Study 2). Error bars indicate 95% confidence intervals around the means.
Appendix A

Affirmation Manipulation (Study 1 and Study 2)

Non-Affirmation

Okay, we are now going to ask you to perform a simple thought experiment. Please take some time and think about everything that you have eaten and drank over the past 48 hours. In the space provided, please list as many of these things as you can remember.

Self-Affirmation

Okay, we are now going to ask you to perform a simple thought experiment. Please take some time and think about what you as an individual consider to be important. From the following list of values/issues*, please select the one that is most important to you personally. Please write a short paragraph explaining how this value or issue is relevant to you and why you consider it to be so important.

Nationality-Affirmation (Study 1 only)

Okay, we are now going to ask you to perform a simple thought experiment. Please take some time now and think about what members of your nationality (e.g., Americans) consider to be important. From the following list of values/issues*, please select the one that you think is the most important to members of your nationality as a group. Please write a short paragraph explaining how this value/issue is relevant to members of your nationality, and why they consider it to be so important.

Political Party-Affirmation

Okay, we are now going to ask you to perform a simple thought experiment. Please take some time and think about what [Republicans/Democrats] consider to be important. From the following list of values/issues*, please select the one that you think is the most important to the
[Republican/Democratic] party as a group. Please write a short paragraph explaining how this value/issue is relevant to the [Republican/Democratic] party, and why [Republicans/Democrats] consider it so important.

*Values/Issues: Art/Music, Social Life, Relationships, Physical Attractiveness/Fashion,
Athletics, Sense of Humor, Loyalty, Family, Honesty, Patience, Concern for Others,
Religion/Spirituality, Independence
Appendix B

Remote Associates Test (Study 1)

Instructions

The next section of the survey will consist of a test of cognitive ability. You will be presented with a series of 10 questions testing your ability to make associations between words. For each trial, you will first see three stimulus words. Your task is to type in a fourth word which, when combined with each of the three stimulus words, results in word pairs that make up a common compound word or phrase. For example:

What word unites these three?
rocking
wheel
high

Correct response: Chair (rocking chair, wheelchair, high chair). After completing the task, you will be asked some questions regarding how well you performed.

RAT Items

(1) Pea, Shell, Chest = Nut; (2) Reading, Service, Stick = lip; (3) Flower, Friend, Scout = girl;
(4) Control, Place, Rate = Birth; (5) Artist, Hatch, Route = Escape; (6) Self, Attorney, Spending = Defense; (7) Way, Ground, Weather = Fair; (8) Cottage, Swiss, Cake = Cheese; (9) Show, Life, Row = Boat; (10) Fight, Control, Machine = Gun

Feedback

You have now completed the word association test. You got [number correct] out of 10 questions correct.
Appendix C

RAT Performance Attributions (Study 1)

Individual Attributions

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

1. To what extent do you think your performance on the word association task was the result of good luck?

2. To what extent do you think your performance on the word association task was the result of bad luck?

3. To what extent do you think your performance on the word association task was the result of the task being easy?

4. To what extent do you think your performance on the word association task was the result of the task being difficult?

5. To what extent do you think your performance on the word association task was the result of your ability to do well on tasks like these?

6. To what extent do you think your performance on the word association task was the result of your inability to do well on tasks like these?

7. To what extent do you think your performance on the word association task was the result of you putting a lot of effort into the task?

8. To what extent do you think your performance on the word association task was the result of you not putting very much effort into the task?
Attribution Rankings

Please rank the following factors* in the order in which you think they had an impact on your performance on the word association task, from greatest to least. In other words, the factor on top should be the one that you think had the biggest effect on your performance, whereas the factor on the bottom should be the one that you think had the smallest effect.

*Factors: Luck, Task difficulty, Your ability, Your effort
Appendix D

Intellectual Orientation Inventory: Task Engagement Subscale (Major et al., 1998)

(Study 1)

Please indicate the extent to which you agree with the following statements regarding the word association task:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
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<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Being good at tasks like this is an important part of who I am.
2. Doing well on intelligence tasks like this is very important to me.
3. It doesn’t matter to me one way or the other how well I did on that task.*
4. This task does not change my opinion of how intelligent I am.*
5. My performance on this task affected how I feel about myself.
6. I really don’t care what this task says about my intelligence.*

*Denotes a reverse coded item
Appendix E

Biosocial Model of Challenge and Threat Scale (Blascovich et al., 2001)

(Study 1 and Study 2)

Please indicate the extent to which you are feeling each of the following emotions right now:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td></td>
</tr>
</tbody>
</table>

1. Fearful
2. Worried
3. Anxious
4. Eager
5. Hopeful
6. Excited
Appendix F
State Self-Esteem Scale (Rosenberg, 1965)
(Study 1 and Study 2)

Please indicate the extent to which you agree with the following statements regarding how you feel about yourself right now:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

1. I feel that I am a person of worth, at least on an equal basis with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.*
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.*
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.*
9. I certainly feel useless at times.*
10. At times I think I am no good at all.*

*Denotes a reverse coded item
Appendix G

Group-Threatening Stimulus (Study 2)

Instructions

You will now be presented with a brief article summarizing the findings from a recent study on political parties and intelligence. Please read the article closely.

Democratic Participants

A new study came out recently looking at whether Republicans or Democrats are smarter. It showed that Republicans are generally more intelligent than Democrats, and that this holds true even after taking race, gender, and other demographic characteristics out of the picture.

Analysts from an independent research group looked at several waves of participants from the General Social Survey. The survey included four separate measures of intelligence. Probability knowledge was measured by asking participants to solve basic probability problems. Verbal intelligence was measured by asking participants to describe the ways in which various items were similar. A vocabulary test was also given. Finally, interviewers rated how well participants seemed to understand the questions they were being asked. Political identity was measured on an eight-point scale, ranging from strong Republican on one end of the scale to strong Democrat on the other end. Those who selected the mid-point of the scale were classified as independents.

The study found that Republicans scored better than Democrats on all four measures of intelligence. The gap was largest when comparing strong Republicans to strong Democrats (3-5 points) and weakest when comparing everyone to the right and everyone to the left of independent (1-2.45 points). This study also contained sub-group analyses in which subjects
were restricted by race, gender, and age. It was found that regardless of race, gender, or age range, Republicans exhibited greater intelligence than Democrats.

This is consistent with previous research linking liberalism with attributes such as simplistic thinking and an overreliance on emotions when making decisions.

**Republican Participants**

A new study came out recently looking at whether Republicans or Democrats are smarter. It showed that Democrats are generally more intelligent than Republicans, and that this holds true even after taking race, gender, and other demographic characteristics out of the picture.

Analysts from an independent research group looked at several waves of participants from the General Social Survey. The survey included four separate measures of intelligence. Probability knowledge was measured by asking participants to solve basic probability problems. Verbal intelligence was measured by asking participants to describe the ways in which various items were similar. A vocabulary test was also given. Finally, interviewers rated how well participants seemed to understand the questions they were being asked. Political identity was measured on an eight-point scale, ranging from strong Republican on one end of the scale to strong Democrat on the other end. Those who selected the mid-point of the scale were classified as independents.

The study found that Democrats scored better than Republicans on all four measures of intelligence. The gap was largest when comparing strong Democrats to strong Republicans (3-5 points) and weakest when comparing everyone to the left and everyone to the right of independent (1-2.45 points). This study also contained sub-group analyses in which subjects were restricted by race, gender, and age. It was found that regardless of race, gender, or age range, Democrats exhibited greater intelligence than Republicans.
This is consistent with previous research linking conservatism with attributes such as simplistic thinking and an overreliance on emotions when making decisions.
Appendix H

Anger/Fear/Respect Index (Mackie et al., 2000)

(Study 2)

On a scale from 1 (not at all) to 7 (very much so), please indicate the extent to which you feel the following emotions towards [police/law-enforcement officers, gun-rights activists, people on welfare, undocumented/illegal immigrants]:

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Very much so</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Angry
2. Furious
3. Irritated
4. Worried
5. Anxious
6. Afraid
7. Fearful
8. Admiring
9. Appreciative
10. Respectful
Appendix I

General Out-Group Evaluations (Voci & Hewstone, 2003)

(Study 2)

Generally speaking, how would you rate your attitude towards [police/law-enforcement officers, gun-rights activists, people on welfare, undocumented/illegal immigrants]:

<table>
<thead>
<tr>
<th>Cold</th>
<th>Warm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1. Cold -- Warm
2. Negative -- Positive
3. Hostile -- Friendly
4. Trusting – Suspicious*
5. Disgust -- Admiration
6. Contempt – Respect

*Denotes a reverse-coded item
Appendix J

Behavioral Intentions (Husnu & Crisp, 2010)

(Study 2)

On a scale from 1 (highly unlikely) to 7 (highly likely), please indicate the extent to which you be willing to do the following things in the near future:

<table>
<thead>
<tr>
<th>Highly unlikely</th>
<th>Highly likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

1. Interact with a(n) [police/law-enforcement officer, gun-rights activist, person on welfare, undocumented/illegal immigrant].

2. Spend time learning more about [police/law-enforcement officers, gun-rights activists, people on welfare, undocumented/illegal immigrants].

3. Attend a gathering of [police/law-enforcement officers, gun-rights activists, people on welfare, undocumented/illegal immigrants].

4. Donate money to an advocacy group supporting [police/law-enforcement officers, gun-rights activists, people on welfare, undocumented/illegal immigrants].

5. Be friends with a(n) [police/law-enforcement officer, gun-rights activist, person on welfare, undocumented/illegal immigrant].
References


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