ABSTRACT

Title of Dissertation: RESPONDING TO GROUP-DIRECTED CRITICISM

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In this dissertation, I investigated how group members respond to a criticism of their group. Realizing the conflict between two literatures, the black sheep effect and the intergroup sensitivity effect, I drew on theories of face, social identity threat, and emotion to create an integrative model. The model proposed that contextual factors (presence of an outgroup audience and critic's group membership), a message attribute (message accuracy), and individual perceptions (presumed media influence on the outgroup and identity importance) work in tandem to predict perceived threats to social identity (through perceived critic's constructiveness) and to collective face. These threat perceptions in turn predict a series of evaluative, emotional, and behavioral intention outcomes. Three pilot studies were conducted to construct the message stimuli, validate the instruments, and check the manipulation of message accuracy and the assumptions of the theoretical model. An experiment was conducted

to test the proposed model. Findings have suggested that (1) it is important to consider multiple causes of threat perceptions; (2) it is necessary to differentiate the two types of collective face threats, as well as the four types of social identity threats; (3) some threat perceptions can lead to desirable outcomes; (4) there may be two major strategies to restore positive distinctiveness of the group in the face of criticism; (5) collective face threat can lead to facework by group members, which involves resolving the issue mentioned in the group criticism; and (6) future research on group criticism should examine the nuances of critic's group membership, as well as the effects of expected critic's effort. Although with limitations, this study contributes to theory and research on group criticism specifically, and on intergroup communication more broadly.

RESPONDING TO GROUP-DIRECTED CRITICISM

by

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Dedication

This dissertation is dedicated to my mother, Li Yanxia.

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I would like to thank my co-advisors, Drs. Anita Atwell Seate and Edward L. Fink, for the enormous support and guidance they have provided during the preparation of this dissertation. I could never achieve what I have achieved without them.

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is one problem in the world you want to solve?" My answer to the question has led to this dissertation. Working with him on a research project helped me develop some habits that benefited me during the process of producing this dissertation: to organize complex ideas using an outline, to think from the abstract to the specific, and to properly address others' constructive criticism of my work.

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Chapter 1: Introduction

The world is infused with hatred, misunderstanding, and conflict—social groups (e.g., nation states, political parties) blame each other for different reasons (e.g., human rights, political decisions), and these criticisms targeting at group performance sometimes result in hostility. Group-directed criticisms are negative feedback that "addresses the performance of a group as a whole, rather than feedback directed towards individual performance" (Rabinovich & Morton, 2015, p. 126), and they are prevalent in societal discourse. For example, a search of "criticism of the United States" on Google yielded 181 million results (February 20, 2018). Group-directed criticisms are often reciprocated by members of the criticized group with defensiveness and even more criticisms. For instance, in the U.S., large numbers of Democrats criticized Republicans for being more closed-minded (70%) and dishonest (42%) than other U.S. Americans, whereas many Republicans said that Democrats were more closed-minded (52%), immoral (47%), lazy (46%), and dishonest (45%) than other U.S. Americans; almost half people in both parties (41% of Democrats and 45% of Republicans) believe the other party is "a threat to the nation's well-being" (Pew Research Center, 2016).

When the conflict caused by such group-directed criticism escalates, war may result. According to the Council on Foreign Relations (2018), as of June 29, 2018, there were 25 ongoing conflicts in the world that had an impact on U.S. interests, including civil wars, political instability, territorial disputes, and other types of conflicts. Regarding the status of these conflicts, 10 were reported to be worsening, 14 were reported to be unchanged, and only one was reported to be improving. Although group-directed criticism is a matter of words, global conflicts that it may lead to may be a matter of life or death. Eighteen ongoing conflicts in the world caused at least 1,000 deaths each in

2016 or 2017; four among them caused more than 10,000 deaths ("List of ongoing armed conflicts," 2017). This situation leaves us to wonder: How, if at all, can world peace be achieved?

Other than the conflicts between social groups, group-directed criticism delivered by members in the group may lead to hostility, conflict, and rejection within the group targeted at these group members. These social group members may be tormented, marginalized, or used as scapegoats by other ingroup members (Hogg, Fielding, & Darley, 2005). For example, a player in the U.S. National Basketball Association, Enes Kanter, openly criticized the government of his home country, Turkey, on social media. His passport was later cancelled by the Turkish embassy and his family disowned him, purportedly due to his criticism of the home country ("Enes Kanter," 2017). Being rejected and excluded by one's group deprives the person of any benefit that the group may offer, harms the person's sense of self, and leads to negative feelings such as helplessness and shame (McLaughlin-Volpe, Aron, Wright, & Lewandowski, 2005). This leads us to wonder: How, if at all, can peace be achieved within a group?

The first step to solve the conflicts between and within social groups is to examine the origin of conflicts and explore the ways of preventing the origin from escalating into conflicts. Group-directed criticism is one important origin of the creation of intergroup and intragroup conflict. Baron (1988) found that when people receive destructive criticism (i.e., criticism that is nonspecific, is inconsiderate in tone, and attributes poor performance to internal characteristics of people who were criticized) versus constructive criticism, they respond with more negative reactions. Specifically, they respond with anger, perceive the criticism as an important cause of conflict, and report that they would handle future conflict in a maladaptive way through avoidance and

direct competition if future conflict occurred (Baron, 1988). When the criticism is directed at a group, group members may perceive the criticism as threatening and respond with disagreement, hostility, and anger (Elder, Sutton, & Douglas, 2005), which can lead to negative intergroup consequences, such as intergroup conflicts. Yet, despite the danger of escalating into conflict, group-directed criticism can also help a group discover and overcome its shortcomings, and group members may respond to the group-directed criticism with less defensiveness, especially when the criticism is seen as constructive (Hornsey & Imani, 2004).

From the above discussion, it is evident that group criticism is a key to understanding why intergroup conflicts happen and why people can be mistreated by their own group. However, group criticism may also be beneficial to the criticized group in the long run under the right conditions (e.g., when the criticism is seen as constructive), because it provides critical feedback and a direction for improvement (Hornsey, 2005). This study examines how group members respond to criticism of their group.

To examine responses to group criticism, two literatures are particularly useful; however, they provide contradictory predictions regarding the way people respond to both group criticism and the critic. The *black sheep effect* (Marques & Paez, 1994) predicts that group members will be harsher toward an ingroup critic than an outgroup critic because criticizing the ingroup is perceived as a deviant behavior (to be discussed below). On the other hand, the *intergroup sensitivity effect* argues that in the face of group criticism, people tolerate ingroup critics more than outgroup critics (Hornsey, 2005). This study seeks to resolve this inconsistency by examining the communicative context, the message content, and individual characteristics in an integrative model.

Three pilot studies will be conducted to ensure that the study's measures are valid, the manipulation is successful, and the assumptions made by the model are correct. Then the proposed model will be tested in an experiment.

To address the inconsistency between the intergroup sensitivity effect and the black sheep effect, I will draw on theory and research on face (Ting-Toomey, 2005), social identity threats (Branscombe, Ellemers, Spears, & Doosje, 1999), the appraisal theory of emotion (Lazarus, 1991), and the perception of media message's impact on others (Gunther & Storey, 2003). I will propose a model predicting group members' responses to group criticism and the critic, taking into account both the communicative context and the message content. My integrative theoretical model sheds important insight into when the black sheep effect and the intergroup sensitivity effect processes come into play, such that in some experimental conditions, people may respond in a way that is consistent with the prediction of the black sheep effect; in other conditions, they may act consistently with the prediction of the intergroup sensitivity effect. This model is important both theoretically and practically, because it explores the underlying processes of group criticism by investigating a combination of message and contextual factors, and it provides directions to strategically reduce both intragroup and intergroup conflicts that result from group criticism.

In the following sections, I will provide more details about the theoretical rationale of my dissertation. First, I will briefly review the social identity approach to studying group processes and its relevance to the study of group criticism. Second, I will introduce the black sheep effect and the intergroup sensitivity effect. Third, pointing out the contradictory predictions from these two literatures, I will outline one model that reconciles this contradiction. I will also define and differentiate collective face threat and

social identity threat, two types of threat that are the key concepts in the context of group criticism. Summarizing the discussion, I will present the hypotheses and the model.

The Social Identity Approach and Group Criticism

Here I take a social identity approach to studying group-directed criticism. The social identity approach, which mainly consists of social identity theory (Tajfel & Turner, 1986) and self-categorization theory (Turner, 1985), is an influential theoretical framework of intergroup communication, and it is closely related to the literatures of both the intergroup sensitivity effect and the black sheep effect. In this section, I will explicate the key concepts and the underlying rationale of the social identity approach that will be used in the discussion that follows.

The social identity approach maintains that communication between people varies on a continuum from interpersonal to intergroup (Tajfel & Turner, 1986). Intergroup communication happens when one or more persons in social interaction define themselves and others in terms of the groups to which they belong, rather than in terms of individual idiosyncrasies (Harwood, Giles, & Palomares, 2005). Groups to which people belong are termed *ingroups*; groups of which these same people are not members are *outgroups*. Intergroup scholars have argued that group-level processes are distinct from individual-level processes. These two levels of processes are not predictive of each other. For example, work on intergroup emotions has found that individual-level emotions and group-level emotions (emotions felt on behalf of the group) are only weakly correlated (Mackie, Maitner, & Smith, 2009).

Self-categorization theory, which focuses on the cognitive aspect of social identity processes, argues that people represent the self by categorizing the self at different levels of abstraction: as a human being, a group member, or a unique individual

(Turner, 1985). When a group identity is perceived to fit social reality and is accessible in a particular context, this group identity becomes the basis for categorization. In other words, the group identity becomes *salient* when it fits social reality and is accessible (Hornsey, 2008). For instance, gender identity becomes salient when people engage in conversations with gender-stereotypic topics (e.g., purchasing makeup), because gender is considered to explain people's varying expertise in these conversation topics (i.e., fits social reality) and is relevant in the situation (i.e., is accessible; Ma & Atwell Seate, 2017; Palomares, 2009). When a group is salient, group members no longer see themselves as distinct individuals. Instead, they view themselves and other group members as interchangeable members of the group, and they think, behave, and feel in a way that is prescribed by the group *prototypes*, a fuzzy set of attributes that define the group (Reid & Hogg, 2005). When shared by group members, group prototypes are group *norms* (Hogg & Reid, 2006), and behaviors and attributes that are inconsistent with group norms are considered *deviant* (Abrams, Marques, Bown, & Henson, 2000). The process explaining why group members align with their group is called *depersonalization*, and it is the core to understanding why a criticism directed at a group would have an impact on individuals even when they are not directly affected.

Social identity processes are not only cognitive; they also have a motivational basis. The social identity approach assumes that people have a need to feel good about themselves. Therefore, people are motivated to do things that enhance their positive feelings of themselves. When people are depersonalized, meaning when they draw their sense of self from group memberships, the need to feel positive about the self is transferred to the group. That is, people have a need for the *positive distinctiveness* of the group (i.e., the degree to which the ingroup is typical on valued dimensions compared to

the outgroup; Turner, 1985), which makes people feel good about themselves via the group. As a result, people are motivated to maintain the positive distinctiveness of the group.

Group-directed criticism can lead to depersonalization by making group identity salient. A group identity becomes salient when it fits social reality and is accessible. Group criticism negatively comments on the group and all its members by saying that they have the same negative performance (whether it is attributed to the group's internal attributes or to changeable situations; Rabinovich & Morton, 2015). Group membership becomes an explanation of the similarities and differences between people, and therefore fits the context (see Abrams & Hogg, 2010). Also, by explicitly addressing the group, group criticism makes the group identity obviously accessible at the moment. Previous research has provided some evidence that group-directed criticism leads to depersonalization and increases group salience. For example, Atwell Seate et al. (Atwell Seate, Cohen, Fujioka, & Hoffner, 2012) found that media coverage of a school shooting tragedy (which may implicate the negative consequence of owning a gun) depersonalized people based on gun ownership; gun ownership can be regarded as a group identity.

Group-directed criticism not only leads to depersonalization, but it also harms the positive distinctiveness of the group (Morier, Bryan, & Kasdin, 2013). By definition, group criticism points out something negative about the group, suggesting that the group is not distinct from outgroups in a positive way. More specifically, group criticism threatens group members' social identity and collective face (to be discussed below). When threatened, group members are motivated to restore the positive distinctiveness of their group, leading to a series of attitudinal, emotional, and behavioral outcomes.

In conclusion, based on the social identity approach, it stands to reason that when

people hear a criticism directed at their group, they are depersonalized, thinking and behaving in a way that is based on what is good and appropriate for the group, not on their personal preferences. Moreover, because the criticism harms the positive and distinctive group identity, we expect group members to act in a way that protects the positive distinctiveness of the group. In the following discussion, this conclusion will be essential to predict people's behavior in the face of group criticism.

The Black Sheep Effect

In this section, I will first explain the underlying processes of the black sheep effect. Second, I will provide an overview of the findings regarding this topic. Last, I will apply it to the context of group criticism.

The black sheep effect refers to people's tendency to judge socially desirable ingroup members more positively than similar outgroup members and judge deviant ingroup members more negatively than similar outgroup members (Marques & Paez, 1994). In other words, the evaluation of ingroup members tends to be more extreme than that of outgroup members who display the same behavior. This is especially the case under the following three conditions: (1) when a group norm is undermined by other ingroup members, (2) when the rest of the ingroup shows less consensus on the norm, and (3) when the superiority of the ingroup to the relevant outgroup is in doubt (Marques, Abrams, & Serôdio, 2001). Research has shown that the polarized evaluation toward ingroup versus outgroup deviants develops in children of eight years and older (Abrams, Palmer, Rutland, Cameron, & van de Vyver, 2014). Most work in this line of research, as well as this study, examines anti-norm deviance (i.e., behaviors or attributes that reject group norms) rather than pro-norm deviance (i.e., behaviors or attributes that are consistent with, but more extreme than, group norms; Abrams et al., 2000).

Work on the black sheep effect focuses on the evaluations of the ingroup versus outgroup deviants, as well as on communicative outcomes. For example, ingroup deviants are seen as less socially attractive (e.g., less favorable, less honest) and are seen as damaging the group image more than outgroup deviants, and other ingroup members are more willing to persuade these ingroup deviants to conform to group norms (Marques et al., 2001). When the deviant behavior is a moral transgression (i.e., behavior that is considered by others as bad or wrong), the feeling of threat is stronger when the moral transgression (e.g., plagiarism) is made by an ingroup member than an outgroup member, although this difference in threat perception disappears when an opportunity to improve the ingroup's morality (e.g., an opportunity to discuss the situation and provide suggestions to improve the group's moral image) is provided (van der Toorn, Ellemers, & Doosje, 2015). Compared to outgroup members and new or marginal ingroup members, full ingroup members (i.e., those who have been in the group for a long time and felt integrated in the group) who expressed a deviant opinion are evaluated the most negatively (e.g., most selfish, most unethical) and receive the most punishing responses from the ingroup, because they are considered as the most influential to group image (Pinto, Marques, Levine, & Abrams, 2010). These findings show that because the deviance of an ingroup member harms the positivity of the group identity, it leads not only to negative evaluations, but also to unfavorable behavioral and communicative outcomes.

The black sheep effect is a social identity process: People maintain a positive social identity by derogating ingroup deviants, who undermine the subjective validity (i.e., the belief that the ingroup is right; Frings & Abrams, 2010) of that social identity. This identity-based motivation can explain some of the moderators of the black sheep

effect indicated in the literature. For example, the black sheep effect is stronger when the superiority of the group is uncertain (Marques et al., 2001) because the subjective validity of the group is already shaky. The effect is also stronger when those who are supposed to represent the group (e.g., full members) display deviant behavior, because these members have the largest impact on the group image compared to outgroup members, new ingroup members, and marginal ingroup members (Pinto et al., 2010).

The black sheep effect can be applied to the context of group criticism, because criticizing the ingroup is an anti-norm deviant behavior (Jetten & Hornsey, 2014). Researchers have suggested that criticism directed at a group harms the subjective validity of positive social identity, thus posing a threat to the social identity of ingroup members (Hornsey, Oppes, & Svensson, 2002). People may then be motivated to restore the subjective validity of the group by denying the criticism and derogating the ingroup critic. Therefore, we would expect the black sheep effect to emerge when an ingroup member (vs. an outgroup member) criticizes the group. The black sheep effect predicts: When criticizing the group, an ingroup critic elicits *reactions that are more negative*—more negative personality evaluation, less social attraction, and more anger—from group members than an outgroup critic does.

Note that the above prediction does not consider possible variables, such as contextual factors and individual characteristics, that can moderate the black sheep effect. On the other hand, prior research on ingroup deviant behavior found that group members' response (e.g., rejection) to deviant ingroup members depends on various factors, such as the cohesiveness of the group, the relevance of the issue (Schachter, 1951), and whether the deviant previously conformed to group norms (Hollander, 1958). In other words, these studies suggest that we need to consider the specific context when examining the

black sheep effect, and these studies offer insights into the moderators that could potentially change the degree or direction of the black sheep effect. I will examine two possible moderators: presence of an outgroup audience (which is a variable of the communicative context) and perceived accuracy of the criticism (which is a variable of the criticism content).

In this section, I have introduced the black sheep effect and applied it to group criticism. Next, I will introduce the intergroup sensitivity effect, which makes the opposite prediction of group criticism compared to the black sheep effect. After that, I will propose moderators that involve the communicative context (i.e., presence of outgroup audience) and criticism content (i.e., perceived criticism accuracy) to reconcile the contradiction of the two theoretical perspectives.

The Intergroup Sensitivity Effect

In this section, I will introduce the intergroup sensitivity effect, its underlying mechanisms, and the main empirical findings concerning it. Next, I will predict the effects of group criticism based on this literature, which contradicts the prediction derived from the black sheep effect. In the next section, I will propose two moderators to reconcile the contradiction of the two theoretical perspectives, one regarding the communicative context (i.e., presence of an outgroup audience) and the other regarding the message content (i.e., perceived accuracy of the criticism).

The intergroup sensitivity effect indicates that people have reactions that are more negative toward criticism from an outgroup member than from an ingroup member (Hornsey et al., 2002). Specifically, this perspective maintains that people evaluate criticism from an outgroup member as being less constructive, more negative (e.g., threatening, disappointing), less fair, and less legitimate, as compared a criticism made by

an ingroup member. People also agree less with a criticism if it is delivered by an outgroup member. The intergroup sensitivity effect also holds for the evaluation of the critic: Outgroup critics receive lower ratings on positive personality traits (e.g., intelligence, trustworthiness), and the intention to make friends with them is lower compared to ingroup critics (Hornsey et al., 2002; Hornsey & Imani, 2004).

The intergroup sensitivity effect is an attribution regarding the critic's motives: People use group membership of the critic as a heuristic to infer whether the critic has constructive or destructive motives, which mediates group members' reactions (Hornsey, 2005). In other words, people tend to perceive an ingroup critic as being more constructive and acting more for the greater good of the group than an outgroup critic. As a result, they have a more positive evaluation of the criticism and the critic that comes from the ingroup versus from an outgroup (Hornsey & Imani, 2004).

Similar to the black sheep effect, social identity processes are also involved in the intergroup sensitivity effect. Scholars have argued that criticism directed at a group is seen as a threat to the group image and group identity (Hornsey & Esposo, 2009), because group criticism suggests that the group has shortcomings and weaknesses, thus harming the positive distinctiveness of the group. Therefore, it is reasonable to argue that people base their reactions to group criticism on the extent to which they perceive that criticism to be threatening to their group. Although suggested in the literature, this mediation of perceived threat has not been explicitly tested. Therefore, one goal of this study is to test the mediation of perceived threat in affecting group members' reactions (e.g., evaluation of the criticism and the critic, emotion) to group criticism.

Based on the proposition of the intergroup sensitivity effect, I predict the following: When criticizing a group, an ingroup critic elicits *reactions that are less*

negative—less negative personality evaluations, less anger, less negative evaluation of the criticism, and more agreement with the criticism—from group members than an outgroup critic does. Note that this prediction is opposite to the prediction derived from the black sheep effect above, which suggests that the ingroup critic is reacted to more negatively than the outgroup critic. Next, I propose a model to resolve this inconsistency.

Resolving the Inconsistency: Communicative Context and Message Content

As mentioned above, the predictions derived from the black sheep effect and the intergroup sensitivity effect are contradictory. The former predicts more negative reactions toward the ingroup critic than the outgroup critic, whereas the latter predicts the opposite. In other words, the literatures are inconsistent in predicting group members' responses to criticisms directed at their group based on the group membership of the critic. Given the large amount of research that supports each of these two effects, the inconsistency between them cannot be ignored. It is important to resolve this inconsistency for two reasons. First, it can contribute to our theoretical understanding of the processes underlying responses to group criticism: what forms group members' judgment, how group members feel, and what evaluations and behaviors such criticism can lead to when group members are given a combination of different situational and message stimuli. Second, because group criticism can lead to both negative and positive consequences, it has practical implications to investigate what predicts group members' varying perceptions and responses to group criticism, so intergroup and intragroup conflict that results from such criticism can be reduced by strategically adapting the message and the context.

Hornsey et al. noted the inconsistency between literatures on the intergroup sensitivity effect and on the black sheep effect, and they provided three possible reasons

for the differences between these two literatures. Specifically, they suggested that (1) ingroup or outgroup critics are qualitatively different from the unlikable ingroup or outgroup deviants typically used in the black sheep literature—the former may bring both threat to the group and opportunity for group improvement, whereas the latter are typically perceived as unattractive and incompetent; (2) group criticisms may represent a special kind of social identity threat that also allows opportunities for improvement; and (3) the social identity threat of group criticisms may not come from the critics or the message, but from the weakness of the group (Hornsey et al., 2005; Hornsey & Esposo, 2009). These speculations can be tested in future research, but they are not the focus here.

Although acknowledging the merits in these speculations, I argue that the processes underlying both effects can be at play, but their relative influence may change based on the communicative context and the message content. In other words, I maintain that the deviants and threats are not qualitatively different in the two literatures; the black sheep effect can actually be applied to the context of group criticism because criticizing the group is a deviant behavior. The urge to derogate the ingroup critic may be greater than the tendency to tolerate the ingroup critic when, for example, the criticism threatens the group image or the ingroup critic is suspected of having malicious intent (e.g., when the ingroup critic delivers an inaccurate group criticism in front of an outgroup audience). The core research question of the present study is thus the following: Under what conditions does the black sheep effect replace the intergroup sensitivity effect? Put differently, when do group members react more negatively to the ingroup criticism and critic than to the outgroup criticism and critic?

The black sheep literature seems to focus mainly on the evaluation of the person (e.g., social attractiveness), whereas the intergroup sensitivity literature examines the

personality evaluation of the critic (which is similar to social attractiveness as used in the black sheep literature), as well as the evaluation of (e.g., fairness and negativity) and agreement with the criticism. This difference in examined outcomes exists because the typical research on the black sheep effect does not involve delivering a message, but it directly manipulates the behavior or attribute of the fictitious ingroup or outgroup member. The present study includes both person evaluation and message evaluation, so I can predict that the valence of evaluation of the criticism is consistent with the valence of the evaluation of the criticism.

In the following sections, I propose a model to explain the contradiction between the predictions derived from the black sheep effect and the intergroup sensitivity effect. Specifically, I argue that to resolve the inconsistency, we need to consider both the communicative context (e.g., the audience of the criticism) and perceived message attributes (e.g., perceived accuracy of the criticism). Considering that group criticism has identity implications for the ingroup, I argue that group criticism poses a social identity threat to group members based on how people attribute the intention of the critic, which depends on the perceived accuracy of the criticism. Moreover, when the criticism is delivered in front of an outgroup audience (e.g., on social media), the criticism threatens the collective face (i.e., the positive self-image that is derived from group membership) of group members. Presumed influence of the mass-communicated criticism on the outgroup magnifies the effect of the outgroup audience on the perceived threat to collective face: The more group members perceive the outgroup as being influenced by the critical message in the direction advocated by the message, the more they feel threatened. The perceived threats to social identity and to collective face in turn lead to negative evaluations of the critic and the criticism. Perceptions of threats also serve as

appraisals that lead to group-level anger (see discussion below; Mackie et al., 2009) toward the critic, if group members think the critic is to blame.

Next, I will show how presence of an outgroup audience can interact with critic's group membership and presumed media influence on the outgroup to cause collective face threat, a concept that will be explicated. I will also differentiate collective face threat from social identity threat, discussing the intragroup and intergroup processes that they are involved in. Then, I will demonstrate how a critic's group membership interacts with perceived message accuracy to predict social identity threat via perception of the critic's constructiveness. Last, I will discuss the outcomes of social identity threats and collective face threats: evaluation of the criticism and the critic, agreement with the criticism, intention to act on the criticism, and group-level anger.

An Outgroup Audience and Threat to Collective Face

Although the intergroup sensitivity effect maintains that people are less defensive to an ingroup critic than to an outgroup critic, research suggests that people expect an ingroup critic to follow certain rules when delivering criticism. Specifically, the criticism should be kept "in-house" (i.e., within the group where only ingroup members are the audience of the criticism; Hornsey, 2005). When an ingroup member deliberately delivers criticism to an outgroup, the privilege of the ingroup critic over the outgroup critic disappears. In a study that examined the influence of audience on people's reactions to group criticism, Elder et al. (2005) manipulated the critic's group membership and the communicative context (public vs. private), and they found that group members had lower sensitivity and higher agreement for the ingroup critic, but only when the criticism was delivered in private.

There are contexts where outgroup members are more likely to learn about the

criticism, for example, when the criticism is mass communicated (see Mastro & Atwell Seate, 2012). Hornsey et al. (2005) manipulated the group membership of the critic and that of the audience, and they found that an ingroup critic who criticized the ingroup to an outgroup audience via media received more negative evaluations (e.g., was perceived as more threatening and more disappointing) and was seen as less appropriate than an ingroup critic who kept the criticism in-house. The present study examines one such mass communication channel: social media, because they are widely used across the world: In 2017, 2.46 billion people were social media users (Statistica, 2017). Moreover, people use social media as the platforms to criticize outgroups. For example, Pew Research Center (2017) found that for the members of the 114th Congress, 15% of their Facebook posts criticized the opposing party, and these critical posts got more likes, comments, and shares than posts that contained no disagreement to the other party.

Criticizing the ingroup in front of an outgroup is seen as inappropriate, probably because such behavior is threatening to group members' face. The intergroup sensitivity literature has argued that group members expect ingroup critics to keep the criticism in-house to avoid potential harm to the group's reputation and image (Hornsey, 2005). Collective face better explains what is being threatened than terms such as group reputation or group image, which have been used in the literature for two reasons. First, the conceptualization of collective face centers on the "self," and it is related to the ego of each individual in the group, rather than being an attribute of the whole group. Second, the concept of face (and collective face) implicates the presence of others (see discussion below). Therefore, I will use the concepts of collective face and threat to collective face to explain group members' reactions to group criticism when an outgroup audience is present.

Face is defined as one's positive self-image in social interaction (Goffman, 1967; Ting-Toomey, 2017). Based on this definition, concerns related to face are relevant in situations where the person is interacting with others. In other words, others need to be present. Brown and Levinson (1987) distinguished between two types of face: Positive face concerns one's need for appreciation and acceptance, whereas negative face concerns the need for autonomy and freedom of action. Criticisms threaten both positive face and negative face, because they show disapproval by questioning the ability or morality of the target (a person or a group), thus threatening positive face, and they imply that the attributes or behaviors mentioned in the criticism should be changed, thus restricting the freedom of the target and threatening negative face (Trees & Manusov, 1998). Most of the research on face or face threats has focused on individual-level face—that is, the social image of a person, rather than that of a group. However, when people are depersonalized, this individual-level face is transformed to the group level, becoming collective face.

According to the social identity approach, when the context makes a group membership salient, people see themselves as group members rather than as distinct individuals (i.e., they are depersonalized; Turner, 1985). Through depersonalization, the image of the group becomes part of group members' self-image when interacting with others (see section above, "Social Identity Approach and Group Criticism"). This collective self-image is parallel to the self-image that people hold in the eyes of others (i.e., face), and therefore can be called collective face (cf. communal face; Ting-Toomey & Dorjee, 2017). Similar to individual-level face, collective face concerns the image of the group in the eyes of others, and thus should require the presence of outgroups. When collective face is threatened by disapproval or restriction of action, such as group

criticism, we should expect that the depersonalized group members react to the threat in a way that is similar to how they cope with individual-level face threats, but at the group level (e.g., to protect the ingroup). However, there has not been much research on collective face. One goal of this study is to develop and validate a measure of collective face threat and to examine its effect on responses to group criticism.

Predicting Collective Face Threat

As discussed above, because collective face threat is conceptualized as the threat to one's image that is derived from group membership in the eyes of outgroups, the implicit assumption, which will be tested by this study, is that it requires the presence of outgroup members. This can involve two situations: when the critic is from an outgroup or when an outgroup audience is present. I argue that there is an interaction between the presence of an outgroup audience (present vs. absent) and the critic's group membership (ingroup vs. outgroup) on collective face threat. This prediction replicates previous work by Elder et al. (2005). Specifically, there are four conditions that are possible in this interaction (H1), and I explain each of the four conditions below.

Collective face threat should be lowest when an ingroup member delivers criticism to the ingroup, because the criticism is kept in-house. No one in any outgroup is part of the audience of the criticism, and there is no risk for collective face to be damaged in front of outgroups. Collective face threat is second lowest with an outgroup critic and an ingroup audience. In this condition, the image of group members is damaged to some extent because the negative feedback is communicated by a person outside of the group, but the damage is limited because only ingroup members have access to the criticism other than the outgroup critic (controlling for group members' perception that outgroups will have access to the criticism in other venues). No outsiders are watching, so group

members' collective face is not severely threatened. Collective face threat should be second highest when an outgroup member delivers criticism in front of an outgroup audience—the threat is higher than the previous condition because the negative side of the group is now exposed to the outsiders. In other words, the group image is damaged in the eyes of many others and thus is damaged to a greater extent. Last, collective face threat should be highest with an ingroup critic in front of an outgroup audience. When an outgroup audience is present, the ingroup critic may pose a "double face threat" to ingroup members: a negative message about the group exposed to an outgroup, and a deviant, nonconforming group member while an outgroup is watching. In this case, not only the message (or the group weakness that it reveals) but also the ingroup critic is the source of threat. Figure 1 shows the hypothesized interaction between critic's group membership and presence of an outgroup audience on perceived threat to group members' collective face.

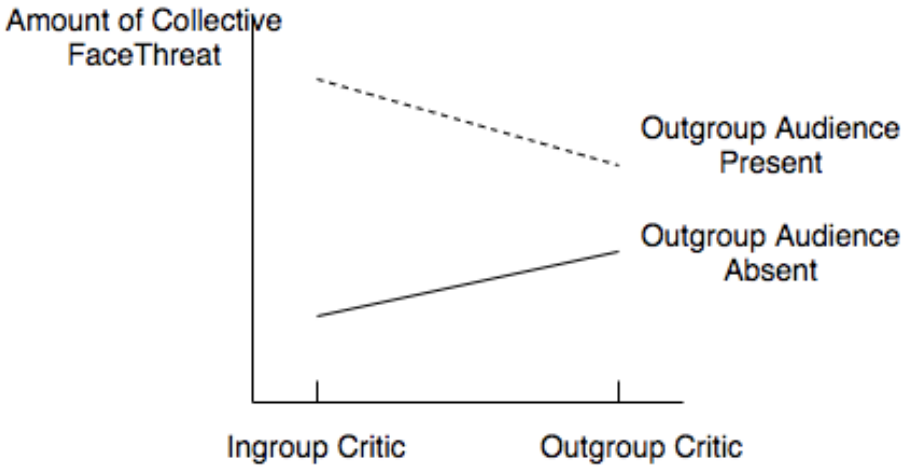


Figure 1. The interaction between critic's group membership and presence of an outgroup audience on collective face threat.

When an outgroup audience is present (i.e., in the last two conditions), the black sheep effect can replace the intergroup sensitivity effect: For the ingroup critic, group

members' collective face is severely damaged by the critic's action of "airing the dirty laundry in public." As a result, group members may derogate the ingroup critic more than the outgroup critic as a response to the collective face threat. Moreover, presumed media influence on the outgroup may also moderate the above 2-way interaction, such that it magnifies the effect of critic's group membership on perceived collective face threat only when an outgroup audience is present (see Figure 2).

Presumed media influence on the outgroup as a moderator. People may change their beliefs and behaviors based on their perception of the impact of the mass-communicated message (i.e., presumed media influence) on others rather than the actual message influence on others or the media influence on themselves (Gunther & Storey, 2003). It is necessary to clarify that presumed media influence typically refers to the presumed influence of the message, which is communicated via some media channel (e.g., radio, internet), rather than the presumed influence of the media channel per se. For example, Park (2005) found that women's use of fashion magazines increased their perceived prevalence of the thin ideal, which increased the presumed influence of the thin ideal on other women. The presumed media influence on other women in turn led to perceived influence on the participants themselves, which predicted their desire to be thin. This idea of presumed media influence originated from the third-person effect, which posits that (1) people tend to perceive others to be more influenced by mass-communicated messages than they believe that themselves are, especially when the message content is negative, and (2) this perception affects people's attitudes and behaviors (Davison, 1983; see also a meta-analysis by Sun, Pan, & Shen, 2008). Although research on third-person effect abounds (Perloff, 1999), Chung and Moon

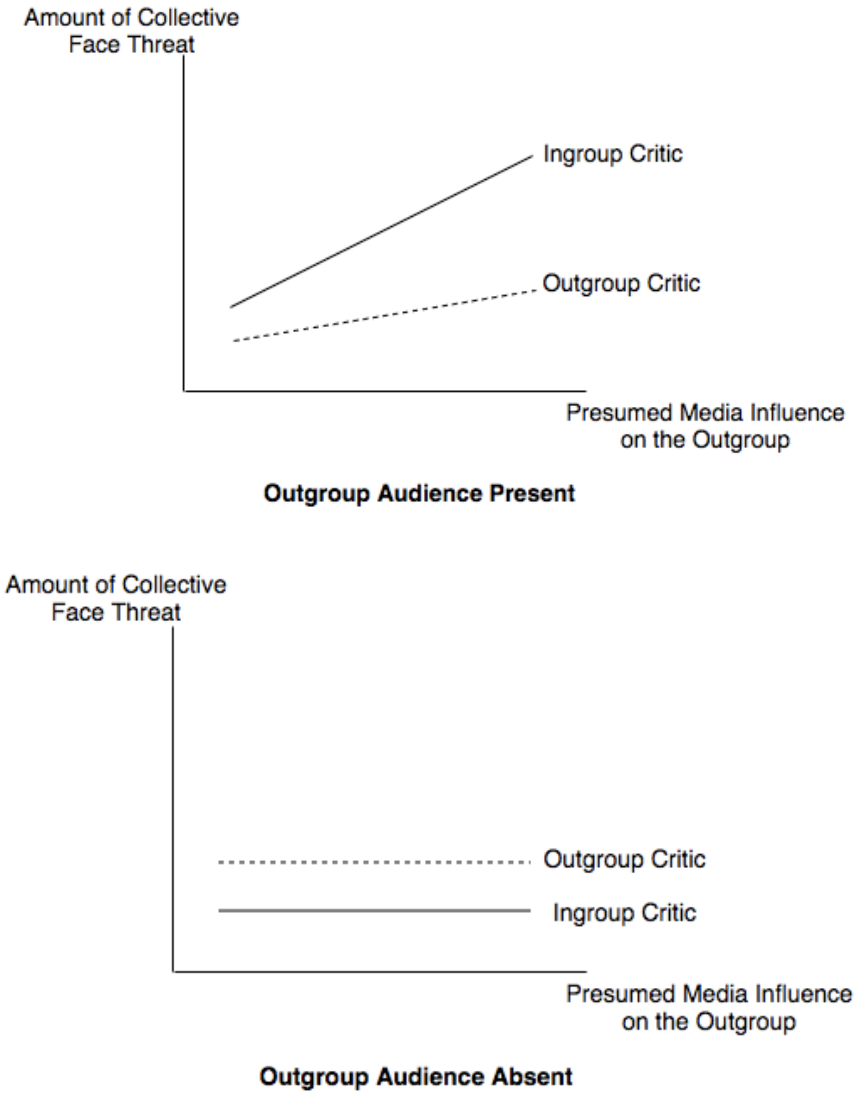


Figure 2. The 3-way interaction between presumed media influence on the outgroup, critic's group membership, and presence of an outgorup audience on collective face threat. Presumed media influence on the outgroup moderates the effect of critic's group membership on collective face threat when an outgroup audience is present (top panel) and has no effect on collective face threat when an outgroup audience is absent (bottom panel).

(2006) have provided empirical evidence that the presumed media influence on others, rather than the other-self gap of perceived media influence, is a strong predictor of censorship attitudes.

The effect of presumed media influence can also be found in intergroup communication, when others refer to an outgroup (Atwell Seate et al., 2012). For example, Tsfati (2007) examined the media coverage of Arabs in Israel and found that Arabs' perception of media influence on Jews predicted Arabs' perception of the group image: The more Arabs thought Israeli media had impact on Jews' perception of Arabs, the more Arabs believed the Jews thought negatively of Arabs. However, the measure of presumed media influence used in many of the aforementioned studies did not take into account the direction of the media influence (cf. Park, 2005). Although these studies all consider media influence in the direction advocated by the message, people can also be influenced in the direction opposite to what is advocated by the message. Therefore, the present study will use a measure of presumed media influence on the outgroup that accounts for the direction of influence.

The work on presumed media influence can be applied to the context of group criticism when the criticism is communicated through media: Because group criticism communicates a negative image about the group, the more that people perceive outgroup members to be influenced by the criticism *in the direction advocated in the message*, the stronger the criticism should threaten group members' collective face. Presumed media influence on the outgroup should be irrelevant to the conditions in which an outgroup audience is absent and cannot learn about the criticism, because group members would not think the outgroup has access to the group criticism, let alone to be influenced by it. On the other hand, when an outgroup audience is present, presumed media influence on

the outgroup should magnify the effect of critic's group membership on collective face threat for the reason discussed above (see Figure 2). Summarizing the discussion above, there is a three-way interaction between presence of an outgroup audience, critic's group membership, and presumed media influence on the outgroup to predict collective face threat, such that when an outgroup audience is present, presumed media influence on the outgroup will magnify the effect of the ingroup/outgroup critic on collective face threat; when an outgroup audience is absent, presumed media influence has no main or interaction effect on collective face threat (H2; Figure 2).

Note the contributions the above discussion makes to the study of group criticism. The intergroup sensitivity effect proposes more positive reactions toward an ingroup critic than an outgroup critic, whereas the black sheep effect predicts the reverse. First, I have argued that presence of an outgroup audience may be the moderator to resolve the contradiction between the two literatures. This moderator has been examined by previous research (e.g., Elder et al., 2005), which found that the intergroup sensitivity effect disappears when there is an outgroup audience. But here I make a more radical prediction: The intergroup sensitivity effect not only disappears, but also may be replaced by the black sheep effect, when an outgroup audience is present. Second, rather than directly predicting reactions to group criticism, as is typically done in the extant research, I have proposed that threat to collective face is the proximal outcome of the interaction between critic's group membership and the presence of an outgroup audience. An ingroup member criticizing the group in front of an outgroup presents double threat (i.e., a nonconforming member and a negative message about the group), and therefore the strongest threat, to the collective face of other group members. Third, I propose that presumed media influence on the outgroup further moderates the interaction between

critic's group membership and presence of an outgroup audience. This way, I take into account the role that individual difference in perception plays in responses to group criticism.

Is Collective Face Threat Different from Social Identity Threat?

I have discussed how presence of an outgroup audience, critic's group membership, and presumed media influence on the outgroup interact to predict collective face threat to the group members. The intergroup sensitivity literature argues that criticism directed at a group poses a threat to the social identity of the group members (Hornsey & Esposo, 2009). This raises a question: Are collective face threat and social identity threat the same or different? I argue that there is a key difference between collective face threat and social identity threat: Face threat emerges only when others are present, as is the case with social interaction; in the context of collective (i.e., group-level) face, the others should be outgroup members. Social identity threat can happen in both intragroup and intergroup processes; others do not have to be present for social identity threat to emerge.

The conceptualizations of collective face threat and social identity threat suggest their close relationship. Collective face threat refers to the potential damage to the person's positive social image that is based on the group's social image. Social identity threat refers to the potential damage to one's sense of who they are that is derived from belonging to a group (Branscombe et al., 1999) or damage to group welfare (Stephan, Ybarra, & Morrison, 2009). Although these conceptualizations are similar, different aspects of group-level self-concept are involved in the two types of threat. However, few studies have integrated the literatures on social identity and face, collective or otherwise, to discuss the relationship between these two types of threats. Such discussion is

important, however, because to understand people's feelings of threat that is based on group memberships, which encompass both social identity threat and collective face threat, we need to know whether researchers are just using different terms for the same concept (i.e., whether the two threats have the same causes and effects) or whether these two threats are involved in different group processes.

It may be useful to first examine the typical indicators of the two types of threat in their respective literatures to capture their relationship. Goffman (1967) used the concept of face to argue that people are motivated to maintain their own and their interaction partner's positive image and restore it when it is damaged during social interaction. Ting-Toomey (2005) further argued that the need for face is universal. The threat to individual-level face is typically measured using items that explicitly point out the presence of an interaction partner. For example, "My partner's actions were rude" (measuring positive face threat) and "My partner's actions constrained my choices" (measuring negative face threat; Cupach & Carson, 2002, p. 450). From these indicators, it seems that the presence of others is a necessary, although not sufficient, condition for face threat.

The concept of social identity threat was developed within the social identity framework (Tajfel & Turner, 1986; Turner, 1985) and intergroup threat theory (Stephan et al., 2009). Branscombe et al. (1999) have argued that group members experience different types of social identity threat depending on the context and group members' identification with the group. Specifically, people can experience the threat of being categorized by others into a group against their will (categorization threat), the threat to the positive distinctiveness of the group (distinctiveness threat), the threat to group values such as competence and morality (value threat), and the threat of not being accepted by the group (acceptance threat). Hence, this perspective of social identity threat applies to

both intergroup and intragroup processes. On the other hand, intergroup threat theory focuses on the intergroup contexts, and it maintains that there are two main types of threat that can come from an outgroup: realistic threat (e.g., the threat of taking resources, the threat of physical danger) and symbolic threat (e.g., the threat of violating group values; Stephan et al., 2009).

As is evident by the indicators of the two types of threat, face threat requires that an interaction partner is present, whereas social identity threat can occur both within the group and between groups. This is consistent with the conceptualizations of both threats. Face is "a 'social self' construction issue" (Ting-Toomey & Kurogi, 1998, p. 187), the "positive social value" that a person claims during an interaction (Goffman, 1967, p. 5). The definition of face thus suggests that face is essentially communicative, and it is the image of the person in the eyes of others. Without others (i.e., when others are not present or not believed to be present), there is no point of talking about face or face threat. This is also the case when elevated to the group level: When there is no outgroup present (either in actuality or in one's imagination), the issues (e.g., threats) related to collective face do not exist.

Social identity threat can be involved in both intragroup and intergroup processes. For example, when an ingroup member harms the subjective validity of the group (e.g., by not possessing group prototypes), other group members may experience threat to their social identity and respond to such threat with rejection and marginalization of the ingroup deviant (Abrams & Hogg, 2010). A social identity threat of this kind does not require an outgroup to witness the situation. All the processes (i.e., deviant behavior, perception of threat, and responses to the threat) happen within the group. However, people can also experience social identity threat in intergroup contexts when, for

example, an outgroup member harms the subjective validity of the group by violating group values (Stephan et al., 2009). In both cases, positive group identity—and thus the positive self-concept because of depersonalization—is put at risk, regardless of where the threat comes from (i.e., from within or outside of the group). In summary, whether an outgroup needs to be present is the key difference between collective face threat and social identity threat.

Criticism Accuracy, Perceived Constructiveness, and Social Identity Threat

In the last section, I have shown how collective face threat can be caused by the interaction between critic's group membership, presence of an outgroup audience, and presumed media influence on the outgroup. I have also differentiated collective face threat from social identity threat, arguing that the former requires the presence of outgroup members, whereas the latter does not. In this section, I will discuss how social identity threat can emerge in the face of group criticism. Specifically, I will argue that a critic's group membership interacts with perceived criticism accuracy to predict perception of the critic's constructiveness, which leads to social identity threat.

The intergroup sensitivity effect posits that group criticism threatens the social identity of group members when the critic is from an outgroup versus the ingroup, because group members use the critic's group membership as an attribution heuristic (Hornsey & Esposo, 2009). An outgroup critic's motive is perceived to be less constructive for the criticized ingroup compared to an ingroup critic, and this attribution of the critic's intent in turn influences group members' reactions, such as feelings of threat (Hornsey & Imani, 2004). In other words, attribution of the critic's motive (more specifically, perception of the critic's constructiveness) mediates the effect of the critic's group membership on social identity threat.

Perceived Accuracy of the Criticism

Other than critic's group membership, message content also matters in the attribution process by influencing perception of the critic's constructiveness. In the persuasion literature, some scholars have argued that people engage in both heuristic (e.g., based on communicator likability) and systematic (e.g., based on number of arguments in the message) information processing when reading a persuasive message, and that people are more influenced by heuristic information processing when they are less involved and by systematic information processing when they are more involved (e.g., Chaiken, 1980). Others have argued that people do not engage in two qualitatively different ways of information processing (Kruglanski & Thompson, 1999). Rather, when people process a persuasive message, both heuristics and message arguments are used as forms of evidence and are influenced similarly by motivations—the processing of both types is enhanced when motivation (which can be triggered by personal relevance) becomes stronger (Kruglanski & Thompson, 1999).

No matter whether the dual-route model or single-route model is used to explain the processing of messages, the implication for group criticism is the same: Because group criticism has a negative view of people's social identity, it causes people to be highly involved and motivated to process the information contained in the message (and information extraneous to the message too, for the single-route model). The more important the social identity is to people, the more relevant the group criticism should be to them, and the more involved and motivated they will be to process the content of the message. This argument is also congruent with the theory and evidence from the intergroup emotion and the self-categorization literature (Mackie et al., 2009; Turner, 1985). Therefore, the content of the criticism should influence group members'

attribution process, especially for those whose social identity is important.

The literature on group criticism has provided some empirical evidence about the effects of message content on group members' reactions toward the criticism (Rabinovich & Morton, 2015). Scholars have found that the attributional locus (i.e., internal vs. external attribution; Rabinovich & Morton, 2010), harshness (Tekman, Hortaçsu, & Ok, 2008), and legitimacy of the criticism (Khoo & See, 2014) have an impact on the reactions of group members toward the group criticism, pointing out the importance of examining the content of group criticism.

Perceived accuracy is another important dimension of criticism content that can influence people's evaluations of and responses to group criticism, for two reasons. First, when people describe a target (an individual or a group) that they view negatively, they are expected to comply with both antinegativity and accuracy norms (i.e., the norms to describe a target in a nonnegative and accurate way), which may result in tension (Bergsieker, Leslie, Constantine, & Fiske, 2012). Group criticism violates the antinegativity norm by revealing the group's shortcomings. Therefore, it is reasonable to expect that the accuracy norm will become particularly salient—the critic will be expected to comply with this norm and deliver information about the group that is at least accurate. Second, the motivation for accuracy is one of the common motivations that influence information processing (Chen, Duckworth, & Chaiken, 1999). When group criticism is processed, group members are motivated to pay attention to the accuracy of the message.

Accuracy of the group criticism may influence social identity threat that group members experience through perceived critic's constructiveness. Recall that people engage in an attribution process when evaluating group criticism—they attribute a

constructive motive to an ingroup critic and a destructive motive to an outgroup critic (Hornsey, 2005). Because of the importance of message content, people may also use the content of the criticism—in this case, accuracy—to make attributions. Specifically, perceived accuracy of the criticism may have a 2-way interaction with critic's group membership to influence perceived critic's constructiveness (see Figure 3; H3), especially for those whose group identity is important (H4; Figure 4). I explain below the interaction between critic's group membership and criticism accuracy, as well as the moderating role of identity importance.

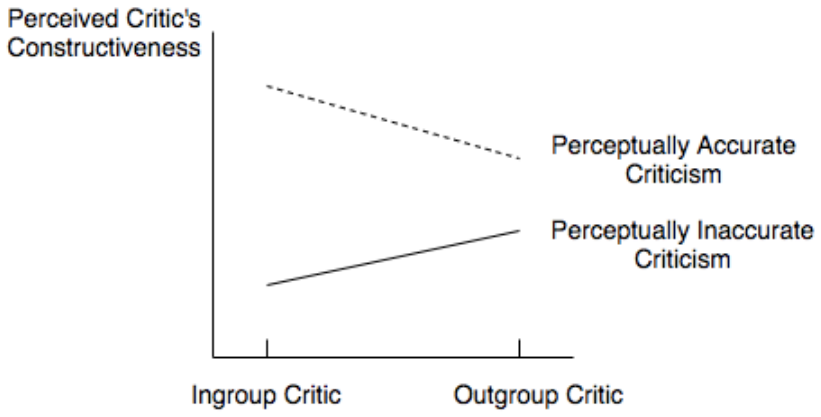
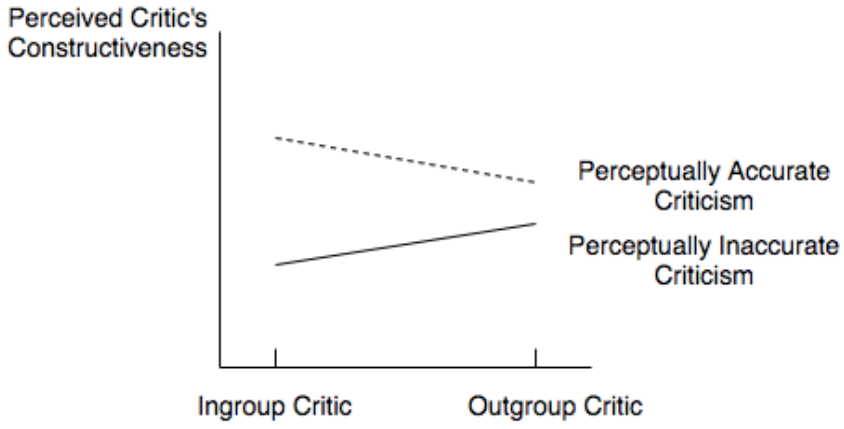


Figure 3. The interaction between critic's group membership and perceived accuracy of criticism on perceived critic's constructiveness.

Hornsey (2005) has argued that group members ask themselves questions when facing group criticism, the first question being "Why would the critic say that?" This is the question that concerns the attribution of the critic's motives. Outgroup members are often regarded as having less knowledge of the group than ingroup members. Generally speaking, intergroup scholarship has argued that knowledge about the outgroup is an important factor in determining intergroup outcomes. For example, Pettigrew and Tropp (2008) have suggested that increasing the outgroup's knowledge of the ingroup can



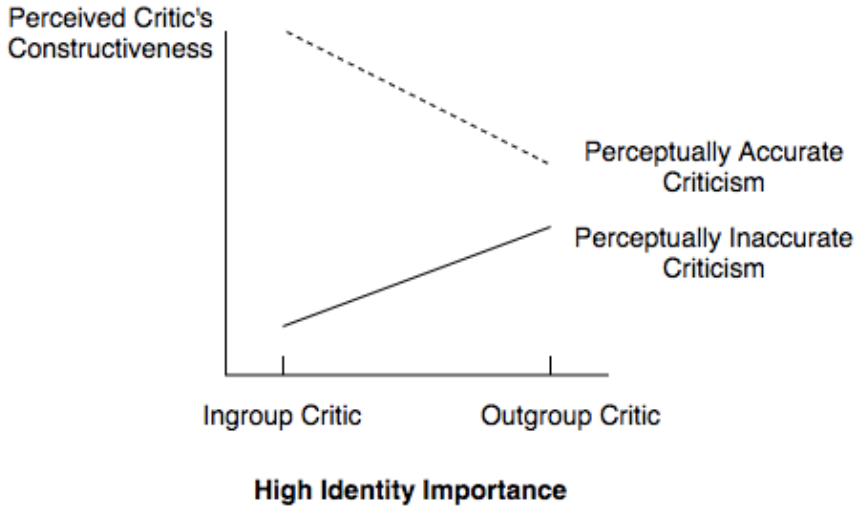


Figure 4. The 3-way interaction between identity importance, critic's group membership, and criticism accuracy on perceived critic's constructiveness. Identity importance moderates the 2-way interaction between criticism accuracy and critic's group membership, such that the 2-way interaction is stronger when identity importance is higher.

reduce prejudice. When a criticism is perceived as inaccurate, it is expected that people assume ingroup members to have more knowledge of the group than outgroup members do. Group members may ask themselves the question above with an additional assumption of the critic's knowledge about the group: "Why would he say negative things about our group while knowing that it's not true?" As a result, the ingroup critic may be perceived to have less constructive motives. An outgroup member's inaccurate criticism, on the other hand, may be partly attributed to a lack of knowledge of the group. People may think, "She said this because she didn't know" and think of the outgroup critic as having motives that are more constructive.

When the criticism is perceived as accurate, reactions toward the ingroup and outgroup critics may be reversed, such that the ingroup critic is perceived to have more constructive motives than the outgroup critic. With an accurate criticism, group members' need for accuracy is satisfied. Hence, group membership of the critic may be used as a cue to infer the critic's motives for delivering the criticism. Recall the intergroup sensitivity literature, which suggests that the ingroup critic's motive may be attributed to be "for our own good," whereas the motive of the outgroup critic could be less constructive. Therefore, the intergroup sensitivity effect may emerge when the criticism is accurate: People have more negative evaluations and responses toward the outgroup critic than the ingroup critic.

This discussion shows how the critic's group membership can have a 2-way interaction with criticism accuracy to predict perceived critic's constructiveness. Moreover, because the content of the criticism should affect group members' attribution, especially when their group identity is important (see discussion above), identity importance will moderate the process discussed above, forming a three-way interaction:

The interaction of critic's group membership and perceived criticism accuracy on perceived critic's constructiveness will be observed especially for those with high identity importance (H4; Figure 4).

It is important to clarify that, although criticism accuracy seems to be similar to criticism legitimacy, which has been examined by Khoo and See (2014), they are distinct concepts. Legitimacy refers to the extent that the criticism is justifiable, that is, the extent to which the conclusion (e.g., "Americans are arrogant") is reasonable based on the arguments provided (e.g., "Americans are arrogant because few Americans I know are interested in knowing other cultures"). On the other hand, the perception of accuracy is more about the statement (e.g., "Americans are arrogant"). In fact, when manipulating criticism legitimacy, Khoo and See (2014) used the same statement ("local universities are inferior to oversees universities"), but different supporting arguments for the legitimate and nonlegitimate criticisms. In the manipulation check, they showed that the two criticisms differed on perceived legitimacy, but not on perceived accuracy, providing evidence that criticism accuracy and legitimacy are different concepts.

Note the unique contributions the above propositions make to the literature on group criticism. We have learned from the intergroup sensitivity effect that critic's group membership predicts perception of the critic's constructiveness, which leads to (social identity) threat perceptions. Building upon this finding, I have argued that (a) the effect of critic's group membership on perceived constructiveness depends on criticism accuracy, and (b) this interaction is further moderated by identity importance. The first contribution is parallel to research that found the effects of criticism content on reactions to group criticism (see Rabinovich & Morton, 2015) by proposing another dimension of content, accuracy. The second contribution restricts the interaction to certain group members by

including an individual difference, identity importance.

Including the variable of identity importance allows predicting within-group variability in responding to group criticism, rather than assuming that all group members' reactions are uniform. Examining such individual differences is important, because people in the same group may have very different responses, sometimes even canceling out the group's main effect. For example, Mastro (2003) examined White participants' responses to a fictitious White versus Latino criminal. The main effect of the criminal's race on justification of the criminal behavior was not significant; however, when exposed to the White criminal, participants' racial identity importance positively predicted their justification of the criminal's behavior. These results suggest that only looking at differing effects between conditions or groups may mask large amount of variations that are caused by individual differences and may hinder our understanding of the phenomenon.

Although not typically hypothesized, a three-way interaction between two contextual factors and an individual-level variable is supported by research evidence. For example, Reid and Hogg (2005) found a three-way interaction between uncertainty, group status, and participant prototypicality on self-stereotyping and identification with the group. This finding shows how group members' individual differences (e.g., prototypicality, identity importance) can moderate the interaction between two contextual factors.

Predicting Social Identity Threat

Once group members attribute the intention of the critic based on the critic's group membership and perceived accuracy of the message, the perceived constructiveness of the critic may further lead to social identity threat. Hornsey and

Esposo (2009) have suggested that "in the context of intergroup criticism, concerns about threats to social identity are likely to have activated suspicions about motive" (p. 282), pointing out the close relationship between social identity threat and the attribution of the critic's intention. Moreover, Branscombe et al. have argued that "the outgroup . . . can also be the source [of social identity threat] . . . when the threatening information or behavior is intentionally directed at the ingroup by the outgroup" (Branscombe et al., 1999, p. 46), implying that the *intentional* harm done by an outgroup threatens the social identity of ingroup members. Although the above two statements both focus on the intergroup context, attribution of the critic's intention should influence social identity threat in the intragroup context as well (i.e., when the critic is from the ingroup), because the less constructive group members perceive the critic to be, the more they believe that the critic is intentionally harming the group, regardless of the critic's group membership, and the more group members' social identity is put at risk (Branscombe et al., 1999). In summary, perceived critic's constructiveness has a negative effect on social identity threat, such that lower perceived constructiveness of the critic leads to greater social identity threat of the group members (H5).

Outcomes of Threat Perceptions

I have discussed how people's collective face threat and social identity threat are influenced by the communicative context (e.g., critic's group membership, presence of an outgroup audience), perception (e.g., presumed media influence on the outgroup, perceived critic's constructiveness), message content (e.g., perceived criticism accuracy), and identity importance in the face of criticisms directed at their group. These threat perceptions, in turn, have evaluative, emotional, and behavioral consequences. This section predicts these outcomes of perceived threats.

As reviewed in the section on the intergroup sensitivity effect, the literature on group criticism has examined evaluation of the criticism, agreement with the criticism, and personality evaluation of the critic as the outcomes of group criticism. My study includes these outcomes. Specifically, I argue that greater collective face threat and social identity threat lead to more negative evaluation of the criticism (H6a), less agreement with the criticism (H6b), and a greater negative personality evaluation of the critic (H6c). Intention to act on the criticism, personality evaluation of the outgroup, and anger toward the critic are added to the model as outcome variables, the reasons of which I discuss below.

First, people's intention to act on criticism to amend the situation is a result of agreement with the message (H7). In a meta-analysis, Kim and Hunter (1993) found that attitudes predict behavioral intentions (with a mean correlation of .87 after statistical corrections), which can lead to actual behavior. It is through the manifested behavior that people interact with the world. Examining the intention to act can help us predict how people will act in response to group criticism, which has important implications for the improvement and growth of the group, as well as for intergroup relations.

Second, the present study examines the evaluation of the critic's group when the critic is from an outgroup. Because group criticism is about the negative side of a group, it makes group identity salient (Atwell Seate et al., 2012). As a result, when a critic comes from an outgroup and is perceived to be a typical and representative member of the outgroup (Brown & Hewstone, 2005), the evaluation of the critic may be generalized to the entire outgroup (H8). As evidence, a meta-analysis on intergroup threats finds that the perceived threat to group esteem or distinctiveness (as in the case of group criticism) from an outgroup is associated with the threatened group's members' negative attitudes

toward that outgroup (Riek, Mania, & Gaertner, 2006). This prediction is also consistent with the intergroup contact literature, which posits that when group identity is salient, positive attitudes toward outgroup individuals that are generated from contact can be generalized to the outgroup under the right conditions (e.g., sufficient time for intergroup friendship to develop; Pettigrew, 1998). The difference between what is stated in the intergroup contact literature and the above prediction is that, in the case of group criticism, the communication (i.e., the delivery of the criticism) is most likely to be negative because of the threat it imposes on group members.

Third, anger is examined here as the emotional response to group criticism. Reactions to threat messages such as group criticisms are often emotional (Hornsey & Esposo, 2009). The intergroup sensitivity literature has examined anger as an outcome of group criticism (Elder et al., 2005), but the underlying mechanism of why anger can result from group criticism was not explicitly provided. From the perspective of the appraisal theory of emotions (e.g., Lazarus, 1991), group criticism can lead to anger by initiating an appraisal process.

This study takes an appraisal approach to emotion (Lazarus, 1991; Mackie et al., 2009) to examine anger in the face of group criticism. Lazarus's appraisal theory of emotions argues that each discrete emotion (e.g., pride, anger) is caused by a set of appraisals of the person-environment relationship based on one's goals at that moment and leads to certain behaviors (see also Frijda, 1987). Based on this literature, emotion is a process that involves appraisals, feeling, physiological reactions, and behavioral tendencies, and it only emerges when the situation is appraised as relevant to one's goals. When the situation is perceived as incongruent with one's goals, the emotion becomes negative, such as anger or guilt. Additional appraisal components further specify the

emotion in each discrete emotion. For example, anger results from the additional appraisals that the self- or social-esteem of one's identity is threatened, and that someone (an other or the self) is to blame for the undesirable situation (see also Smith & Ellsworth, 1985).

Intergroup emotions theory (Mackie et al., 2009) integrates the appraisal approach of emotions with self-categorization processes. The theory argues that whereas the traditional appraisal approach (e.g., Lazarus, 1991) has typically treated emotions on the individual level (e.g., feeling angry because my own goals are impeded), emotions can also arise on the group level, when people are depersonalized and appraise the environment in terms of its relationship with the group. For example, people can feel angry when their group is being threatened (and some other entity is to blame), even when they are not personally affected.

Group-level anger can emerge from collective face threat and social identity threat, because both of these threats suggest that one's self-esteem that is derived from group membership is being questioned. In fact, Maitner, Mackie, and Smith (2006) have used group criticism to induce anger at the group level. Whereas collective face threat and social identity threat set the stage for anger to emerge, the degree of anger depends on how much someone is blamed. In other words, blame moderates the effect of threat perceptions on anger. The target of the blame is the target of anger (Lazarus, 1991). In the context of group criticism, the critic may be blamed for delivering a negative message about the group and threatening the collective face and social identity of group members. Therefore, the amount of blame directed at the critic should moderate the effect of collective face threat and social identity threat on anger toward the critic, such that the greater the blame, the greater the effect of threat perceptions on anger toward the critic

(H10). In other words, blame on the critic and threat perceptions will have a linear by linear interaction on anger with the critic.

Moreover, perceived critic's constructiveness should have a direct effect on the appraisal of blame, because perceived constructiveness examines the perception of how the critic is purposefully being constructive in the message (e.g., "To what extent do you feel the critic was intended to be constructive?"; see Hornsey & Imani, 2004), thus implying that the critic is responsible and accountable for the information contained in the criticism. The less constructive that group members perceive the intention of the critic, the stronger the blame on the critic (H9).

Predicting anger in the face group criticism is not to say that other emotions cannot emerge. In fact, emotions such as guilt and shame may also arise from group criticism (Iyer, Schmader, & Lickel, 2007), the former from the appraisal that the self or the ingroup is responsible for a moral transgression, and the latter from the appraisal that the self or the ingroup is responsible for not living up to one's ego-ideal (Lazarus, 1991). This study examines anger because it is caused by appraisals that are closest to the types of perceived threat included here, not necessarily including other concerns such as moral transgression (in the case of guilt) or failure to fulfill one's ideal self (in the case of shame; Lazarus, 1991). In other words, anger is predicted to emerge in group criticism regardless of the topic of the criticism; guilt and shame may emerge depending on whether the criticism involves the respective concerns mentioned above.

Anger also brings about the tendency to attack (Frijda, 1987; Lazarus, 1991). The tendency to attack can be manifested in more specific behaviors, such as refusing to act in accordance with the criticism (e.g., refusing to be more environmentally friendly), or even a boomerang effect (i.e., acting in opposition to what the message advocates). In

fact, Dillard and Seo (2013) found that students' anger toward an advertisement of an educational program negatively predicted their intention to take part in the program. In other words, anger may have a direct and negative effect on the intention to act on the criticism to alter the criticized behavior (H11).

Time Ordering

I have argued that contextual factors (critic's group membership, criticism accuracy, and presence of an outgroup audience) and individual differences (presumed media influence and identity importance; independent variables) interact to predict perception of the critic's constructiveness (mediator 1) and threat perceptions (mediator 2), which in turn predict responses to group criticism (dependent variables; see Figure 5). However, some may argue that the above mediation process may not operate in the proposed temporal order. For example, it is possible that social identity threat causes perceived constructiveness, or responses to criticism cause threat perceptions, rather than the other way around. To counter these arguments, I now present three pieces of theoretical and empirical evidence.

First, perceived critic's constructiveness mediates the effect of criticism on social identity threat (independent variables → mediator 1 → mediator 2). The literature on intergroup sensitivity effect provides direct evidence for this claim. For example, Hornsey, Trembath, and Gunthorpe (2004) found that there was a difference of perceived constructiveness between a highly identified ingroup critic and other critics (outgroup critic and low identified ingroup critic). This difference further affected group members' evaluations, such as perceived negativity and agreement. Although the authors did not explicitly frame negativity as a social identity threat, they discussed the threat to collective self-concept that group criticism can lead to, and they used items that were

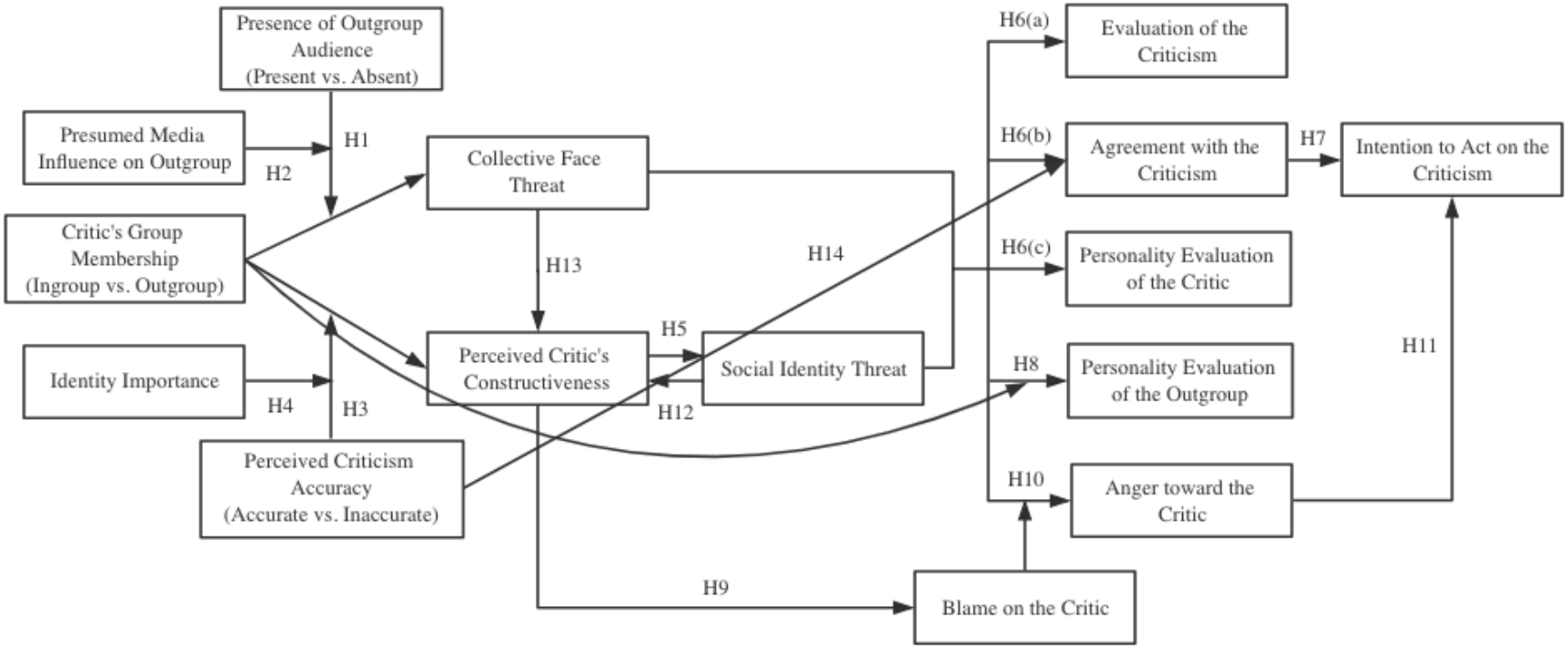


Figure 5. Model of group criticism. In the final latent variable model (see Chapter 3), identity importance was represented by 5 items, presumed media influence by 3 items, categorization threat by 3 items, distinctiveness threat by 3 items, value threat by 8 items, overall threat by 5 items, positive and negative collective face threat each by 6 items, perceived critic's constructiveness by 4 items, evaluation of the criticism by 6 items, agreement with the critic by 4 items, intention to act by 4 items, personality evaluation of the critic by 5 items, anger by 3 items, and expected critic's effort (covariate in the model) by 4 items.

closely related to threat perceptions (e.g., irritating, offensive, insulting) to measure perceived negativity.

Second, threat perceptions cause responses to group criticism (mediator 2 → dependent variables). Evidence can be found in both literatures on social identity threat and on intergroup threat theory. For example, in Branscombe et al.'s (1999) typology of social identity threats, different responses to these threats were proposed based on research evidence. The outcome responses in this study can be seen as the specific manifestations of some of the responses listed by Branscombe et al., such as defensive reactions and outgroup derogation. Moreover, in a study using intergroup threat theory, Atwell Seate and Mastro (2016) manipulated threat in news to examine its effect on people's responses. They observed that threat in news caused intergroup anxiety, which further led to unfavorable immigration attitudes. This result is consistent with the proposed causal path between threat perceptions and responses to group criticism.

Third, threat perceptions mediate the effect of group criticism on responses to the criticism (independent variables → mediator 2 → dependent variables). Research evidence again can be found in research applying intergroup threat theory in media settings. For example, Atwell Seate, Ma, Chien, and Mastro (2017) found that threat perceptions mediated the influence of media use on Caucasians' anger and anxiety toward minorities in the US (i.e., Blacks and Latinos). Group criticism is one type of message that people can be exposed to in media, and it should be expected to function in a similar way leading to negative emotions and other responses indirectly through threat perceptions.

With that said, there could be nonrecursive paths in the model, in which an outcome has a causal influence on its cause. For example, although I argue that perceived

critic's constructiveness leads to social identity threat, it is also possible that social identity threat and collective face threat have a causal impact on perceived critic's constructiveness, such that the more group members feel threatened, the less constructive they perceive the critic to be (H12 & 13). Research has also provided evidence for this claim. For instance, Dietz-Uhler and Murrell (1998) manipulated the level of threat that participants' group received, and they found that when their group was threatened, group members had a greater need to affirm their group identity by making more positive statements (vs. negative statements) about the group. It is reasonable to expect that in the face of group criticism, which disconfirms, rather than affirms, the positive group identity, threat perceptions will lead group members to attribute motives that are less constructive to the critic.

Moreover, there should be a direct causal path from criticism accuracy to agreement with the criticism. In Ilgen et al.' study on the consequences of feedback, they argued that perceived accuracy of the feedback influences the extent to which the feedback is accepted by its receivers (Ilgen, Fisher, & Taylor, 1979). Therefore, people tend to agree with the criticism that they perceive as accurate than one they perceive as inaccurate (H14).

Model and Hypotheses

I have discussed the solution to resolve the inconsistency of the predictions derived from the black sheep effect and the intergroup sensitivity effect. I have argued that the critic's group membership (manipulated), presence of an outgroup audience (manipulated), and presumed media influence on the outgroup (measured) work together to predict perceived collective face threat of group members. Moreover, critic's group membership (manipulated) interacts with perceived criticism accuracy (manipulated) and

identity importance (measured) to predict perceived critic's constructiveness, which further predicts perceived social identity threat. Collective face threat and social identity threat predict evaluation of the criticism, agreement with the criticism, intention to act on the criticism, as well as personality evaluation of and anger toward the critic. When the critic is from an outgroup, the two threats also predict evaluation of the entire outgroup. Under some circumstances, the ingroup critic is more tolerated (e.g., has more positive evaluations) than the outgroup critic; under other conditions, the results may be reversed. Summarizing the discussion above, I present the model in Figure 5, and I propose the following hypotheses.

H1: A critic's group membership interacts with presence of an outgroup audience to predict collective face threat: Collective face threat is lowest with ingroup critic and no outgroup audience, second lowest with outgroup critic and no outgroup audience, second highest with outgroup critic and outgroup audience, and highest with ingroup critic and outgroup audience (see Figure 1).

H2: When an outgroup audience is present, presumed media influence on the outgroup will magnify the effect of the ingroup/outgroup critic on collective face threat; when an outgroup audience is absent, presumed media influence has no main or interaction effect on collective face threat (see Figure 2).

H3: A critic's group membership interacts with criticism accuracy to predict perceived critic's constructiveness: Perceived constructiveness of the critic is highest for the ingroup critic who delivers accurate criticism, second highest for the outgroup critic who delivers accurate criticism, second lowest for the outgroup critic who delivers inaccurate criticism, and lowest for the ingroup critic who delivers inaccurate criticism (see Figure 3).

H4: The interaction in H3 is stronger for people with high identity importance than people with low identity importance (see Figure 4).

H5: Perceived critic's constructiveness has a negative effect on social identity threat, such that the lower perceived critic's constructiveness, the greater the social identity threat.

H6: Collective face threat and social identity threat have a negative effect on (a) evaluation of the criticism, (b) agreement with the criticism, and (c) personality evaluation of the critic, such that stronger collective face threat and social identity threat each leads to less positive evaluation of the criticism, less agreement with the criticism, and less positive personality evaluation of the critic.

H7: Agreement with the criticism has a positive effect on the intention to act on the criticism.

H8: When the critic is from an outgroup, collective face threat and social identity threat have a negative effect on personality evaluation of the outgroup.

H9: Perceived critic's constructiveness has a negative effect on blame on the critic.

H10: Blame on the critic moderates the positive effect of collective face threat and social identity threat on anger toward the critic, such that the greater the blame, the greater the positive effect of the two threats on anger.

H11: Anger has a negative effect on the intention to act on the criticism.

H12: Social identity threat has a negative effect on perceived critic's constructiveness.

H13: Collective face threat has a negative effect on perceived critic's constructiveness.

H14: Criticism accuracy has a positive effect on agreement with the criticism, such that group members agree more with the perceptually accurate criticism than the perceptually inaccurate criticism.

At first sight the model may appear overly complicated. However, most social phenomena *are* complicated. Multiple factors may interact to sufficiently predict a phenomenon, although each of these single factors may not be a sufficient or necessary cause of the phenomenon (see Atwell Seate, Joyce, Harwood, & Arroyo, 2015; Ragin, 2008; Shadish, Cook, & Campbell, 2002). Although previous research has examined variables such as audience composition (e.g., Elder et al., 2005) or message attributes (Rabinovich & Morton, 2015) to predict group members' response to group criticism, little has been done to investigate how the *combination* of both contextual factors and individual differences can lead to one effect (e.g., the black sheep effect) and not the other (e.g., the intergroup sensitivity effect). The failure to acknowledge and examine the plurality of causes may be the reason why literatures are inconsistent in predicting responses to group criticism (see Ragin, 2008). Therefore, it is theoretically important for the present study to investigate the combination of variables to see how group members' responses are multiply determined so we will have a better understanding of the complex social phenomenon of responding to group criticism (see Atwell Seate et al., 2015).

Chapter 2: Method

This study consists of three pilot studies and one main study. The first pilot study collected a pool of accurate and inaccurate criticisms about U.S. Americans from participants and used it to construct criticism messages that were perceived to be inaccurate or accurate by the ingroup. The second pilot study validated the instruments to be used in the main study (for the final version of the instruments, see Appendix A). The third pilot study conducted a manipulation check to ensure that the two criticism messages created in the first pilot study differed in perceived accuracy in the intended direction. It also checked three assumptions made in the present study: that group criticism led to group salience, that people presumed ingroup members to have more group knowledge than outgroup members, and that people perceived outgroup members to have less access to messages in an intragroup context than in an intergroup context. The main study tested the proposed model using the scales and messages constructed from the three pilot studies.

All participants (except participants in Pilot Study 2 Part II, to be explained below) were recruited from Amazon Mechanical Turk (MTurk), an online crowdsourcing platform. Participants (called MTurk workers) signed up for studies posted on MTurk and received payment after completing a study. Paolacci and Chandler (2014) suggested that MTurk has a more diverse participant pool than college student samples, which are commonly used but are very unrepresentative of humans (Henrich, Heine, & Norenzayan, 2010). Goodman, Cryder, and Cheema (2013) also found that MTurk samples are similar to traditional convenient samples (e.g., community samples) in many aspects (although some differences exist), and they recommended using MTurk samples for its reliability and quick data collection. As of November 2017, around 75% of MTurk workers were

located in the U.S. (Difallah, Filatova, & Ipeirotis, 2018). Given the reliability of MTurk samples and the large number of U.S. MTurk workers, it is justifiable to use MTurk samples in the present study. All participants in the present study were U.S. citizens (except for Pilot Study 1 Part I, to be explained below), because the study examines U.S. Americans' perceptions and responses to criticisms directed at U.S. Americans.

Three qualifications were required for MTurk participants. First, if they had participated in any part of the study, they would not be eligible to participate in any following part. This was done by assigning each participant the qualification of "Past Participant," and excluding anyone who had this qualification in subsequent parts. Second, the location of participants was set to the United States (except for Pilot Study 1 Part I). This was to ensure that most participants were U.S. citizens. To further ensure that only U.S. participants were included, people who identified themselves as non-U.S. citizens in the study were removed. Third, to ensure data quality, participants needed to have an approval rate above 95%. All participants were 18 years or older.

The researcher of the present study is Chinese. However, because the study involves group criticisms that make national identity salient, a Chinese name on the consent forms shown to participants may create researcher attribute effect (i.e., the phenomenon in which some of the researcher's characteristics influence participants' responses; Baxter & Babbie, 2004). Participants' responses may be affected by the researcher's national identity, which is evident in my name. Therefore, a pseudonym, Emma Johnson, instead of my own name, was used in the consent forms. All participants were debriefed about the researcher's name at the end of the study, and they were given the option to have their data removed. The number of people that requested removal of their data in each part is specified in the following sections.

For each part of the study, participants first read and electronically signed a consent form (see Appendix B). The instructions for participants are in Appendix C, and the debriefing about the pseudonym is in Appendix D. Moreover, the same demographic information (see Appendix E) was collected in each part of the study.

Pilot Study 1: Constructing the Criticism Messages

Purpose and Overview

The aim of the first pilot study was to construct the criticisms about U.S. Americans that were perceived to be accurate or inaccurate by U.S. Americans. This pilot study had two parts. In Part I, both U.S. and non-U.S. participants were asked to provide criticisms about U.S. Americans, which were compiled into a pool of criticisms. Both accurate and inaccurate criticisms were sought from both U.S. and non-U.S. participants, because this could ensure a more comprehensive collection of U.S.-directed criticisms. Note that this is the only part in the present study that recruited non-U.S. participants. In other words, all the other parts included only U.S. participants. In Part II, participants rated the accuracy of the criticism messages collected in Part I using a magnitude scale, when these criticisms were directed at either U.S. Americans or Chinese people. Two pairs of criticisms were chosen to construct the messages to be used in Pilot Study 2, because the criticisms in each pair met two criteria: (a) the two criticisms differed on perceived accuracy when they were used to depict U.S. Americans, and (b) the two criticisms did not differ on perceived accuracy when they were used to depict Chinese people.

Part I: Collecting Criticisms about the United States and U.S. Americans

One hundred and twenty-four participants in total were recruited from MTurk. After removing participants who asked to have their data deleted, the final dataset

consisted of 77 participants; 33 were U.S. citizens, 35 were non-U.S. participants, and 9 did not disclose citizenship. This sample size was consistent with Jackson and Trochim (2002; $N = 76$): In their study, participants were asked to list group norms, which were later used in a concept mapping analysis.

On average, participants were 32.27 years old ($SD = 8.33$) and mostly male (79.22%). Participants identified themselves as African/African American (5.19%), Asian/Pacific Islander (33.77%), Caucasian (49.35%), Latino/Hispanic (2.60%), Native American (2.60%), or multiracial (3.90%); two did not disclose racial identity. Participants were not allowed to choose more than one race/ethnicity.

Procedures. Participants were told that the study examined common criticisms about the United States (the country) or Americans (the people). A brief definition of criticism was given (see Appendix C). Next, participants were asked to provide five criticisms that they heard from media, the internet, or daily interactions, and that they believed to be accurate, and five that they believed to be inaccurate. To simplify the subsequent aggregating of the messages, participants were asked to focus on one aspect only by writing down one adjective or phrase that describes U.S. Americans. Last, participants provided demographic information and were debriefed.

Results. Participants provided 770 criticisms in total. I deleted messages that did not criticize (but instead praised or simply described) United States or U.S. Americans (e.g., "Everything is awesome!"; $n = 72$ messages), messages that did not make sense (e.g., sentences that appeared to be part of a novel or story; $n = 113$ messages), and messages that did not have any content (e.g., "n/a"; $n = 7$ messages). The final pool contained 578 criticisms. Similar criticisms were grouped into categories. Here I did not differentiate the accurate and inaccurate criticisms provided by participants; perceived

accuracy of criticisms was investigated in Part II.

Next, I selected criticisms to be used in Part II. I deleted criticisms that were too vague (e.g., "The United States is evil") or that addressed a specific incident. To prevent participant fatigue, I reduced the number of criticisms while trying to have a good coverage of the criticism themes collected in Part I. For consistency, I rewrote the criticisms so they either started with "Americans," or they started or ended with "The United States." The final list consisted of 67 criticisms: 50 about Americans and 17 about the United States. Then I changed the subject in each criticism to "Chinese people" or "China." This yielded two lists of criticisms with the same content; one was U.S.-directed, and the other was China-directed.

Part II: Rating Accuracy of Criticisms

One hundred and fifty-six participants who were located in the United States were recruited. All of them were U.S. citizens. After removing those who asked to have their data deleted (n = 40), those who got both attention checking questions wrong (n = 2), and those who completed the study in less than 180 seconds (n = 8), the final dataset consisted of 106 participants. They were 36.93 years old on average (SD = 12.01) and mostly male (66.04%; one did not disclose sex). They identified themselves as African/African American (2.83%), Asian/Pacific Islander (3.77%), Caucasian (75.47%), Latino/Hispanic (11.32%), Native American (2.83%), or multiracial (2.83%); one did not disclose racial identity. Participants were not allowed to choose more than one race/ethnicity.

Procedures. Participants were randomly assigned to read either the U.S.-directed (n = 57 messages) or the China-directed criticisms (n = 49 messages) and rated perceived accuracy using magnitude scaling (Fink, 2009). After a training session to help

familiarize them with the scale (Cionea, 2013; see Appendix F), participants indicated how accurate they thought each criticism was using any number from 0 to infinity, where 0 = not accurate at all, and 100 = moderately accurate.

Results. To reduce outlier effects, answers greater than 999 were changed to 999 (Zhu, Liu, & Fink, 2016). A magnitude scale is bounded at the bottom (i.e., it starts at 0) and is likely to be positively skewed. However, *t* tests assume a normal distribution of the data. Therefore, the data needed to be transformed to approximate normality (Fink, 2009). Skewness and kurtosis were used to evaluate the normality of the transformed data. A normal distribution is symmetric (i.e., skewness = 0) and mesokurtic (i.e., kurtosis = 0). Kline (2011) argued that absolute values of skewness > 3.0 and kurtosis > 10.0 would suggest a problem, so the absolute values of skewness ≤ 3.0 and kurtosis ≤ 10.0 were used as cutoff values. I transformed each variable by taking the natural logarithm of the original variable after adding 1 (Fink, 2009). The transformed variables approximated normality: The absolute values of skewness were all smaller than 3, and the absolute values of kurtosis were all smaller than 10 (Kline, 2011). Then, I ordered the criticisms based on transformed accuracy score separately for U.S.-directed and China-directed criticisms. The criticisms in the order of accuracy are presented in Table 1.

A Spearman's rank-order correlation was done between the rank orders of U.S.-directed and of China-directed criticisms. The correlation was significant (r_s = .54, p < .01), indicating a positive monotonic relationship between the two rank orders. In other words, the level of accuracy perceived in the U.S. criticisms is similar to those targeting at China. A Wilcoxon signed-rank test was conducted to see if difference existed between the two ranks. Results showed that the difference was not significant (Z = -0.11, p = .91), meaning that the rank order of perceived accuracy did not differ significantly between

Table 1

Order of Perceived Accuracy of Criticisms When Directed at the U.S. Versus China (N = 106)

Criticism	Order of Accuracy (U.S.)	Order of Accuracy (China)
The United States has too big a gap between rich and poor.	1	2
The United States is politically polarized.	2	16
The United States has a dysfunctional political system.	3	4
The United States has a toxic political climate.	4	6
The United States has too much gun violence.	5	58
The United States spends too much money on the military.	6	25
The United States interferes too much in foreign countries.	7	17
The United States has a terrible healthcare.	8	21
Americans are obsessed with guns.	9	63
The United States is divided as a nation.	10	24
The United States only cares about its own interests.	11	3
The United States has terrible social welfare.	12	11
The United States has a problematic police system.	13	9
Americans don't elect good leaders.	14	5
Americans are aggressive.	15	36
Americans are too materialistic.	16	29
Americans have unhealthy diets.	17	50
Americans are too conservative in political views.	18	15
Americans are loud.	19	28
The United States is a country of wasteful consumerism.	20	33
Americans are superficial.	21	26
Americans are obese.	22	56
The United States has a terrible education system.	23	49
Americans are always in a hurry.	24	12
Americans are greedy.	25	27
Americans don't treat immigrants fairly.	26	13
Americans discriminate racial minorities.	27	7
Americans don't care about the environment.	28	22
Americans are politically apathetic.	29	20
Americans are self-righteous.	30	37
Americans are boastful.	31	40
Americans are rude.	32	39
Americans are closed-minded.	33	8
Americans are violent.	34	48
Americans are pushy.	35	30

Table 1 (Continued)

Criticism	Order of Accuracy (U.S.)	Order of Accuracy (China)
Americans are warmongers (i.e., they advocate war against other countries).	36	42
Americans are hypocritical.	37	41
Americans are selfish.	38	34
Americans are ignorant.	39	52
Americans are racist.	40	14
Americans are sexist.	41	18
Americans complain too much.	42	43
Americans are xenophobic (i.e., they hate foreigners).	43	10
Americans lack intellectual curiosity.	44	45
Americans don't help poor people.	45	23
Americans are arrogant.	46	35
Americans are poorly educated.	47	55
Americans are anti-intellectual.	48	54
Americans are lazy.	49	60
Americans don't look after the elderly.	50	61
Americans are snobby.	51	38
Americans are gullible.	52	46
Americans are addicted to drugs.	53	47
Americans do not value education.	54	65
Americans are not egalitarian.	55	32
It's not free in the United States.	56	1
Americans are too patriotic.	57	44
Americans are not introspective (i.e., they don't reflect on their own thoughts and feelings).	58	51
Americans are unfriendly.	59	19
Americans are sex-crazed.	60	53
Americans don't care about others.	61	31
Americans do not value family.	62	66
The United States is too lenient with immigration laws.	63	62
Americans are too liberal.	64	59
Americans don't have creativity.	65	57
Americans don't have a culture.	66	67
It's too free in the United States.	67	64

those criticisms directed at the U.S. versus those directed at China.

Next, I selected the criticisms to be used in subsequent parts of the study. Two

criticisms would be chosen if they met both of these criteria: (a) When both directed at U.S. Americans, the accuracy scores of the two criticisms differed significantly, and (b) When both directed at Chinese people, the accuracy scores of the two criticisms did not differ significantly. This procedure ensured that people's perception of outgroup-directed criticisms would not interfere with their perception of ingroup-directed criticisms, especially in conditions when the outgroup (i.e., Chinese people) is present as the critic or as the audience.

By examining Table 1, two pairs of criticisms were tentatively selected for further analysis. The first pair was "snobby" and "aggressive." Paired-samples *t* test of the accuracy score was done for "Americans are snobby" and "Americans are aggressive." The criticism of Americans being "snobby" was perceived to be significantly less accurate than the criticism of Americans being "aggressive," $\Delta M = -0.71$, $p < .001$, repeated-measures Cohen's $d = 0.28$. Next, paired-samples *t* test of the accuracy score was done for "Chinese people are snobby" and "Chinese people are aggressive." The two criticisms did not differ on perceived accuracy, $\Delta M = -0.09$, $p = .68$. The two criteria were met.

The second pair of criticisms was "Americans (or Chinese people) don't have a culture" and "Americans (or Chinese people) are obsessed with guns." The same analyses were conducted. The criticism "Americans don't have a culture" was perceived to be significantly less accurate than the criticism "Americans are obsessed with guns," $\Delta M = -2.26$, $p < .001$, repeated-measures Cohen's $d = 1.19$. When directed at Chinese people, the two criticisms did not differ on perceived accuracy, $\Delta M = -0.31$, $p = .23$. The two criteria were met. These two pairs of criticisms were both selected for subsequent studies. A short paragraph was written for each criticism with similar length and sentence

structures (see Appendix G).

Pilot Study 2: Validating the Instruments

Purpose and Overview

The second pilot study was designed to validate the instruments to be used in Pilot Study 3 and the main experiment. The goal of Pilot Study 2 was to ensure that the scales were actually measuring the constructs they were supposed to measure (i.e., that they were valid).

There are four types of measurement validity: Face validity refers to the subjective judgment of whether the scale appears to measure the construct. Content validity refers to the extent to which the measurement covers the domain of content of the construct, which can be examined through factor structure of the measure. Criterion-related validity assesses the relationship between the scale and one or more external criteria. Construct validity assesses whether the measure is related to other measures that are part of the causal network hypothesized by theory, and it can often be assessed by examining convergent validity (i.e., the extent to which the items supposed to measure the same construct are at least moderately interrelated) and discriminant validity (i.e., the extent to which items supposed to measure different constructs are not highly related; Fink, 2017; Kline, 2011; Shadish, Cook, & Campbell, 2002). On the other hand, Haynes, Richard, and Kubany (1995) suggested that face validity is a component of content validity, whereas other scholars (e.g., Nevo, 1985) argued that these two are different types of validity. Moreover, Messick (1995) argued that construct validity should be regarded as a comprehensive term that encompasses aspects such as content, structure, and generalizability, which provide complementary evidence for validity. No matter which stand is taken, it is important to examine multiple types of validity to provide a

comprehensive view of the measures' validity. Pilot Study 2 assessed the validity of the constructs by examining their face validity, the structural aspect of validity, criterion-related validity, and discriminant and convergent validity.

This pilot study had three parts. The first sample of participants provided feedback on the wording of the items (Part I), whereas another group of participants indicated the match of each item with the corresponding constructs by giving a percentage score from 0% (does not match at all) to 100% (perfect match; Part II). These two parts assessed the face validity and provided preliminary evidence for the structural validity of the constructs. A third sample of participants were randomly assigned one of the four criticisms constructed in Pilot Study 1 and allegedly delivered by either a Chinese person or a U.S. American, and they rated their agreement with the items, some of which had been revised in Parts I and II. Participants' responses to the items were further assessed for reliability using coefficient *H* (Hancock & Mueller, 2001), and for content, discriminant, and convergent validity (Part III), discussed below.

Instruments

In this section, I introduce the tentative instruments that were intended to measure the constructs presented in the theoretical model, the manipulation check of criticism accuracy, and the variables that were needed when checking the assumptions of the theoretical model in Pilot Study 3 (i.e., group salience, presumed group-related knowledge, and perceived outgroup access to criticism). These instruments were either taken from past research or created by me. All items were measured using the same magnitude scale: Participants provided any nonnegative number to indicate their agreement with the statements, where 100 represented a moderate level of agreement. These instruments were revised in Pilot Study 2. The complete list of instruments after

revision can be found in Appendix A.

Because all items were measured using a magnitude scale, the data tended to be positively skewed. However, the statistical tests used in this study assume normality. For example, structural equation modeling (SEM) uses maximum likelihood as the estimation method, and it assumes multivariate normality (Kline, 2011). Kline (2011, p. 60) suggested that multivariate normality can be assessed by examining whether the distribution of each variable is normal (i.e., univariate normality). Therefore, all variables were transformed by taking the natural logarithm of the original variable after adding 1: $Y^* = \ln(Y + 1)$, where Y^* is the transformed value of Y. The absolute values of skewness ≤ 3.0 and kurtosis ≤ 10.0 were used as cutoff values to assess univariate normality (Kline, 2011).

Perceived accuracy of the criticism. I created five items based on the conceptualization of perceived accuracy as the perception of the correctness and precision of the criticism. Examples of the items are: "The message presents an accurate picture of Americans," and "The description of Americans in this message is correct."

Identity importance. Four items were adapted from Luhtanen and Crocker (1992) to measure identity importance. Examples of items are: "Overall, being an American has very little to do with how I feel about myself" (reverse coded by multiplying the score by -1) and "Being an American is an important reflection of who I am."

Presumed media influence on the outgroup. Presumed media influence on the outgroup is conceptualized as the perception of the media's impact on the outgroup (Gunther & Storey, 2003). Based on this conceptualization, I developed four items. Following Park (2005), two items measure the intensity of presumed media influence

(e.g., “The message influences Chinese people’s opinions about the U.S.”), and the other two items measure the direction of presumed media influence (e.g., “The message makes Chinese people believe that Americans are aggressive”).

Perceived threat to social identity. Hornsey and Esposo (2009) argued that group criticism is a threat to social identity, but this argument has not been tested using a measure of social identity threat. The typical way of measuring perceived threat of a message is to ask participants to rate the extent to which a message is threatening, disappointing, irritating, offensive, insulting, judgmental, hypocritical, and arrogant. This measure is often called *sensitivity* (e.g., Hornsey & Imani, 2004), *negativity* (e.g., Hornsey et al., 2005), or *threat of criticism* (e.g., Morier et al., 2013). Because the above measure does not specify social identity as the target of perceived threat, the present study needs to take a different route to construct a measure that (a) emphasizes the notion of social identity, and (b) captures the various types of social identity threat.

Branscombe et al.’ classification of social identity threat was used to construct a measure of perceived threat to social identity (Branscombe et al., 1999). They argued that there are four types of social identity threat: the threat of being categorized as a member of the group, the threat of the ingroup being no longer distinct from relevant outgroups, the threat that group values are violated (e.g., the group is incompetent or immoral), and the threat of not being accepted by a group. The last type is irrelevant in the context of group criticism: The instrument of social identity threat used here measures threat to group members who are the receivers of the group criticism and who themselves did not display any deviant behavior, so there is no reason to believe that these members feel the danger of being excluded from the ingroup. Therefore, I excluded acceptance threat from the measure.

I developed five items to measure categorization threat based on its conceptualization as the threat of being categorized into a group against one's own will (Branscombe et al., 1999). Examples include: "The message categorizes me as an American against my will" and "The message makes me feel like I am merely an American, not a unique person."

I developed five items to measure distinctiveness threat based on its conceptualization as the threat of not having a distinctive and unique social identity (Branscombe et al., 1999). Examples include: "The message makes me feel that Americans are not unique" and "The message makes me feel that Americans are not better than the rest of the people in the world."

I developed eight items to measure value threat, that is, the perception that group values of competence and morality are undermined (Branscombe et al., 1999). Four items reflect threat to group competence. Examples include: "The message makes me feel that Americans are incompetent" and "The message makes me feel that Americans are not successful." Four items measure threat to group morality. Examples include: "The message suggests that Americans are immoral" and "The message makes me feel that Americans don't know what is right and what is wrong."

I created five items to measure the overall perceived social identity threat based on its conceptualization as the perception that something has the potential to cause damage to the positive social identity the person has. For example: "The message is threatening to me as an American" and "The message threatens my sense of being an American."

Perceived threat to collective face. Goffman (1967) conceptualized face as one's positive social image during an interaction. This idea is more closely tied to the concept

of positive face (i.e., need for appreciation and approval) examined in previous research (White, Tynan, Galinsky, & Thompson, 2004). On the other hand, Trees and Manusov (1998) suggested that criticisms not only threaten the positive face, but also negative face (i.e., need for freedom of action) of the person being criticized (see Chapter 1). Although their study focused on individual-directed criticism and individual-level face, this conclusion can be generalized to the group level: We should expect group-directed criticism to threaten both positive collective face and negative collective face. Therefore, I conceptualized perceived threat to collective face as the perception that something may cause damage to the positive social image of one's group or constrain the group's freedom during interaction with outgroup members.

Cupach and Carson (2002) provided ten items to measure threat to individual-level positive face and four items to measure threat to negative face. All fourteen items were included in the present study. These items were adapted so they reflected threat to the group-level image and specified the outgroup (Chinese people) where it was sensible to do so. Moreover, I developed seven additional items to better capture the constructs; these added items emphasize the intergroup context that is implicated in my conceptualization of perceived threat to collective face, and they specify the outgroup (i.e., the other) as Chinese people.

Examples of the ten items that measure threat to positive face are: "The message is polite to Americans" (reverse coded) and "The message is hostile to Americans." I created four more items based on the conceptualization of threat to collective positive face. Two examples are: "The message threatens the positive image of Americans in Chinese people's eyes" and "The message brings shame to Americans in front of Chinese people."

Examples of the four items that measure threat to negative face are: “The message constrains the choices of Americans” and “The message takes away some independence from Americans.” I developed three additional items based on the conceptualization of negative face threat: “The message forces Americans to alter their behavior when interacting with Chinese people,” “The message imposes on Americans the need to take different action when interacting with Chinese people,” and “The message intrudes on the independence of Americans when interacting with Chinese people.”

Perceived critic’s constructiveness. The level of perceived constructiveness of the critic was measured using three items taken from past research (Hornsey & Imani, 2004). These items were modified so they fit the scenario of the present study: “The message is intended to be constructive,” “[Critic’s name] cares about the U.S.,” and “[Critic’s name]’s message was made in the U.S.’s best interests.” I created two additional items that reflected the perceived intention of the critic: “The message has good intention for the U.S.” and “The message is for the greater good of the U.S.”

Evaluation of the criticism. Nine items were taken from past research to measure the evaluation of the criticism: “The message is threatening [or disappointing, irritating, offensive, insulting, judgmental, hypocritical, arrogant, fair].” The first eight items were labeled the sensitivity scale by Hornsey and Imani (2004). The last item, measuring fairness, was taken from Hornsey et al. (2002) and was reverse coded.

Agreement with the criticism. One item was adapted from past research to measure agreement with the criticism: “I agree with the message” (Hornsey & Imani, 2004). I created three additional items to reflect the extent to which people agree or disagree with the criticism: “I disagree with the message” (reverse coded), “I am in support of the message,” and “I’m opposed to the message” (reverse coded).

Intention to take action. I developed four items to measure the intention to take action regarding the criticism. Examples include: "I want to take action regarding the message" and "I want to change the negative things mentioned in the message."

Personality evaluation of the critic. The scale for personality evaluations was adapted to measure the evaluation of the critic (Hornsey et al., 2002). The instrument consists of eight items: "[Critic's name] is intelligent [or trustworthy, friendly, open minded, likable, nice, respected, interesting]."

Personality evaluation of the outgroup. Group-directed criticism may not only influence the evaluation of the critic but also the evaluation of the critic's group when it is an outgroup, because group identity tends to be salient in group-directed criticism. In other words, the evaluation of the outgroup critic may be generalized to the entire outgroup, especially when the outgroup critic is perceived to be a typical member of her or his group (Brown & Hewstone, 2005). Therefore, the measure of personality evaluation was modified to measure the personality evaluation of the critic's group by changing the critic's name to the outgroup critic's group in each item. For example: "Chinese people are likable."

Blame on the critic. The critic reveals a negative aspect of a group, so members of the criticized group may see the critic as a source of social identity threat and collective face threat, and they may blame the critic for his or her behavior. Four items were developed based on the conceptualization of blame (Lazarus, 1991; Smith & Ellsworth, 1985) to measure the appraisal of blame on the critic. Examples are: "[Critic's name] is accountable for the potential damage that the message could cause" and "[Critic's name] is responsible for the threat presented in the message."

Anger. Other-blame appraisal is the proximal cause of anger (i.e., the appraisal

that someone is to blame directly causes the emotion of anger), and it specifies at whom the anger is directed (Lazarus, 1991). That is, if the critic is to be blamed, then anger is directed at the critic. Using synonyms of anger as suggested by Lazarus (1991), five items were created to measure anger at the critic. Examples include: "I am angry with [critic's name]" and "[Critic's name] annoys me."

Variables related to theoretical assumptions. The following variables were also assessed for reliability and validity, because although they were not included in the model (see Figure 5), they were related to assumptions made by the model, which were checked in Pilot Study 3.

Perceived outgroup access to the message. In the main experiment, the presence of an outgroup audience would be manipulated using U.S. (in conditions without an outgroup audience) and Chinese social networking websites (in conditions with an outgroup audience). In the former case, it would be further specified that the criticism was posted on a Facebook closed group (i.e., a Facebook group that can be joined only by invitation or request) that had mostly U.S. citizens as group members, which makes the intragroup context more explicit. However, it is possible that group members perceive an outgroup or outgroups to have access to the criticism. For example, Atwell Seate et al. (2015) found that imagined intergroup contact can influence group members' attitudes toward the outgroup. Therefore, Pilot Study 3 will check the assumption that perceived outgroup access was actually lower in the conditions without an outgroup audience (i.e., intragroup contexts) than in the conditions with an outgroup audience (i.e., intergroup contexts). If results indicated that there was no difference in perceived outgroup access between the intergroup and intragroup contexts, perceived outgroup access to the message would be included as a predictor of collective face threat when the criticism is

delivered to the ingroup. Perceived outgroup access to the criticism was measured using four items I developed. Examples include: “Chinese people might learn about the message” and “Chinese people might have access to the message.”

Expectation of outgroup critic’s effort. In the proposed model, I have argued that group members have a more positive evaluation of the outgroup critic’s intention than the ingroup critic’s intention when the criticism is inaccurate, because group members’ expectation of the outgroup critic’s knowledge of the group is lower than that of an ingroup critic’s knowledge. However, it is possible that group members expect the outgroup critic to try to learn about their group when his or her knowledge is lacking. Therefore, the expectation of the outgroup critic’s effort to know about the group would be included as a predictor of all the endogenous variables of the model, and it was measured using four items I developed. Examples of the items include: “[Critic’s name] should try to find out the truth about U.S. Americans” and “[Critic’s name] should make an effort to learn more about U.S. Americans.”

Presumed group-related knowledge of an ingroup or outgroup member. The present study has assumed that people expect ingroup members to have more knowledge about their group than outgroup members do, which leads them to attribute less constructive motives to an ingroup critic who delivers an inaccurate criticism about the group (see Chapter 1). This assumption of presumed group-related knowledge will be checked in Pilot Study 3. I developed eight items to measure participants’ presumption of knowledge of a U.S. American (4 items) versus a Chinese person (4 items). Examples include: “I expect Americans [Chinese people] to have knowledge about our country” and “I suppose an American [a Chinese person] probably knows a lot about U.S.”

Group salience. The present study assumes that group-directed criticism leads to

group salience (see Chapter 1). This assumption will be checked in Pilot Study 3 using the six items adapted from Palomares (2009). Examples include: "While reading the message, I was thinking about being an American" and "While reading the message, I evaluated myself in terms of my nationality (i.e., American)."

Part I: Collecting Feedback on Item Wording

The aim of Part I was to make sure that the items were easy to understand for the target population, U.S. Americans. Because the total number of items was large, I divided the constructs, including the items that were supposed to measure them, into three groups. Thirty participants were recruited and were randomly assigned one group of constructs and items. This sample size was determined based on Xie (2009; $N = 8$), who recruited participants to evaluate the wording of her items. After deleting two cases who requested removal of their data, there were 28 participants with an average age of 35.82 (SD = 11.10); 19 were male. Participants were all U.S. citizens. One was African American, and the others were Caucasians.

Procedures. Participants were presented with the items. Under each item was a blank space where they could write down anything that was unclear, hard to understand, or difficult to answer in that item. They could do this by either pointing out the things that were confusing or by directly revising the statement. If the item was clear, participants were asked to type "N/A" in the blank.

Based on participants' feedback, the wording of some items was edited. The complete list of items after revision can be found in Appendix A.

Part II: Collecting Feedback on Item Matching

Part II examined the extent to which each item matched its construct. Twenty participants were recruited. All of them were U.S. citizens, and all opted to have their

data included in the study. The sample size was determined following the study by Wang, Fink, and Cai (2012; $N = 14$), who recruited participants to rate the match of their items with the intended constructs. Participants had an average age of 33.10 years old ($SD = 9.11$), and the majority were female ($n = 11$). They identified themselves as African American ($n = 2$), Asian or Pacific Islander ($n = 1$), Caucasian ($n = 14$), Latino/Hispanic ($n = 1$), and Native American ($n = 2$). Participants were allowed to choose only one race/ethnicity.

Procedures. Participants were presented with the constructs (some had definitions) and the items (see Appendix A). They were asked to enter a percentage score to indicate how much they thought each item matched its construct, where 0% meant no match at all, and 100% meant a perfect match.

Round Two. The average match percentage score was 67.44, which was lower than expected. Three issues were identified: First, the explanation of negative worded items was not clear. The instructions mentioned: "Negatively worded items mean that the items measure the opposite of the definition." However, the instructions did not point out how these items should be viewed in terms of their match with the construct. Second, the wording of the instructions included terms such as *concept* and *statements*, which might not be easy to understand for the sample. Third, because each measure had several items, it is not necessary for every item to perfectly reflect the construct; rather, as long as the item is relevant to the construct and descriptive of the construct, it should be a proper candidate for the measure. In other words, participants might have given high match scores only to items that they thought perfectly described every aspect of the construct. Therefore, I revised the instructions, so they included more specific guidelines for rating negatively worded items, had a clearer explanation of what "match" meant, and were

easier to understand. The instructions before and after revision can be found in Appendix C.

Forty-one participants were recruited on the SONA system at the University of Maryland. Five were removed because they did not complete most of the study. Three more were deleted because the participants requested removal of their data. All 33 participants were U.S. citizens (72.7% female), and they were 19.30 years old on average (*SD* = 1.47). Participants identified themselves as Asian/Pacific Islander (12.1%), Caucasian (78.8%), Latino/Hispanic (3.0%) and multiracial (6.1%). They were allowed to choose one race/ethnicity only.

Results. The mean match score for each item was computed, and the average of all the mean match scores was calculated. The items had an overall mean match percentage score of 76.01 (*SD* = 8.67). This was better than the first round, but still lower than the cutoff value set in Wang et al. (2012), 80%.

Three issues still existed in the study design. First, although clear guidelines about negatively worded items were provided, it was possible that participants did not read the guidelines carefully or did not understand them fully. Among the 10 items with the lowest match scores, 9 were negatively worded items. Second, it was possible that participants were not familiar with this type of questionnaire, which asked for their feedback on the materials per se, not their agreement with the items. Third, the word "match" might have been confusing to participants, although an explanation for *match* was provided. In other words, asking for match scores might not be a good approach at the outset.

I ran additional analyses to obtain preliminary evidence about the validity of the measures. First, I examined the descriptives of all the items. All variables approached

normality (absolute values of skewness < 3 and kurtosis < 10). Second, I did principal components analysis (PCA) for each measure and used the scree plot to determine the number of components. Results showed that all measures were unidimensional except for the measures of identity importance, agreement with the criticism, and the intention to take action, which had two components. Third, for the above three measures, I did PCAs with oblique rotation, extracting two components, to examine the potential reason of multidimensionality. Results showed that, for identity importance and agreement with the criticism, the positively worded items loaded on one component and the negatively worded items loaded on the other. That is, the multidimensionality was due to a methodological artifact—negatively worded items. Considering that participants gave relatively low match scores to negatively worded items, this result was expected. For intention to take action, the first two items loaded on the first component, and the last two loaded on the other. This might be due to the similar sentence structure of the first two items. This result was also predictable. Based on the conceptualization of the constructs (see Appendix A), the unidimensional structure of the measures was expected. Therefore, the results provided evidence for the structural aspects of measurement validity (Messick, 1995). Fourth, I calculated the Cronbach's α for each unidimensional measure. All twenty Cronbach's αs were above .70, indicating good overall reliability of the measures. Nine Cronbach's αs were above .90, nine were between .80 and .90, and two were between .70 and .79. These results provide preliminary evidence for the validity and reliability of the measures, which would be further examined in Part III.

Part III: Examining Reliability and Validity

Part III investigated the reliability and validity of the instruments to be used in Pilot Study 3 and the Main Study. Five hundred and two participants were recruited on

MTurk. This sample size was determined based on Gagné and Hancock (2006), who showed that in confirmatory factor analysis (CFA), under the conditions that (1) loadings are heterogeneous, (2) the indicator:factor ratio is 4:1, and (3) the coefficient *H* (which is a reliability estimate) of the scale is .70, the model achieves satisfactory convergence when the sample size is 400. Given that the measures showed evidence of reliability in Part II and the indicator:factor ratios were above 4:1, a sample size of 400 should be adequate.

There were 468 participants in total, after deleting data of participants with response time less than 180 second (n = 1), who requested removal of their data after debriefing (n = 7), who claimed that they did not pay attention (n = 2), who got both attention checking questions wrong (n = 22), who were not U.S. citizens (n = 1), and who did not answer the question about U.S. citizenship (n = 1). Included participants were 35.42 years old on average (SD = 9.84; 13 had missing data); 45.7% were female (one did not disclose sex, and one chose "other" as sex without providing specifying information). Participants were African American (9.4%), Asian/Pacific Islander (4.3%), Caucasian (70.9%), Latino/Hispanic (9.6%), Native American (1.9%), multiracial (3.2%), or belonged to other ethnic groups (0.6%). They were not allowed to choose more than one race/ethnicity.

Procedures. A 2 (Criticism: accurate vs. inaccurate) × 2 (Message Pair: aggressive, snobby vs. obsession with guns, lack of culture) × 2 (Critic: U.S. American vs. Chinese) between-subject experimental design was used. First, participants went through a training session to be able to use the magnitude scales (Cionea, 2013; see Appendix F). Then they read one of the four criticism messages constructed in Pilot Study 1, and they were told that the message was delivered by either a U.S. American or

a Chinese person. Participants were asked to rate their agreement on the items that had been revised in Part I of this pilot study as well as the criterion measures (see Appendix H).

Results. Values higher than 999 were winsorized to 999 to reduce outlier effects (Zhu et al., 2016). Before conducting analyses, the data were transformed by taking the natural logarithm of the original variable after adding 1: $Y^* = \ln(Y + 1)$, where Y^* is the transformed value of Y. All the transformed variables approximated normality: the absolute values of skewness were all smaller than 3, and the absolute values of kurtosis were all smaller than 10.

Then, the responses were assessed for reliability and validity through four steps. First, PCAs were conducted to examine the dimensionality of each scale. This step helped examine the internal structure for the sets of items by exploring their underlying dimensions (Messick, 1995), and set the stage for assessing construct validity (Pett, Lackey, & Sullivan, 2003; Trompenaars, Masthoff, van Heck, Hodiamont, & de Vries, 2005).

Second, Cronbach's αs were computed for the scales. In this step, responses to the negatively worded items were reverse coded by multiplying them by -1. The following decision rules were used: If Cronbach's $\alpha < .70$, which was considered unacceptable (Kline, 2011; Nunnally & Bernsten, 1994), items with an item-total correlation < .30 were discarded (Cristobal, Flavián, & Guinalíu, 2007). If Cronbach's $\alpha > .70$ and there were more than 4 items in the measure, (1) any item with an item-total correlation < .30 was discarded; (2) if any inter-item correlation was above .80, which suggested that one item was just a duplicate of the other (Pett et al., 2003), one of the two items was discarded. This last rule (i.e., deleting duplicate items) saved participants' efforts by

shortening the measure. Meanwhile, it did not lower the Cronbach's α to a large extent: For the measures that had duplicate items, they still achieved high reliability (i.e., Cronbach's α was close to .90) after removing these duplicate items.

Third, a CFA was conducted for the combination of all the scales. A CFA was used because it assessed both convergent and discriminant validity: If the items in one scale had high factor loadings (e.g., > .70), the results would show convergent validity; if the factors were not highly correlated, the results would show discriminant validity (Kline, 2011). The coefficient *H* (Hancock & Mueller, 2001) was used as the final estimate of reliability instead of Cronbach's α, because Cronbach's α assumes tau equivalence (i.e., all items have the same true score, but item errors can differ; Graham, 2006), whereas coefficient *H* does not. A coefficient *H* larger than .70 was considered acceptable (Hancock & Mueller, 2001).

Fourth, for some of the measures, criterion-related validity was examined by correlating each measure with an established measure that had been empirically confirmed to be related to the construct of interest. A significant correlation that had a sign (i.e., positive or negative) consistent with previous research would provide support for the criterion-related validity of the measure.

PCA. To examine the dimensionality of measures, I conducted the PCA without rotation on each measure. For social identity threat measures, PCA was run on all the items, not on the subscales (categorization threat, distinctiveness threat, competence threat, moral threat, and overall threat). A PCA was also conducted on all the collective face threat items. The scree plots and eigenvalues (when > 1) were used to determine the number of components.

Results showed that all measures were unidimensional except for social identity

threat (the scree plot suggested one component; four components had eigenvalues > 1), collective face threat (the scree plot suggested two components; three components had eigenvalues > 1), and presumed media influence on the outgroup (the scree plot suggested two components; one component had eigenvalue > 1). I further examined these measures of dimensionality.

For the social identity threat measure, I did a PCA with oblique rotation extracting 4 components and examined the item loadings (see Table 2). An item was regarded to load on a component if it had a loading > .40 (Pett et al., 2003). One item loaded on multiple components (i.e., had a loading larger than .40 on multiple components) and was discarded. Subscales were created for each component and were termed value threat, overall threat, distinctiveness threat, and categorization threat (see Appendix A). Table 3 shows the correlations between the four components.

For the collective face threat measures, a PCA with oblique rotation was conducted, extracting 3 components (see Table 4 for item loadings). Four items loaded on multiple components and were discarded. Five items loaded on component 1, which was termed positive collective face threat. Seven items loaded on component 2, which was termed negative collective face threat; one item ("The message will strengthen the relationship between Americans and Chinese people") was deleted because it seemed unrelated to negative face threat. Four items loaded on component 3 and seemed not to be directly related to a person's public image; these items were deleted. The first two components had a correlation of .39. Appendix A shows the final subscales of positive collective face threat and negative collective face threat.

For the measure of presumed media influence on the outgroup, one item ("The message makes Chinese people believe that Americans are not aggressive/are not

Table 2

Loadings of Social Identity Threat Items (N = 468)

	Component			
	1	2	3	4
Categorization Threat #1	.17	-.40	.39	-.03
Categorization Threat #2	.20	-.38	.30	.14
Categorization Threat #3	-.02	-.27	.01	**.73**
Categorization Threat #4	.14	.15	.02	**.90**
Categorization Threat #5	-.05	-.21	-.02	**.81**
Distinctiveness Threat #1	.28	-.22	**.48**	-.05
Distinctiveness Threat #2	-.11	-.01	**.90**	-.004
Distinctiveness Threat #3	**.48**	-.33	.13	-.01
Distinctiveness Threat #4	.47	.27	.47	.10
Distinctiveness Threat #5	-.07	-.04	**.85**	.02
Competence Threat #1	**.82**	-.07	-.01	-.01
Competence Threat #2	**.66**	-.33	-.01	-.08
Competence Threat #3	**.68**	-.31	-.04	-.08
Competence Threat #4	**.76**	-.17	-.02	-.03
Moral Threat #1	**.83**	.08	.003	.08
Moral Threat #2	**.85**	.05	.05	.01
Moral Threat #3	**.77**	.08	.04	.10
Moral Threat #4	**.81**	.01	-.07	.16
Overall Social Identity Threat #1	-.03	**-.75**	-.02	.31
Overall Social Identity Threat #2	.08	**-.79**	.03	.13
Overall Social Identity Threat #3	.10	**-.74**	.10	.11
Overall Social Identity Threat #4	.12	**-.76**	.07	.06
Overall Social Identity Threat #5	.21	**-.69**	.07	.05

Note. The loadings of items chosen for each component are in boldface.

Table 3

Correlations between the Four Components of Social Identity Threat in PCA (N = 468)

Component	1	2	3	4
1	1.00			
2	-.50	1.00		
3	.46	-.28	1.00	
4	.39	-.38	.19	1.00

Note. Components were created in a PCA with oblique rotation extracting 4 components.

snobby/are not obsessed with guns/have a culture") had low loading on the first component and was deleted. Another PCA without rotation was run on the rest of the items and yielded one component.

Cronbach's α. To provide preliminary evidence of reliability and to identify the items that needed to be removed (because of too low item-total correlation or too high

Table 4

Loadings of Collective Face Threat Items (N = 468)

	Component		
	1	2	3
Positive Collective Face Threat #1	-.12	.46	.57
Positive Collective Face Threat #2	.45	.15	-.58
Positive Collective Face Threat #3	.36	.24	-.57
Positive Collective Face Threat #4	.41	.20	-.59
Positive Collective Face Threat #5	.25	-.05	.83
Positive Collective Face Threat #6	.40	.20	-.52
Positive Collective Face Threat #7	-.06	.71	.31
Positive Collective Face Threat #8	**.45**	.09	-.34
Positive Collective Face Threat #9	.45	.45	-.04
Positive Collective Face Threat #10	.09	.30	.74
Positive Collective Face Threat #11	**.83**	.04	.00
Positive Collective Face Threat #12	**.69**	.20	.10
Positive Collective Face Threat #13	**.90**	-.14	-.03
Positive Collective Face Threat #14	**.89**	-.01	.08
Negative Collective Face Threat #1	-.05	**.83**	-.07
Negative Collective Face Threat #2	-.06	**.85**	-.07
Negative Collective Face Threat #3	**.91**	-.08	.01
Negative Collective Face Threat #4	-.09	**.87**	-.06
Negative Collective Face Threat #5	.16	**.73**	.06
Negative Collective Face Threat #6	.36	**.57**	.11
Negative Collective Face Threat #7	.09	**.76**	-.09

Note. The loadings of items chosen for each component are in boldface.

inter-item correlation), Cronbach's α was computed for each scale or subscale, which was revised when necessary based on the decision rules detailed above. All scales were reliable (i.e., Cronbach's $\alpha > .70$). For the measures of perceived accuracy, perceived constructiveness, evaluation of the criticism, anger, and group salience, one item was deleted because it had a high correlation with another item. For the measures of personality evaluation of the critic and personality evaluation of the outgroup, three items were removed from each for the same reason. For group salience, one other item was deleted because it had low item-total correlation. The final list of measures can be found in Appendix A. The Cronbach's αs before and after revising the scales can be found in Table 5.

Table 5

Cronbach's α of the Measures Before and After Revision (N = 468)

Measure	Cronbach's α Before Revision	Cronbach's α After Revision
Identity Importance	.85	N/A
Perceived Accuracy	.97	.95
Presumed Media Influence on the Outgroup	.61	.88
Categorization Threat	.85	N/A
Distinctiveness Threat	.73	N/A
Value Threat	.94	N/A
Overall Threat	.94	N/A
Positive Collective Face Threat	.89	N/A
Negative Collective Face Threat	.90	N/A
Perceived Critic's Constructiveness	.95	.93
Evaluation of the Criticism	.91	.89
Agreement with the Criticism	.93	N/A
Intention to Act upon the Criticism	.91	N/A
Personality Evaluation of the Critic	.96	.93
Personality Evaluation of the Outgroup	.95	.90
Blame on the Critic	.97	N/A
Anger at the Critic	.92	.91
Perceived Outgroup Access to the Criticism	.94	N/A
Expectation of Critic's Effort	.97	N/A
Presumed Group-Related Knowledge of an Ingroup Member	.94	N/A
Presumed Group-Related Knowledge of an Outgroup Member	.91	N/A
Group Salience	.86	.90

CFA. To examine convergent validity, discriminant validity, and reliability of the measures, a CFA was conducted for the combination of all the measures (after revision) in Mplus 7.0 (Muthén & Muthén, 1998-2015). Fit indices were examined using the cutoff values suggested by Hu and Bentler (1999): SRMR ≤ .08, RMSEA ≤ .06, and CFI ≥ .95. The fit indices of the model were acceptable except for CFI (which was .88). I examined the modification indices and decided that one error covariance should be added because the two items that covaried were both negatively worded, which could be a methodological artifact (Woods, 2006). Another CFA was conducted after adding the error covariance, and the modification indices were examined again. The same procedure was repeated five times. The fit indices of the model in each step, as well as the added

error covariances and the reasons to add them, can be found the Table 6. The final model achieved relatively good fit, $\chi^2(4518, N = 468) = 9008.22$, $p < .001$; RMSEA = .046, 90% CI [.045, .048], CFI = .90, SRMR = .063. However, CFI was still below the cutoff value, .95. Kenny (2015) suggested that when RMSEA for the null model < .158, the CFI is no longer informative. This is because the CFI is an index that compares the hypothesized model with the null model, in which all covariances between measured variables are set to 0. If the null model's absolute fit (e.g., RMSEA) is not too bad (e.g., < .158), the CFI of the hypothesized model would be low, because the hypothesized model cannot make much improvements over the null model. For my data, the RMSEA for the null model was .141 < .158. Therefore, a CFA of .90 was acceptable.

Correlations between the factors are in Table 7, and coefficient *H*s can be found in Table 8. All measures were reliable (i.e., coefficient *H*s > .70). The measures had convergent validity: Most loadings had absolute values larger than .70. The measures also had evidence of divergent validity: All factor correlations were below .90. The correlation between agreement with the criticism and perceived accuracy was above .80, but the items show good face validity, and it would be hard to argue that they represent the same construct.

Criterion-related validity. Last, I assessed the criterion-related validity for some of the measures I created. I computed the average item scores for the measures, and then I calculated the correlation between each measure and its criterion measure (see Table 9). All correlations were significant and were in the expected direction, which provided evidence for the criterion-related validity of these measures.

Selecting messages. I also selected a message pair from the four criticisms used in Part III (pair 1: aggressive vs. snobby; pair 2: obsession with guns vs. lack of culture).

Table 6

Fit Indices of the Measurement Models and Reasons for Modifications in Pilot Study 2 Part III (N = 468)

Model	χ^2	*df*	*p*	CFI	RMSEA	90% CI	SRMR	Modification	Reason for Modification
1	10351.27	4718	< .0001	.877	.051	[.049, .052]	.070	N/A	N/A
2	10062.71	4717	< .0001	.883	.049	[.048, .051]	.071	Added one error covariance	Both were negatively worded items
3	9685.08	4618	< .0001	.888	.049	[.047, .050]	.066	Deleted one item in *message evaluation*	Cross loading on perceived accuracy
4	9471.70	4617	< .0001	.893	.048	[.046, .049]	.066	Added one error covariance	Both were negatively worded items
5	9120.69	4519	< .0001	.897	.047	[.045, .048]	.063	Deleted one item in *message evaluation*	Cross loading on overall threat
6	9008.22	4518	< .0001	.900	.046	[.045, .048]	.063	Added one error covariance	Similar sentence structure

Table 7

Correlations Between the Factors in Pilot Study 2 Part III (N = 468)

Factor	1	2	3	4	5	6	7	8	9	10	11
1. Identity Importance	1.00										
2. Perceived Accuracy	.24***	1.00									
3. Presumed Media Influence	-.30***	-.03	1.00								
4. Categorization Threat	-.37***	-.18***	.50***	1.00							
5. Distinctiveness Threat	-.05	.38***	.28***	.34***	1.00						
6. Value Threat	-.14**	.29***	.32***	.56***	.64***	1.00					
7. Overall Threat	-.30***	.03	.33***	.67***	.54***	.73***	1.00				
8. Positive Collective Face Threat	-.41***	-.15**	.78***	.66***	.25***	.42***	.41***	1.00			
9. Negative Collective Face Threat	-.31***	.09	.39***	.50***	.57***	.64***	.78***	.49***	1.00		
10. Perceived Constructiveness	.15**	.69***	-.06	-.28***	.38***	.26***	.11*	-.18***	.19***	1.00	
11. Evaluation of the Criticism	-.41***	-.51***	.43***	.73***	.17**	.27***	.45***	.58***	.36***	-.48***	1.00
12. Agreement with the Criticism	.29***	.83***	-.13**	-.33***	.29***	.16**	-.06	-.24***	-.02	.71***	-.61***
13. Intention to Act upon the Criticism	-.13**	.34***	.19***	.24***	.56***	.51***	.48***	.23***	.52***	.36***	.07
14. Personality Evaluation of the Critic	.20***	.69***	-.08	-.25***	.34***	.18***	.01	-.21***	.08	.72***	-.50***
15. Personality Evaluation of Outgroup	-.05	.04	.08	.002	-.05	-.06	-.14**	.10	-.24***	.02	.01
16. Blame on the Critic	-.39***	-.28***	.41***	.56***	.18**	.30***	.47***	.51***	.47***	-.24***	.67***
17. Anger at the Critic	-.40***	-.30***	.32***	.61***	.32***	.43***	.68***	.47***	.60***	-.18***	.69***
18. Perceived Outgroup Access to the Criticism	-.15**	.04	.37***	.26***	.04	.10*	.08	.38***	.07	-.04	.17***
19. Expectation of Critic's Effort	-.42***	-.37***	.37***	.45***	-.02	.06	.18***	.42***	.16**	-.37***	.55***
20. Presumed Group-Related Knowledge of an Ingroup Member	-.46***	-.28***	.29***	.22***	-.06	0.00	.04	.34***	.04	-.23***	.32***
21. Presumed Group-Related Knowledge of an Outgroup Member	-.05	.26***	.01	-.01	.21***	.12*	.10	-.04	.14**	.35***	-.05
22. Group Salience	-.70***	-.11*	.31***	.48***	.08	.26***	.32***	.46***	.35***	-.06	.42***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 7 (Continued)

	12	13	14	15	16	17	18	19	20	21	22
12. Agreement with the Criticism	1.00										
13. Intention to Act upon the Criticism	.32***	1.00									
14. Personality Evaluation of the Critic	.66***	.31***	1.00								
15. Personality Evaluation of Outgroup	.03	.04	.10*	1.00							
16. Blame on the Critic	-.42***	.11*	-.34***	-.07	1.00						
17. Anger at the Critic	-.37***	.26***	-.29***	-.09	.60***	1.00					
18. Perceived Outgroup Access to the Criticism	-.07	.04	-.03	.34***	.15**	.11*	1.00				
19. Expectation of Critic's Effort	-.44***	.07	-.29***	.21***	.37***	.35***	.24***	1.00			
20. Presumed Group-Related Knowledge of an Ingroup Member	-.27***	.03	-.22***	.21***	.21***	.18***	.27***	.39***	1.00		
21. Presumed Group-Related Knowledge of an Outgroup Member	.23***	.16**	.33***	.26***	.04	.01	.07	.02	.04	1.00	
22. Group Salience	-.19***	.22***	-.12*	.09	.38***	.35***	.27***	.37***	.35***	.11*	1.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 8

Coefficient Hs of the Factors in Pilot Study 2 Part III (N = 468)

Factor	Coefficient *H*
1. Identity Importance	.94
2. Perceived Accuracy	.97
3. Presumed Media Influence	.90
4. Categorization Threat	.86
5. Distinctiveness Threat	.73
6. Value Threat	.94
7. Overall Threat	.94
8. Positive Collective Face Threat	.92
9. Negative Collective Face Threat	.90
10. Perceived Constructiveness	.94
11. Evaluation of the Criticism	.92
12. Agreement with the Criticism	.95
13. Intention to Act upon the Criticism	.93
14. Personality Evaluation of the Critic	.94
15. Personality Evaluation of Outgroup	.91
16. Blame on the Critic	.97
17. Anger at the Critic	.94
18. Perceived Outgroup Access to the Criticism	.95
19. Expectation of Critic's Effort	.97
20. Presumed Group-Related Knowledge of an Ingroup Member	.94
21. Presumed Group-Related Knowledge of an Outgroup Member	.94
22. Group Salience	.91

Table 9

Correlations Between Measures in the Present Dissertation and Criterion Measures (N = 468)

Measure in the Present Dissertation	Criterion Measure	Correlation
Perceived Accuracy	Perceived Usefulness	.66
Presumed Media Influence	Negativity of Perceived Image	.39
Categorization Threat	Anger	.53
	Anxiety	.46
Distinctiveness Threat	Anger	.24
	Anxiety	.37
Value Threat	Anger	.36
	Anxiety	.49
Overall Threat	Anger	.56
	Anxiety	.60
Positive Collective Face Threat	Positive Collective Face Threat	.71
	Anger/Hurt	.52
Negative Collective Face Threat	Negative Collective Face Threat	.92
	Anger/Hurt	.52
Perceived Constructiveness	Perceived Constructiveness	.97
Agreement with the Criticism	Agreement	.92

Note. All correlations were significant at the $p < .01$ level.

Specifically, I did a 2 (Message Pair: pair 1 vs. pair 2) × 2 (Message Accuracy: accurate vs. inaccurate) × 2 (Critic's Group Membership: U.S. American vs. Chinese) full factorial analysis of variance (ANOVA), predicting perceived accuracy. The model was significant, $F(7, 460) = 5.19$, $p < .001$. The main effect of message accuracy was significant, $F(1, 460) = 22.76$, $p < .001$, message pair was significant, $F(1, 460) = 4.23$, $p = .04$, and the interaction between message accuracy and message pair was significant, $F(1, 460) = 7.18$, $p = .008$. To explicate this interaction, the estimated marginal means showed that for pair 1, the allegedly accurate criticism ($M = 2.56$, 95% CI [2.18, 2.94]) was not perceived to be significantly more accurate than the allegedly inaccurate one ($M = 2.18$, 95% CI [1.81, 2.54]). For pair 2, the two messages differed significantly on perceived accuracy ($M = 3.42$, 95% CI [3.07, 3.78] for the accurate criticism, $M = 2.07$, 95% CI [1.74, 2.40] for the inaccurate criticism). Therefore, the second pair of criticisms was selected to be used in Pilot Study 3 and the Main Study.

Pilot Study 3: Checking Manipulations and Assumptions

Purpose and Overview

The third pilot study checked whether the manipulation of perceived accuracy was successful for the two messages constructed and selected in Pilot Studies 1 and 2 (confirming the evidence that Pilot Study 2 provided; see above), and it checked three assumptions of the present study: (a) whether group criticism led to group salience, (b) whether people presumed that ingroup members had more knowledge about the ingroup than outgroup members, and (c) whether people perceived an outgroup to have less access to the criticism when it was delivered in the intragroup context (i.e., when an outgroup audience was absent) than in the intergroup context (i.e., when an outgroup audience was present).

Two hundred and two participants were recruited on MTurk. The final sample size was 191, after deleting participants who requested removal of their responses after debriefing (n = 4), who were not U.S. citizens (n = 5), who completed the study in less than 120 seconds (n = 1), and who got both attention checking questions wrong (n = 1). The cutoff value of completion time was smaller than Pilot Study 2 Part III (which was 180 seconds), because Pilot Study 3 had less content and should require less time to complete. The included participants were 36.73 years old on average (SD = 10.98, two had missing data), and the majority were male (53.9%; 45.5% female, one did not disclose sex). They were African American (5.8%), Asian/Pacific Islander (5.2%), Caucasian (81.2%), Latino/Hispanic (3.1%), Native American (1.0%), and multiracial (3.1%); one did not disclose ethnicity. Participants were not allowed to choose more than one race/ethnicity.

Procedures

The study first used a 3 (Messages: accurate criticism, inaccurate criticism, control message) × 2 (Critic's Group Membership: U.S. American vs. Chinese) design. Participants went through a training session to be able to use magnitude scales (see Appendix F). Then they were assigned to one of six conditions: They read the accurate criticism, inaccurate criticism, or a paragraph that briefly described MTurk workers (control condition), which was said to be delivered by either a U.S. American or a Chinese person (see Appendix I). The control message had similar sentence structure and length with the two group criticism messages. Participants were then asked to indicate their perceptions about the accuracy of the message as well as their group salience (see Appendix A for the measures).

Next, participants were randomly assigned to indicate their expectation of a

Chinese person's or a U.S. American's knowledge of the U.S. Last, for participants who read one of the two criticisms, they were randomly assigned to the intragroup or intergroup context. In other words, participants were told that the message they just read was delivered either in a Facebook closed group that includes mostly U.S. Americans (intragroup context) or on Sina Weibo, a social networking website in China (intergroup context; see Appendix I). Participants indicated their perception of Chinese people's access to the message (see Appendix A for the measure).

Results

Responses higher than 999 were changed to 999 (Zhu et al., 2016). Data were transformed by taking the natural logarithm of the original variable plus 1, and they approached normality (i.e., absolute value of skewness < 3 and absolute value of kurtosis < 10; Kline, 2011). A PCA without rotation was conducted on all items; both the scree plot and eigenvalues suggested four components. Another PCA was conducted with oblique rotation, extracting four components. All items loaded on their presumed components: perceived accuracy (component 1), group salience (component 2), perceived outgroup access (component 3), and presumed group-related knowledge (component 4). All four scales were reliable (Cronbach's αs = .97, .94, .94, and .90, respectively).

Four analyses were conducted. First, a 3 (Message: accurate criticism, inaccurate criticism, control message) × 2 (Critic's Group Membership: U.S. American vs. Chinese) ANOVA was conducted to predict perceived accuracy. This was to examine whether the accurate message was actually perceived to be more accurate than the inaccurate one.

The model was significant, $F(5, 185) = 14.87$, $p < .001$. There was a main effect of message accuracy, $F(2, 185) = 35.39$, $p < .001$, partial $\eta^2 = .28$. A Tukey HSD post-hoc analysis was conducted: The MTurk message was perceived to be more accurate than

both the allegedly accurate U.S.-directed criticism ($\Delta M = 1.53$, $p < .001$) or the allegedly inaccurate criticism ($\Delta M = 2.53$, $p < .001$). The allegedly accurate criticism was perceived to be more accurate than the allegedly inaccurate one, $\Delta M = 1.00$, $p = .002$, providing evidence that the manipulation of message accuracy was successful.

Second, a 3 (Message: accurate criticism, inaccurate criticism, control message) × 2 (Critic's Group Membership: U.S. American vs. Chinese) ANOVA was conducted to predict group salience, to check the assumptions that (a) the two U.S.-directed criticisms elicited higher group (i.e., nationality) salience than the control message, and that (b) the two U.S.-directed criticisms did not differ significantly on elicited group salience.

The model was significant, $F(5, 185) = 12.71$, $p < .001$. There was a main effect of message accuracy, $F(2, 185) = 24.80$, $p < .001$, partial $\eta^2 = .21$, and an interaction effect, $F(2, 185) = 5.07$, $p = .007$, partial $\eta^2 = .05$. Because the interaction was significant, a simple main effects analysis was conducted to examine the effect of message accuracy at each level of critic's group membership. When the critic was U.S. American, the difference in perceived accuracy between the three messages was significant, $F(2, 185) = 3.82$, $p = .024$. Both the accurate criticism ($\Delta M = 0.91$, $p = .046$) and the inaccurate criticism ($\Delta M = 1.31$, $p = .008$) elicited higher group salience than the control message. The accurate and inaccurate criticisms did not differ on the group salience that they elicited, $\Delta M = -0.40$, $p = .38$. When the critic was Chinese, the result was similar: The difference in perceived accuracy between the three messages was significant, $F(2, 185) = 27.77$, $p < .001$. Both the accurate criticism ($\Delta M = 2.82$, $p < .001$) and the inaccurate criticism ($\Delta M = 2.87$, $p < .001$) elicited higher group salience than the control message; the accurate and inaccurate criticisms did not differ on the group salience that they elicited, $\Delta M = -0.05$, $p = .90$. Therefore, the two assumption were both supported.

However, it also should be noted that group salience elicited by group-directed criticism was higher when the critic was Chinese than when the critic was U.S. American.

Third, a 3 (Message: accurate criticism, inaccurate criticism, control message) × 2 (Critic's Group Membership: U.S. American vs. Chinese) × 2 (Presumed Group-Related Knowledge: U.S. Americans' knowledge vs. Chinese people's knowledge) ANOVA was conducted on presumed group-related knowledge.

The model was significant, $F(11, 179) = 9.74$, $p < .001$. There was only a main effect of presumed group-related knowledge, $F(2, 185) = 92.60$, $p < .001$, partial $\eta^2 = .34$. Participants presumed U.S. Americans to possess more knowledge of the United States than Chinese people, $\Delta M = 1.55$, $p < .001$. This assumption of the theoretical model was supported.

Fourth, a 2 (Criticism: accurate vs. inaccurate) × 2 (Critic's Group Membership: U.S. American vs. Chinese) × 2 (Presumed Group-related Knowledge: U.S. Americans' knowledge vs. Chinese people's knowledge) × 2 (Context: intragroup vs. intergroup) ANOVA was conducted on perceived outgroup access. Because perceived outgroup access was only measured for participants exposed to the two group-directed criticisms, only these participants were included.

The model was significant, $F(15, 116) = 3.60$, $p < .001$. There was only a main effect of context, $F(1, 116) = 41.65$, $p < .001$, partial $\eta^2 = .26$. Participants perceived the outgroup (i.e., Chinese) to have more access to the criticism in the intergroup context than in the intragroup context, $\Delta M = 1.31$, $p < .001$. This assumption was also met.

Summary of Pilot Study Results

In summary, three pilot studies were conducted to construct the message stimuli (Pilot Study 1), validate the instruments (Pilot Study 2), and check the manipulation of

message accuracy and the assumptions of the theoretical model (Pilot Study 3).

Pilot Study 1 collected common criticisms of the United States or U.S. Americans from both U.S. citizens and non-U.S. participants. These criticisms were rated by a second sample of U.S. participants on perceived accuracy. Two criticisms were selected: "Americans are obsessed with guns" (accurate criticism) and "Americans don't have a culture" (inaccurate criticism). Two messages with the same sentence structure were constructed based on these two criticisms and were used in subsequent parts of the dissertation.

Pilot Study 2 evaluated the reliability and validity of the instruments through three steps. First, I revised the wording of some items based on participant feedback to ensure that the items were easy to understand. Second, a second sample of participants rated on match of each item with its construct; the responses were analyzed using PCA and Cronbach's α to obtain preliminary evidence for structural validity and reliability. Third, another sample of participants read a criticism and responded to all the items. There responses were analyzed using PCA to assess structural validity and CFA to assess convergent and discriminant validity. Correlations between some of the instruments with criterion variables were used to examine criterion-related validity. Coefficient *H* was calculated as an estimate of reliability. Based on the results, all the measures were reliable and valid.

Pilot Study 3 checked the manipulation of perceived accuracy using the two messages constructed in Pilot Study 1, and it checked three assumptions of the theoretical model. Results showed that the manipulation was successful. Moreover, group criticism led to group salience (first assumption), people presumed ingroup members to have more group-related knowledge than outgroup members (assumption 2), and people perceived

outgroup members to have less access to a group criticism in the intragroup context than in the intergroup context (assumption 3). In other words, all these assumptions were met.

The three pilot studies set the stage for the main study, which tested the proposed theoretical model (see Figure 5). Below I introduce the method and results of the main study.

Main Study: Testing the Theoretical Model

Purpose and Overview

The main study tested the proposed model (see Figure 5) using a 2 (Critic's Group Membership: ingroup vs. outgroup) × 2 (Outgroup Audience: present vs. absent) × 2 (Criticism: accurate vs. inaccurate) between-subjects experimental design. Group membership of the critic was manipulated using common U.S. American and Chinese male names, which were specified in the message presented to the participants. The presence of an outgroup audience was manipulated using popular U.S. and Chinese social networking websites (Facebook and Sina Weibo, respectively); for the U.S. website, it was further specified that the criticism was posted in a Facebook closed group (i.e., a group that can be joined only by request or invitation) that contains mostly U.S. citizens, to make the intragroup context more salient. Perceived accuracy of the criticism was manipulated using the two messages constructed in Pilot Study 1. See Appendix C for instructions for participants.

Participants

Five hundred and forty-six U.S. citizens participated in the experiment. They were at least 18 years old and had not participated in any part of the three pilot studies. After deleting those who did not complete most part of the study (n = 45), those who wanted their data to be removed after being debriefed (n = 12), four non-U.S. citizens and one

who did not answer the question on U.S. citizenship, those who got both attention checking questions wrong (n = 35), and two cases that claimed that they were not honest in their responses, the final sample size was 457. All participants completed the study in more than three minutes (shortest completion time was 340 seconds).

Participants were 36.12 years old on average (SD = 10.87, *Median* = 33), and nine did not disclose their age. The majority were male (58.0%; female 41.6%, 2 did not disclose sex). Participants were African/African American (9.0%), Asian/Pacific Islander (4.4%), Caucasian (72.2%), Latino/Hispanic (6.1%), multiracial (3.9%), Native American (1.8%), and other (1.5%); five did not disclose race. Participants were allowed to choose only one race/ethnicity.

Procedures

Participants who signed up for the study were provided with a link to access an online survey. After electronically signing the consent form (see Appendix B), participants first went through a training session to be able to use magnitude scales (see Appendix F). Next, they were randomly assigned to one of the eight conditions and were presented with a message, which introduced a social media platform (Facebook closed group or Sina Weibo), a social media user (U.S. American or Chinese), and the criticism (accurate or inaccurate) that was allegedly delivered by the social media user. The eight messages can be found in Appendix J.

After reading the message, participants were asked to rate their agreement with the statements on a series of instruments, which had been validated and revised in Pilot Study 2. The order of the instruments, as well as the order of the items within each instrument, was randomized. Finally, participants provided demographic information (see Appendix E) and were debriefed (see Appendix D).

Chapter 3: Results

Data Preparation and Overview of Data Analysis

Values higher than 999 were changed to 999 to reduce outlier effects (Zhu et al., 2016). To assess the normality of the data, the absolute value of the skewness coefficient < 3 and the absolute value of the kurtosis coefficient < 10 were used as the criteria; skewness and kurtosis coefficients outside of this range would suggest nonnormality of the data (Kline, 2011). Many variables had a skewness or kurtosis coefficient out of the acceptable range. Therefore, all the variables were transformed by taking the natural logarithm of the original variable plus 1: $Y^* = \ln(Y + 1)$, where Y^* is the transformed value of Y. After transformation, the skewness and kurtosis of all the variables were within an acceptable range (i.e., the absolute value of the skewness coefficient < 3 and the absolute value of the kurtosis coefficient < 10).

The manipulated variables, critic's group membership (U.S. American = 0, Chinese = 1), message accuracy (accurate message = 0, inaccurate message = 1), and presence of an outgroup audience (absent = 0, present = 1), were dummy coded.

The data analysis consisted of four steps. First, a CFA was run to assess the measurement model, where each item was specified under the factor that the item was supposed to measure, and all factors were allowed to covary. The fit indices of the measurement model were evaluated based on the suggestions provided by Hu and Bentler (1999). Because the initial model did not have good fit, the modification indices were examined; the model was modified (e.g., adding an error covariance) only when it was reasonable to do so (e.g., the errors of two indicators were allowed to covary because the indicators had similar sentence structures). The revised measurement model went through another CFA to assess model fit and was modified if necessary until it achieved

acceptable model fit. Coefficient *H* was calculated for each measure as an estimate of reliability.

Second, to provide preliminary evidence for the first half of the model (H1-H4; see Chapter 1 and Figure 5) and to simplify subsequent analyses, two regressions were run. Both positive collective face threat and negative collective face threat were regressed on critic's group membership (dummy coded), presence of an outgroup audience (dummy coded), presumed media influence, and their two-way and three-way interaction terms. Perceived critic's constructiveness was regressed on critic's group membership (dummy coded), perceived criticism accuracy (dummy coded), identity importance, and their two-way and three-way interaction terms, as well as expectation of the critic's effort and collective face threats. All the interaction terms were created by multiplying values of the variables that were involved in the interaction.

The objective of these regression analyses was to see the extent to which the first half of the model (H1-H4) was supported. Only the significant main effects and interaction terms were included in the subsequent structural equation modeling (SEM); the effects that were not significant were excluded from subsequent analyses. However, it is important to acknowledge that the results (e.g., coefficients) from regression may be slightly different from the results from SEM due to, for example, the difference in estimation method (i.e., ordinary least squares vs. maximum likelihood).

Third, SEM analyses were done through the following procedures. (1) A latent variable path analysis was conducted: on the basis of the CFA measurement model, the structural relations between the factors were specified. The model could not run because there were several factor interactions, which made the memory space of the computer insufficient. (2) To reduce the demand of memory space, I conducted a measured variable

path analysis instead, where each variable was represented by a composite. The path analysis model was modified based on the model's modification indices. Moreover, two variables (blame and evaluation of the outgroup) were excluded from the model (for reasons of excluding these two variables, see below "Measured Variable Path Analysis"). (3) Then, because the number of interactions were greatly reduced in the path analysis, the model was again assessed using SEM, where all continuous variables were treated as latent factors. After modifications, the model achieved acceptable fit.

Fourth, the path coefficients of the final structural model were assessed to examine whether the hypotheses were supported. To make sense of the interaction terms, data were evaluated by running models using the SPSS PROCESS macro. I report the details of the data analysis below.

Measurement Model

A CFA was conducted for the measures for all eighteen factors that are included in the proposed model (see Appendix A) in Mplus 7.0 (Muthén & Muthén, 1998-2015). Fit indices were examined using the cutoff values suggested by Hu and Bentler (1999): SRMR ≤ .08, RMSEA ≤ .06, and CFI ≥ .95. The fit indices of the model were acceptable except for the CFI (which was .88). The modification indices suggested one error covariance (the first and the third items of *identity importance*) should be added. This was probably because the two items were both negatively worded items, which could be a methodological artifact (Woods, 2006). Another CFA was conducted after adding the error covariance, and the modification indices were examined again. The same procedures were repeated four times. The fit indices of the model in each step, as well as the added error covariances and the reasons to add them, can be found in Table 10. The final model achieved relatively good fit, $\chi^2(3328, N = 457) = 6985.201$, $p < .001$;

Table 10

Fit Indices of the Measurement Models and Reasons for Modifications in the Main Study (N = 457)

Model	χ^2	*df*	*p*	CFI	RMSEA	90% CI	SRMR	Modification	Reason for Modification
1	7620.22	3332	< .0001	.877	.053	[.051, .055]	.069	N/A	N/A
2	7410.65	3331	< .0001	.883	.052	[.050, .053]	.069	Added one error covariance	Both were negatively worded items
3	7238.20	3330	< .0001	.888	.051	[.049, .052]	.070	Added one error covariance	Both were negatively worded items
4	7040.01	3329	< .0001	.894	.049	[.048, .051]	.068	Added one error covariance	Similar content of the two items
5	6985.20	3328	< .0001	.895	.049	[.047, .051]	.069	Added one error covariance	Similar content of the two items

RMSEA = .049, 90% CI [.047, .051], CFI = .90, SRMR = .069. However, the CFI was still below the cutoff value, .95. Kenny (2015) suggested that when the null model's absolute fit is not too bad (e.g., RMSEA < .158), CFI of the hypothesized model would be low and would not be informative. The RMSEA for the null model was .146. Therefore, a CFA of .90 was acceptable.

Correlations between the factors are in Table 11, and the reliability estimates of the measures (i.e., coefficient *H*s) can be found in Table 12. All measures were reliable (i.e., coefficient *H*s > .70). Based on the criteria suggested by Kline (2011), the measures had convergent validity: Most loadings had absolute values larger than .70. The loading of each item had a sign (positive or negative) that was consistent with the conceptualization of the construct. The measures also had evidence of discriminant validity: All factor correlations were below .80 except for the correlation between agreement with the criticism and perceived accuracy (.825). Agreement with the criticism (e.g., "I agree with the message.") and perceived accuracy (e.g., "The message presents an accurate picture of Americans.") show good face validity, and it would be hard to argue that they represent the same construct.

Linear Regression: Providing Preliminary Evidence of H1 Through H4

H1 and H2 predicted a three-way interaction between critic's group membership, presence of outgroup audience, and presumed media influence on collective face threat. H3 and H4 predicted a three-way interaction between critic's group membership, criticism accuracy, and identity importance on perceived critic's constructiveness. H13 predicted that collective face threat has a negative effect on perceived critic's constructiveness. To provide preliminary evidence for these hypotheses, regressions were run to determine which variables should be included in subsequent analyses. Before

Table 11

Correlations Between the Factors in the Main Study (N = 457)

Factor	1	2	3	4	5	6	7	8	9
1. Identity Importance	1.00								
2. Perceived Accuracy	.24***	1.00							
3. Presumed Media Influence	-.32***	-.12*	1.00						
4. Categorization Threat	-.34***	-.31***	.42***	1.00					
5. Distinctiveness Threat	-.14*	.10	.07	.43***	1.00				
6. Value Threat	-.10*	.25***	.25***	.54***	.49***	1.00			
7. Overall Threat	-.35***	-.13**	.27***	.76***	.57***	.63***	1.00		
8. Positive Collective Face Threat	-.31***	-.21**	.72***	.62***	.17**	.37***	.42***	1.00	
9. Negative Collective Face Threat	-.35***	.10	.25***	.58***	.52***	.51***	.79***	.41***	1.00
10. Perceived Constructiveness	.16**	.63***	-.18***	-.30***	.09	.16**	-.08	-.28***	-.03
11. Evaluation of the Criticism	-.44***	-.57***	.35***	.70***	.24***	.17**	.51***	.47***	.42***
12. Agreement with the Criticism	.29***	.83***	-.14**	-.41***	.01	.18**	-.24***	-.25***	-.17**
13. Intention to Act upon the Criticism	-.17**	.23***	.26***	.26***	.34***	.55***	.42***	.27***	.42***
14. Personality Evaluation of the Critic	.11*	.67***	-.10*	-.33***	.11	.14**	-.10*	-.26***	-.10
15. Personality Evaluation of Outgroup	.03	.16**	-.10	-.14**	.02	-.03	-.20***	-.11*	-.18***
16. Blame on the Critic	-.35***	-.31***	.29***	.46***	.25***	.14**	.43***	.30***	.40***
17. Anger at the Critic	-.36***	-.34***	.20***	.62***	.35***	.28***	.63***	.35***	.58***
18. Expectation of Critic's Effort	-.31***	-.34***	.31***	.44***	.16**	.06	.27***	.39***	.19***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 11 (Continued)

	10	11	12	13	14	15	16	17	18
10. Perceived Constructiveness	1.00								
11. Evaluation of the Criticism	-.56***	1.00							
12. Agreement with the Criticism	.67***	-.67***	1.00						
13. Intention to Act upon the Criticism	.25***	.10	.21***	1.00					
14. Personality Evaluation of the Critic	.70***	-.54***	.69***	.18**	1.00				
15. Personality Evaluation of Outgroup	.25***	-.20***	.17***	.02	.36***	1.00			
16. Blame on the Critic	-.25***	.51***	-.37***	.15**	-.28***	-.13**	1.00		
17. Anger at the Critic	-.31***	.70***	-.48***	.27***	-.32***	-.25***	.51***	1.00	
18. Expectation of Critic's Effort	-.30***	.53***	-.42***	.16**	-.31***	-.05	.39***	.37***	1.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 12

Coefficient Hs of the Factors in the Main Study (N = 457)

Factor	Coefficient *H*
1. Identity Importance	.96
2. Perceived Accuracy	.96
3. Presumed Media Influence	.92
4. Categorization Threat	.83
5. Distinctiveness Threat	.70
6. Value Threat	.92
7. Overall Threat	.92
8. Positive Collective Face Threat	.92
9. Negative Collective Face Threat	.88
10. Perceived Constructiveness	.94
11. Evaluation of the Criticism	.94
12. Agreement with the Criticism	.95
13. Intention to Act upon the Criticism	.86
14. Personality Evaluation of the Critic	.92
15. Personality Evaluation of Outgroup	.91
16. Blame on the Critic	.97
17. Anger at the Critic	.95
18. Expectation of Critic's Effort	.98

running regressions, the composite of each variable was calculated by averaging the scores on all the items that measured that variable.

Predicting Constructiveness

The perceived constructiveness of the critic was regressed on critic's group membership (dummy coded), message accuracy (dummy coded), identity importance, their two-way interactions, and the three-way interaction, as well as negative collective face threat, positive collective face threat, and expected critic's effort (which was treated as a covariate in the model; see Chapter 2, "Instruments"). The independent variables were entered in three blocks to evaluate the necessity of the interaction terms: Model 1 consisted of the main effects; Model 2 consisted of all the main effects and the two-way interaction terms (Critic's Group Membership × Message Accuracy, Critic's Group Membership × Identity Importance, and Message Accuracy × Identity Importance); Model 3 consisted of all the main effects, the two-way interaction terms, and the three-

way interaction (Critic's Group Membership × Message Accuracy × Identity Importance).

Model 1 was significant in predicting perceived critic's constructiveness, $F(6, 450) = 27.73$, $p < .001$, adjusted $R^2 = .26$. Model 2 did not significantly increase the R^2 compared to Model 1, $\Delta F(3, 447) = 0.81$, $\Delta R^2 = .003$, $p = .65$. Model 3 did not significantly increase the R^2 compared to Model 2, $\Delta F(1, 446) = 2.21$, $\Delta R^2 = .003$, $p = .14$. Therefore, Model 1 was selected.

Results showed that message accuracy predicted perceived constructiveness, $b = -1.33$, $p < .001$, such that the critic who delivered an inaccurate message was perceived to be less constructive than the critic who delivered an accurate message. Identity importance increased perceived critic's constructiveness, the unstandardized coefficient $b = 0.28$, $p = .001$. Expected critic's effort decreased perceived critic's constructiveness, $b = -0.21$, $p < .001$: The more U.S. participants expected the critic to make efforts to know about U.S. Americans, the less they perceived the critic to be constructive. Positive collective face threat decreased ($b = -0.37$, $p < .001$) and negative collective face threat increased ($b = 0.15$, $p = .007$) perceived constructiveness. Critic's group membership was not significant in predicting perceived constructiveness, $b = -0.04$, $p = .79$. Therefore, message accuracy, identity importance, expected critic's effort, and positive and negative collective face threats were included in subsequent SEM analyses to predict perceived critic's constructiveness.

Predicting Positive Collective Face Threat

Positive collective face threat was regressed on critic's group membership, presence of an outgroup audience, and presumed media influence, their two-way interactions, and the three-way interaction. The independent variables were entered in

several blocks: Model 1 included only the main effects, Model 2 included the main effects and the two-way interactions, and Model 3 included the main effects, the two-way interactions, and the three-way interaction.

Model 1 was significant in predicting positive collective face threat, $F(3, 453) = 162.86$, $p < .001$, adjusted $R^2 = .42$. Model 2 significantly increased the R^2 compared to Model 1, $\Delta F(3, 450) = 3.20$, $\Delta R^2 = .012$, $p = .02$. Model 3 did not significantly increase the R^2 compared to Model 2, $\Delta F(1, 449) = 1.41$, $\Delta R^2 = .002$, $p = .24$. Therefore, Model 2 was selected, $F(6, 450) = 58.69$, $p < .001$, adjusted $R^2 = .43$.

Critic's group membership predicted positive face threat, $b = -0.56$, $p = .05$: Participants' positive collective face was less threatened when the critic was Chinese than when he was U.S. American. Presence of an outgroup audience predicted positive face threat, $b = 1.13$, $p = .001$: Positive collective face threat was stronger when an outgroup audience was present than when the audience was absent. Presumed media influence increased positive face threat, $b = 0.56$, $p < .001$. Moreover, the interaction between critic's group membership and presence of outgroup audience ($b = -0.50$, $p = .04$) and the interaction between presence of outgroup audience and presumed media influence ($b = -0.16$, $p = .03$) were significant, and the interaction between critic's group membership and presumed media influence ($b = 0.12$, $p = .08$) was marginally significant, in predicting positive collective face threat. Therefore, all the above predictors were included in subsequent SEM.

Predicting Negative Collective Face Threat

Because the hypotheses did not propose different predictors for positive and negative collective face threat, the same predictors were entered (in three blocks) in the regression model as for positive collective face threat. Model 1 was significant in

predicting negative collective face threat, $F(3, 453) = 11.48$, $p < .001$, adjusted $R^2 = .06$. Model 2 did not significantly increase the R^2 compared to Model 1, $\Delta F(3, 450) = 0.55$, $\Delta R^2 = .003$, $p = .65$. Model 3 did not significantly increase the R^2 compared to Model 2, $\Delta F(1, 449) = 0.25$, $\Delta R^2 = .002$, $p = .62$. Therefore, Model 1 was selected.

Presumed media influence significantly predicted negative collective face threat, $b = 0.21$, $p < .001$. However, neither critic's group membership ($b = -0.23$, $p = .11$) nor presence of an outgroup audience ($b = 0.22$, $p = .16$) significantly predicted negative collective face threat. Therefore, only presumed media influence was included in subsequent SEM to predict negative collective face threat.

Structural Equation Modeling: Model Testing

Mplus 7.0 was used for SEM analyses. On the basis of the measurement model, the structural relations between the factors were specified based on the proposed theoretical model; the variables that did not significantly predict perceived constructiveness, positive face threat, and negative face threat in regressions (see above, "Linear Regression: Providing Preliminary Evidence of H1 Through H4") were excluded from the model. However, an error message suggested that there was not enough memory space to run the model. This was because there were several factor interactions in the model (e.g., the interaction between blame and all the social identity threats and collective face threats), specified using the XWITH command in Mplus. The XWITH command requires a numerical integration algorithm (denoted by ALGORITHM = INTEGRATION), which becomes more computationally demanding when the number of factors is large (Muthén & Muthén, 1998-2015). Therefore, I ran measured variable path analysis instead, which makes less computational demand. Each variable was indicated by a composite, which was calculated by averaging all the indicators of that variable.

Measured Variable Path Analysis

The structural relations were specified on the basis of the theoretical model. Positive and negative collective face threats and perceived critic's constructiveness were predicted by the significant terms in the regression models. Expectation of critic's effort was treated as a covariate by entering it as a predictor in all the paths. All the interaction terms were created by multiplying values of the variables that were involved in the interaction. For example, Blame × Categorization Threat was created by multiplying scores of blame on the critic and scores of categorization threat. For this reason, the model only considers the linear by linear interaction. Moreover, the errors of all the threat variables (positive collective face threat, negative collective face threat, categorization threat, distinctiveness threat, value threat, and overall social identity threat) were allowed to covary, because there may be factors (e.g., the proneness to feeling threatened) other than the predictors indicated by the model that could cause the covariance between these threat variables. The errors of the interaction terms were allowed to covary with the variables that created the interaction terms (e.g., Critic's Group Membership × Categorization Threat was allowed to covary with categorization threat). The Mplus syntax for the initial measured variable path analysis model can be found in Appendix K.

The initial model had bad model fit (see Table 13). By examining the modification indices and the path coefficients, I found that none of the interaction terms between critic's group membership and (collective face or social identity) threat significantly predicted personality evaluation of the outgroup. Recall that H8 predicts that, when the critic is from an outgroup, collective face threats and social identity threats have a negative effect on personality evaluation of the outgroup. The reason to include evaluation of the outgroup in the model was to examine how evaluation of an outgroup

Table 13

Fit Indices of the Measured Variable Models in the Main Study (N = 457)

Model	χ^2	*df*	*p*	CFI	RMSEA	90% CI	SRMR	Modification
1	2961.45	365	< .0001	.670	.125	[.121, .129]	.196	N/A
2	1543.06	223	< .0001	.802	.114	[.108, .119]	.191	Removed personality evaluation of the outgroup
3	408.28	91	< .0001	.899	.087	[.079, .096]	.056	Removed blame
4	341.21	90	< .0001	.920	.078	[.069, .087]	.054	Added error covariance between evaluation of the criticism and anger
5	283.79	89	< .0001	.938	.069	[.060, .078]	.052	Added a path from message accuracy to distinctiveness threat

critic can be generalized to the entire outgroup. When critic's group membership did not interact with any of the threat variables to predict personality evaluation of the outgroup, this outcome variable was no longer of theoretical interest. Therefore, I decided to remove personality evaluation of the outgroup from the model and rerun the model. The model excluding personality evaluation of the outgroup had improved but still unacceptable fit (see Table 13). A close examination of the modification indices and the path coefficients showed that anger was not significantly predicted by either blame or the interaction terms between blame and the threat variables. Moreover, blame was not significantly predicted by the model ($R^2 < .001$, $p = .83$). Many of the modification indices also indicated that modifications regarding many Blame × Threat interaction terms would improve the fit of the model. Also, removing blame and its interaction terms could improve parsimony of the model. For these reasons, blame on the critic and its interaction terms with the threat variables were removed from the model. Although H10 draws on the appraisal theory of emotions (Lazarus, 1991) to propose that the positive effects of the threat variables on anger is moderated by strength of the blame on the critic, removing blame and its interaction terms is justified: Based on the intergroup threat theory, the feelings of threat caused by an outgroup directly lead to anger toward the outgroup. Atwell Seate et al.' (2017) findings support this claim: Caucasians' feelings of threat toward racial minority groups in the United States predicted their anger (and anxiety) toward these minority groups; blame was not included as a moderator. Therefore, it was justifiable to remove blame and its interaction terms from the model.

After excluding blame on the critic and its interaction terms with the threat variables, the model had a much-improved fit (see Table 13). Modification indices suggested that the model fit would be improved if errors of evaluation of the message and

anger were allowed to covary. Making this modification was reasonable, because the items that measured evaluation of the message used words that were clearly emotional (i.e., indicative of anger; e.g., disappointing, insulting), which could have caused the error covariance.

The model was rerun after adding the error covariance between evaluation of the message and anger (for fit indices see Table 13). The largest modification index suggested that a path should be added from message accuracy (dummy coded) to distinctiveness threat. Adding this path was justifiable: The inaccurate criticism suggests that U.S. Americans do not have a unique culture, which directly threatens the feelings of U.S. Americans for being unique and distinctive (i.e., it increases the distinctiveness threat).

After adding the path from message accuracy to distinctiveness threat, the model had improved fit (see Table 13) and was close to good fit. Moreover, because personality evaluation of the outgroup and its predictors, as well as blame and its interaction terms, were excluded from the model, the number of factor interactions in the model were reduced greatly. Thus, a latent variable path analysis may be possible because of the reduced computational demand.

Latent Variable Path Analysis

The latent variable path analysis models specified the correspondence between each factor and its indicators, as well as the structural relations between the factors. Because the model still contained two interaction terms that involved continuous variables (Critic's Group Membership × Presumed Media Influence and Presence of Outgroup Audience × Presumed Media Influence), specified by the XWITH command in Mplus, model fit indices such as χ^2 and CFI were not available in the Mplus output.

However, the log-likelihood value, AIC, and BIC were available. Based on previous research (Ma & Hample, 2018; Maslowsky, Jager, & Hemken, 2015), the following steps were taken to select a model and to infer model fit: First, I ran the model without the two interaction terms (termed Model 0). Model 0 was modified using modification indices when necessary, until it achieved acceptable fit. Second, I ran the models with one interaction term: one with Critic's Group Membership × Presumed Media Influence (termed Model 1) and the other with Presence of Outgroup Audience × Presumed Media Influence (termed Model 2), and I obtained the log-likelihood value for each. Third, I ran the model with both interaction terms (termed Model 3) and obtained the log-likelihood value.

Fourth, log-likelihood tests were conducted to compare pairs of models, in which one model was nested in another. Model 0 (without interaction term) was nested in Model 1 and Model 2 (with one interaction term), and Models 1 and 2 were nested in Model 3 (with both interaction terms). Therefore, log-likelihood tests were performed: Model 0 versus Model 1, and Model 1 versus Model 3. To double check, another two tests were performed: Model 0 versus Model 2, and Model 2 versus Model 3. For example, when comparing Model 0 and Model 1, a log-likelihood test was done by calculating $D = -2$[(log-likelihood of Model 0) - (log-likelihood of Model 1)] and comparing it with a χ^2 distribution, with the difference in free parameters as the degree of freedom. A significant result would suggest that Model 0 fit significantly worse than Model 1. If Model 0 already had good fit, I could conclude that Model 1 (i.e., the model with the interaction term) had even better fit.

The initial model without the two interaction terms (Critic's Group Membership × Presumed Media Influence and Presence of Outgroup Audience × Presumed Media

Table 14

Fit Indices of the Latent Variable Models and Reasons for Modifications in the Main Study (N = 457)

Model	χ^2	*df*	*p*	CFI	RMSEA	90% CI	SRMR	Modification	Reason for Modification
1	5558.79	2535	< .0001	.892	.051	[.049, .053]	.083	N/A	N/A
2	5230.09	2463	< .0001	.898	.050	[.048, .051]	.082	Deleted one item in anger	Cross loading on multiple factors
3	4985.21	2392	< .0001	.903	.049	[.047, .051]	.081	Deleted one item in value threat	Cross loading on multiple factors
4	4921.38	2391	< .0001	.906	.048	[.046, .050]	.081	Added one error covariance	Same content in the second half of the sentence
5	4881.33	2390	< .0001	.907	.048	[.046, .050]	.080	Added one error covariance	Similar content and sentence structure

Influence) did not have good fit (see Table 14). The two largest modification indices suggested that the second item of anger was cross-loaded on evaluation of the message and categorization threat. For this reason, the second item of anger was deleted, and the model had improved fit. The model was modified four times in total. Table 14 shows the modifications (e.g., deleting an item, adding an error covariance), the rationale for each modification, and the fit indices for each model.

The final model did not achieve good fit based on Hu and Bentler's (1999) criteria, $\chi^2(2390, N = 457) = 4881.33$, $p < .001$; RMSEA = .048, 90% CI [.046, .050], CFI = .91, SRMR = .080. Specifically, CFI was worse than the cutoff values (CFI > .95) suggested in Hu and Bentler (1999). However, modifying the model any further did not improve the model fit. Other scholars suggested cutoff values of fit indices that are less stringent. For example, Hair, Black, Babin, and Anderson (2010) argued that a CFI larger than .90 is usually associated with a good-fit model. Therefore, I accepted this final version of Model 0.

A comparison regarding the fit indices was done between the final latent variable model (Model 5 in Table 14) with the final measured variable model (Model 5 in Table 13). Compared to the measured variable model, the latent variable model had lower CFI and higher SRMR (which indicated poorer model fit), but lower RMSEA (which indicated better model fit). Therefore, it could not be concluded definitely that one model had better fit than the other. Note, however, that the latent variable model here (without the two interaction terms) should fit worse than the final chosen latent variable model, which included one interaction term and for which model fit indices were not available. This is because the model without interaction term was more parsimonious, and thus had a significant loss of fit, compared to the model with an interaction term (see below).

Next, I ran Model 1 by adding the Critic's Group Membership × Presumed Media Influence interaction term to the final version of Model 0. Similarly, Model 2 was run by adding the Presence of Outgroup Audience × Presumed Media Influence interaction term to the final version of Model 0. Model 3 was run by adding both interaction terms to Model 0. Table 15 shows the log-likelihood and number of free parameters of Model 0 through Model 3.

Table 15

Log-Likelihood and Number of Free Parameters of Models with and Without Interaction Terms (N = 457)

Model	Log-likelihood	Number of Free Parameters
Model 0 (without Interactions)	-54634.358	296
Model 1 (with Critic's Group Membership × Presumed Media Influence)	-54632.779	297
Model 2 (with Presence of Outgroup Audience × Presumed Media Influence)	-54632.164	297
Model 3 (with Both Interactions)	-54630.646	298

A log-likelihood test was conducted between Model 0 and Model 1: $D = -2[(\text{log-likelihood of Model 0}) - (\text{log-likelihood of Model 1})] = 3.16 < 3.84$, $df = 1$. The nonsignificant result indicated that Model 0 did not fit significantly worse than Model 1. Therefore, for parsimony of the model, the Critic's Group Membership × Presumed Media Influence interaction term should not be included. Another log-likelihood test was conducted between Model 1 and Model 3: $D = -2[(\text{log-likelihood of Model 1}) - (\text{log-likelihood of Model 3})] = 4.27 > 3.84$, $df = 1$. Therefore, the Presence of Outgroup Audience × Presumed Media Influence interaction was needed in the model.

To double check the results, two other log-likelihood tests were conducted: Model 0 versus Model 2, and Model 2 versus Model 3. Model 0 fit significantly worse than Model 2, $D = 4.39 > 3.84$, $df = 1$, again suggesting the inclusion of the Presence of Outgroup Audience × Presumed Media Influence interaction. Model 2 did not fit

significantly worse than Model 3, $D = 3.04 < 3.84$, $df = 1$, again suggesting the exclusion of the Critic's Group Membership × Presumed Media Influence interaction.

In conclusion, the final latent variable path analysis model was Model 2. It included the Presence of Outgroup Audience × Presumed Media Influence interaction, although excluding the Critic's Group Membership × Presumed Media Influence interaction. The Mplus syntax for the final model is shown in Appendix L. The proportion of explained variance (R^2) of all the endogenous variables can be found in Table 16, and the standardized path coefficients can be found in Table 17. I now turn to hypothesis testing using standardized path coefficients.

Hypothesis Testing

Predicting Collective Face Threats

H1 hypothesized that critic's group membership interacts with presence of an outgroup audience to predict collective face threat (see Figure 1). Because collective face threat is conceptualized as the threat to one's social image in front of an outgroup, it requires the presence of outgroup members. Therefore, collective face threat should lowest with ingroup critic and no outgroup audience, because no one in any outgroup is

Table 16

Proportion of Explained Variance (R^2) of the Endogenous Variables (N = 457)

Factor	R^2
Categorization Threat	.26***
Distinctiveness Threat	.23***
Value Threat	.05*
Overall Threat	.07***
Positive Collective Face Threat	.46***
Negative Collective Face Threat	.04*
Perceived Constructiveness	.28***
Evaluation of the Criticism	.72***
Agreement with the Criticism	.72***
Intention to Act upon the Criticism	.45***
Personality Evaluation of the Critic	.61***
Anger at the Critic	.52***

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Table 17

Standardized Path Coefficients of the Final Latent Variable Model in the Main Study (N = 457)

Path	Path Coefficient
Predicting Positive Collective Face Threat	
Critic's Group Membership (1 = Chinese, 0 = U.S.)	-.03
Presence of Outgroup Audience (1 = Present, 0 = Absent)	.15**
Critic's Group Membership × Presence of Outgroup Audience	-.08
Presumed Media Influence	.63***
Presence of Outgroup Audience × Presumed Media Influence	-.08†
Expectation of Critic's Effort	.24***
Predicting Negative Collective Face Threat	
Presumed Media Influence	.06
Expectation of Critic's Effort	.18***
Predicting Perceived Critic's Constructiveness	
Message Accuracy (1 = Inaccurate, 0 = Accurate)	-.37***
Identity Importance	-.06
Positive Collective Face Threat	-.25***
Negative Collective Face Threat	.16**
Expectation of Critic's Effort	-.19**
Predicting Categorization Threat	
Perceived Critic's Constructiveness	-.19***
Expectation of Critic's Effort	.42***
Predicting Distinctiveness Threat	
Perceived Critic's Constructiveness	.29***
Message Accuracy (Dummy Coded)	.46***
Expectation of Critic's Effort	.24***
Predicting Value Threat	
Perceived Critic's Constructiveness	.23***
Expectation of Critic's Effort	.12*
Predicting Overall Threat	
Perceived Critic's Constructiveness	-.02
Expectation of Critic's Effort	.27***
Predicting Evaluation of the Criticism	
Positive Collective Face Threat	-.05
Negative Collective Face Threat	.19†
Categorization Threat	.58***
Distinctiveness Threat	-.01
Value Threat	-.13*
Overall Threat	-.02
Perceived Critic's Constructiveness	-.31***
Expectation of Critic's Effort	.18***

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 17 (Continued)

Path	Path Coefficient
Predicting Agreement with the Criticism	
Message Accuracy (Dummy Coded)	-.24**
Positive Collective Face Threat	.16*
Negative Collective Face Threat	-.15
Categorization Threat	-.51***
Distinctiveness Threat	.38*
Value Threat	.22**
Overall Threat	-.13
Perceived Critic's Constructiveness	.35***
Expectation of Critic's Effort	-.15**
Predicting Personality Evaluation of the Critic	
Positive Collective Face Threat	.12†
Negative Collective Face Threat	-.21*
Categorization Threat	-.45***
Distinctiveness Threat	.23*
Value Threat	.08
Overall Threat	.20
Perceived Critic's Constructiveness	.56***
Expectation of Critic's Effort	-.04
Predicting Intention to Act on the Criticism	
Agreement with the Criticism	.13
Positive Collective Face Threat	.16*
Negative Collective Face Threat	.08
Categorization Threat	-.32*
Distinctiveness Threat	.01
Value Threat	.40***
Overall Threat	.10
Perceived Critic's Constructiveness	.17*
Anger with the Critic	.23**
Expectation of Critic's Effort	.20***
Predicting Anger with the Critic	
Positive Collective Face Threat	-.11*
Negative Collective Face Threat	.34**
Categorization Threat	.27*
Distinctiveness Threat	-.01
Value Threat	-.11†
Overall Threat	.26
Perceived Critic's Constructiveness	-.14**
Expectation of Critic's Effort	.09*

Note. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

part of the audience of the criticism. Collective face threat should be second lowest with outgroup critic and no outgroup audience, because the image of group members is damaged to some extent when the negative feedback is communicated by a person outside of the group. Collective face threat should second highest with outgroup critic and outgroup audience, because the negative side of the group is now exposed to the outsiders. Collective face threat should be highest with ingroup critic and outgroup audience, because both the negative message about the group and a deviant, nonconforming group member are the sources of threat in front of an outgroup.

H2 predicted that presumed media influence moderates the two-way interaction that H1 proposes (see Figure 2). When an outgroup audience is present, presumed media influence on the outgroup magnifies the effect of the ingroup or outgroup critic on collective face threat. On the other hand, when an outgroup audience is absent, presumed media influence on the outgroup should be irrelevant, because group members would not think the outgroup has access to the group criticism, let alone to be influenced by it.

Positive collective face threat. Results showed that the Critic's Group Membership (dummy coded) × Presence of an Outgroup Audience (dummy coded) interaction was not significant in predicting positive collective face threat, $\beta = -.08$, $p = .21$. H1 was not supported for positive collective face threat. Also, because the three-way interaction term was excluded in the regression analyses, H2 was also not tested for positive collective face in SEM.

However, presence of outgroup audience had a main effect on positive collective face threat, $\beta = .15$, $p = .006$: Positive collective face threat was stronger when an outgroup audience was present (vs. absent). Presumed media influence led to positive collective face threat, $\beta = .63$, $p < .001$: The more participants perceived the outgroup to

be influenced by the criticism of their group, the more their positive collective face was threatened. These results were not hypothesized.

The interaction between presence of an outgroup audience and presumed media influence was marginally significant, $\beta = -.08$, $p = .09$. To make sense of this interaction effect, data were entered into the PROCESS macro in SPSS (Hayes, 2013). Model 1 was selected; presence of outgroup audience was entered as the independent variable, presumed media influence was the moderator, and positive collective face threat was the dependent variable. Critic's group membership, Critic's Group Membership × Presumed Media Influence, and expectation of critic's effort were also entered as predictors to control for their effects on positive collective face threat.

The interaction between presence of outgroup audience and presumed media influence was significant, $b = -0.19$, $p = .007$. The presence of outgroup audience had a decreasing effect on positive collective face threat as presumed media influence increased: $b = 0.78$, $p < .001$ when presumed media influence was low (i.e., at one standard deviation below the mean), $b = 0.45$, $p = .005$ when presumed media influence was medium (i.e., at the mean), and $b = 0.13$, $p = .50$ when presumed media influence was high (i.e., at one standard deviation above the mean). In other words, although people in general had higher positive collective face threat when an outgroup audience was present than when it was absent, this difference decreased as people perceived the criticism to have a larger impact on the audience (see Figure 6). This result was not hypothesized.

Negative collective face threat. The predictors of negative collective face threat that were nonsignificant in the linear regressions were removed from the model. Therefore, negative collective face threat was only predicted by presumed media

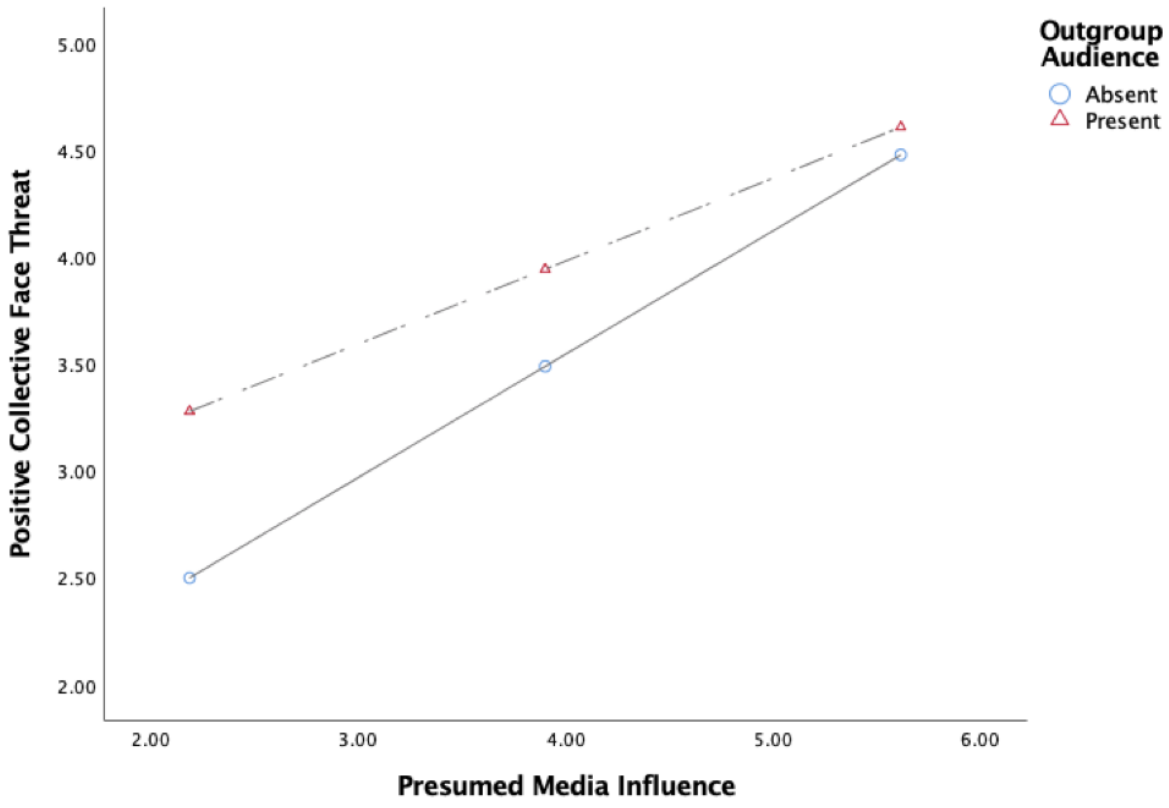


Figure 6. The interaction between presence of outgroup audience and presumed media influence on positive collective face threat. As the presumed media influence on the outgroup increased, the impact of presence of outgroup audience on positive collective face threat decreased.

influence (and expectation of critic's effort, which was treated as a covariate) in the SEM analyses. Presumed media influence was not a significant predictor, $\beta = .06$, $p = .15$.

In conclusion, H1 and H2 were not supported in the regression analyses, and they were not tested in SEM.

Predicting Perceived Critic's Constructiveness

H3 proposed that a critic's group membership interacts with criticism accuracy to predict perceived critic's constructiveness (see Figure 3). Perceived constructiveness of the critic should be highest for the ingroup critic who delivers accurate criticism and second highest for the outgroup critic who delivers accurate criticism, because the

ingroup critic's motive may be attributed to be "for our own good," whereas the outgroup critic is considered to be less well-intentioned (i.e., showing the intergroup sensitivity effect). Perceived critic's constructiveness should be second lowest for the outgroup critic who delivers inaccurate criticism, and lowest for the ingroup critic who delivers inaccurate criticism, because an ingroup member is more expected to possess accurate knowledge of the group than an outgroup member, and thus suffers more negative evaluation when the ingroup critic does not deliver an accurate message.

H4 predicted that identity importance moderates the two-way interaction in H3: The interaction in H3 is stronger for people with high identity importance than people with low identity importance (see Figure 4), because the content of the criticism should affect group members' perception especially when the group identity is important to them.

The two-way interaction predicted in H3 and the three-way interaction predicted in H4 were both excluded from the SEM analysis (see "Linear Regression: Providing Preliminary Evidence of H1 Through H4"). Therefore, H3 and H4 were not tested in SEM.

Message accuracy (dummy coded) had a direct main effect on perceived constructiveness, $\beta = -.37$, $p < .001$: Participants perceived the critic to be less constructive when the criticism was inaccurate (vs. accurate). This result was not hypothesized.

H13 hypothesized that collective face threat has a negative effect on perceived critic's constructiveness, such that the more threatened people's collective face is, the less people tend to perceive the critic to be constructive. Positive collective face threat had a negative effect, $\beta = -.25$, $p < .001$, and negative collective face threat had a positive

effect, β = .16, p = .003, on perceived critic's constructiveness. Therefore, H13 was supported for positive collective face threat, but not for negative collective face threat.

Predicting Social Identity Threats

H5 predicted that perceived critic's constructiveness has a negative effect on social identity threat. This is because the less constructive group members perceive the critic to be, the more they believe that the critic is intentionally harming the group, and the more group members' social identity is put at risk (Branscombe et al., 1999). This hypothesis did not differentiate types of social identity threats. However, the results were not consistent across the four social identity threats, which I discuss below.

Perceived critic's constructiveness had a negative effect on categorization threat, β = -.19, p < .001: The more participants perceived the critic to be constructive, the less they felt the threat of being categorized as U.S. Americans against their will.

Perceived critic's constructiveness had a positive effect on distinctiveness threat, β = .29, p < .001, and on value threat, β = .23, p < .001: The more participants perceived the critic to be constructive, the more they felt that their group was not unique and distinct, and that their group values were violated. Note that this result is opposite to what was hypothesized.

Perceived critic's constructiveness did not significantly predict overall threat, β = -.02, p =.62. Therefore, H5 was partially supported.

Message accuracy directly influenced distinctiveness threat, β = .46, p < .001: Distinctiveness threat was greater when the criticism was inaccurate versus accurate. This path was added to the model based on the modification indices and was not hypothesized.

Predicting Evaluative, Emotional, and Behavioral Intention Outcomes

Consistent with the intergroup sensitivity literature, H6 hypothesized that

collective face threat and social identity threat have a negative effect on (a) evaluation of the criticism, (b) agreement with the criticism, and (c) personality evaluation of the critic, such that stronger collective face threat and social identity threat each leads to more negative evaluation of the criticism, lower agreement with the criticism, and more negative personality evaluation of the critic. Moreover, H14 predicted that criticism accuracy has a direct positive effect on agreement with the criticism, because the more accurate the message is, the more people tend to accept the message (Ilgen et al., 1979), and the more they agree with the message.

Evaluation of the criticism. The SEM analysis showed that the two collective face threats and the four social identity threats did not have the same effect on evaluation of the criticism. Specifically, positive collective face threat did not have a significant effect, and negative collective face threat had a marginally significant positive effect on evaluation of the criticism (where higher scores indicate more negative evaluations), $\beta = .19$, $p = .053$. Among the social identity threats, categorization threat had a positive effect, $\beta = .58$, $p < .001$, and value threat had a negative effect, $\beta = -.13$, $p = .02$, on evaluation of the criticism. In other words, the stronger the participants felt that they were categorized as U.S. Americans against their will, and the less participants felt that their group values were threatened, the more negative their evaluation was of the criticism. However, neither distinctiveness threat nor overall threat significantly predicted evaluation of the criticism. H6(a) was partially supported.

Perceived critic's constructiveness had a direct effect on evaluation of the criticism, $\beta = -.31$, $p < .001$: The more participants perceived the critic to be constructive, the less negative their evaluation was of the criticism. This result was not hypothesized.

Agreement with the criticism. The threat variables did not have consistent

effects on agreement with the criticism. Positive collective face threat had a positive effect on agreement, β = .16, *p* =.01: The more participants' positive collective face was threatened, the more they agreed with the criticism. Negative face threat did not have a significant effect on agreement. Categorization threat had a negative effect, β = -.51, *p* < .001, but distinctiveness threat (β = .38, *p* =.04) and value threat (β = .22, *p* =.006) each had a positive effect on agreement with the criticism. H6(b) was partially supported. Message accuracy had a direct effect on agreement, β = -.24, *p* = .004: People agreed with the accurate criticism more than with the inaccurate criticism. H14 was supported.

Perceived critic's constructiveness had a direct positive effect on agreement, β = .35, *p* < .001: The more participants perceived the critic to be constructive, the more they agreed with the criticism. This result was not hypothesized.

Personality evaluation of the critic. Positive collective face threat had a marginally significant positive effect on personality evaluation of the critic, β = .12, *p* =.06. On the other hand, negative collective face had a negative effect on personality evaluation of the critic, β = -.21, *p* =.05. Among the social identity threats, categorization threat negatively predicted the outcome, β = -.45, *p* =.002: The more participants felt that they were categorized as U.S. Americans against their will, the more negative they evaluated the critic. Distinctiveness threat positively predicted the outcome, β = .23, *p* =.03: The more people felt that the distinctiveness of their social identity was threatened, the more positive they evaluated the critic. Value threat or overall threat did not predict personality evaluation of the critic. H6(c) was partially supported.

Perceived critic's constructiveness had a positive effect on personality evaluation of the critic, β = .56, *p* < .001. This result was not hypothesized.

Intention to act on the criticism. Based on previous findings that attitudes are

predictive of behavioral intentions (Ajzen & Fishbein, 1980; Kim & Hunter, 1993), H7 predicted that agreement with the criticism has a direct positive effect on the intention to act on the criticism. H7 was not supported, $\beta = .13$, $p = .18$. Rather, some of the threat variables and perceived constructiveness directly predicted this behavioral intention.

Positive collective face threat had a positive effect on intention to act, $\beta = .16$, $p = .02$: The more participants' positive collective face was threatened, the more they intended to act on the criticism by, for example, changing their behavior so they would not fit the description in the criticism. Value threat ($\beta = .40$, $p < .001$) and perceived critic's constructiveness ($\beta = .17$, $p = .02$) each had a positive effect on the intention to act. However, categorization threat had a negative effect on the intention to act, $\beta = -.32$, $p = .01$: The more people felt that they were categorized as U.S. Americans against their will, the less they intended to take action on the criticism.

H11 predicted that anger has a negative effect on the intention to act on the criticism, because anger brings about the action tendency of attack (Frijda, 1987), which can be manifested in more specific behaviors, such as refusing to act in accordance with the criticism (Dillard & Seo, 2013). H11 was supported, $\beta = .23$, $p = .001$. The angrier participants were, the less they intended to take action.

Evaluation of the outgroup. H8 proposed that when the critic is from an outgroup, collective face threat and social identity threat have a negative effect on the personality evaluation of the outgroup, because the negative evaluation of the outgroup critic may be generalized to the entire outgroup. Evaluation of the outgroup was excluded from the SEM analysis (see above, "Measured Variable Path Analysis") because it was not predicted by any of the interaction terms between critic's group membership and the threat variables. Therefore, H8 was not tested in the final SEM.

Blame and anger. H9 proposed that perceived critic's constructiveness has a negative effect on blame on the critic. Based on the appraisal theory of emotion (Lazarus, 1991), H10 predicted that blame interacts with the threat variables to predict anger: The greater the blame, the greater the effect of threat perceptions on anger toward the critic. Because blame on the critic was excluded from the SEM analysis (see above, "Measured Variable Path Analysis"), H9 and H10 were not tested in the final SEM.

In the SEM model, anger with the critic was directly predicted by some of the threat variables and perceived constructiveness, which was not hypothesized. Specifically, positive collective face threat had a negative effect, $\beta = -.11$, $p = .04$, and negative collective face threat had a positive effect, on anger, $\beta = .34$, $p = .003$. Categorization threat had a positive effect, $\beta = .27$, $p = .03$, and value threat had a marginally negative effect on anger, $\beta = -.11$, $p = .06$. Neither distinctiveness threat nor overall threat directly predicted anger. Perceived critic's constructiveness had a negative effect on anger with the critic, $\beta = -.14$, $p = .005$.

H12 predicted that social identity threat has a negative effect on perceived critic's constructiveness. In other words, H5 and H12 predicted a nonrecursive path between social identity threats and perceived critic's constructiveness. However, adding the paths from the social identity threats to perceived critic's constructiveness greatly reduced model fit, and the explained variance of some of the social identity threats were close to 0. Because H12 was not central to the model, it was removed from the analysis and was not tested. See Table 18 for a summary of the SEM results.

Table 18

Summary of Main Study SEM Results (N = 457)

Hypotheses That Were Tested and Supported

H5 (For Categorization Threat)
H6(a) (For Negative Collective Face Threat [Marginally Significant] & Categorization Threat)
H6(b) (For Categorization Threat)
H6(c) (For Negative Collective Face Threat & Categorization Threat)
H11
H13 (For Positive Collective Face Threat)
H14

Hypotheses That Were Tested and Not Supported

H1 (For Positive Collective Face Threat)
H5 (For **Distinctiveness Threat, Value Threat**, & Overall Threat)
H6(a) (For Positive Collective Face Threat, Distinctiveness Threat, **Value Threat**, & Overall Threat)
H6(b) (For **Positive Collective Face Threat**, Negative Collective Face Threat, **Distinctiveness Threat, Value Threat**, & Overall Threat)
H6(c) (For **Positive Collective Face Threat [Marginally Significant], Distinctiveness Threat**, Value Threat, & Overall Threat)
H7
H13 (For **Negative Collective Face Threat**)

Hypotheses That Were Not Tested

H1 (For Negative Collective Face Threat)
H2 (For Positive Collective Face Threat & Negative Collective Face Threat)
H3
H4
H8
H9
H10
H12

Statistically Significant Results That Were Not Hypothesized

Presence of an Outgroup Audience → Positive Collective Face Threat (+)
Presumed Media Influence → Positive Collective Face Threat (+)
Presence of an Outgroup Audience × Presumed Media Influence → Positive Collective Face Threat (–, Marginally Significant)
Message Accuracy → Perceived Critic's Constructiveness (–)
Message Accuracy → Distinctiveness Threat (+)
Perceived Critic's Constructiveness → Evaluation of the Criticism (–)
Perceived Critic's Constructiveness → Agreement with the Criticism (+)
Perceived Critic's Constructiveness → Personality Evaluation of the Critic (+)
Positive Collective Face Threat → Intention to Act on the Criticism (+)
Categorization Threat → Intention to Act on the Criticism (–)
Value Threat → Intention to Act on the Criticism (+)
Perceived Critic's Constructiveness → Intention to Act on the Criticism (+)
Positive Collective Face Threat → Anger with the Critic (–)
Negative Collective Face Threat → Anger with the Critic (+)
Categorization Threat → Anger with the Critic (+)
Value Threat → Anger with the Critic (–, Marginally Significant)
Perceived Critic's Constructiveness → Anger with the Critic (–)

Note. Under "Hypotheses That Were Tested and Not Supported," results that were significant in the opposite direction from hypotheses are in boldface. Under "Statistically Significant Results That Were Not Hypothesized," "+" = positive relationship; "–" = negative relationship.

Chapter 4: Discussion

This dissertation aims at exploring U.S. Americans' responses to a group-directed criticism under various conditions: when the critic is from the ingroup or from an outgroup, when an outgroup audience is present or absent, and when the criticism is perceived to be accurate or inaccurate. Understanding the causes and consequences of group-directed criticism is important, because group-directed criticism has the potential to lead to conflict both within and between social groups: If the critic is from one's social group, this ingroup critic may be marginalized or penalized for disclosing negative aspects of the group (Hogg et al., 2005); if the critic is not from one's social group, the criticism may lead members of the criticized group to generalize negative attitudes toward the critic and their criticism to the entire outgroup, thus resulting in intergroup conflict. On the other hand, group criticism, especially when it is perceived as constructive, can provide valuable feedback to members of the criticized group, who can take the criticism as an opportunity for improvement (Hornsey & Imani, 2004).

Although group criticism is an important research topic, researchers have not reached agreement on the causes and consequences of such criticism. Specifically, two literatures have been inconsistent in predicting responses to group criticism based on the critic's group membership. The black sheep literature (Marques & Paez, 1994) argues that group members are more intolerant of an ingroup member who has deviant behavior than of an outgroup member who displays the same behavior. Because criticizing a group is a deviant behavior (Jetten & Hornsey, 2014), based on the reasoning of the black sheep literature, we would expect members of the criticized group to have a more negative evaluation of the critic and of the criticism when the critic comes from the ingroup rather than an outgroup. On the other hand, the intergroup sensitivity literature (Hornsey et al.,

2002) has shown that group members tend to have more negative evaluations when the critic is from an outgroup than from the ingroup, and these evaluations are mediated by the perceived constructiveness of the critic (Hornsey, 2005).

I proposed a theoretical model (see Figure 5) to explicate how and why members of the criticized group respond differently to a group criticism. This model may resolve the inconsistency between the two important literatures mentioned above. The model should make three theoretical contributions. First, it not only considers the effect of a critic's group membership, but also the effects of the communicative context (presence of an outgroup audience) and message content (perceived accuracy of the criticism) on responses to the criticism. This may explain why the black sheep effect and the intergroup sensitivity effect literatures make opposite predictions: One effect may be stronger than the other, depending on the context and the message.

Second, the model proposes that the perceived critic's constructiveness and threat perceptions (collective face threats and social identity threats) are important mediators in this process. Previous research on group criticism has examined perceived critic's constructiveness as a mediator (Hornsey, 2005), and it has suggested that group criticism is a threat to social identity (Hornsey & Esposo, 2009), but it has not examined these threat perceptions explicitly. Moreover, previous research has not differentiated collective face threat and social identity threat. But as proposed in Chapter 1, collective face threat should be driven by the perception that people from an outgroup know of a negative message (i.e., group criticism) or a deviant member (i.e., ingroup critic) of the group, and therefore should only be relevant when an outgroup audience is believed to have access to the criticism. Social identity threat is driven by the negativity of the critic's behavior (i.e., delivering the criticism), and it should be irrelevant to the presence

of an outgroup audience. Furthermore, previous research has not differentiated types of collective face threats, nor has it differentiated types of social identity threats. Here I differentiated positive and negative collective face threats, as well as categorization, distinctiveness, value, and overall social identity threats. Although the model does not predict different causes and effects for the two collective face threats, nor for the four social identity threats, the results showed interesting differences between them (discussed below).

Third, I investigated a series of outcomes of group criticism, including evaluation (i.e., evaluation of the criticism, personality evaluation of the critic, and agreement with the criticism), emotion (i.e., anger with the critic), and behavioral intention (i.e., intention to take action regarding the criticism). Although previous research on group criticism has examined some of these outcomes, to my best knowledge, this study is the first to examine a wide variety of evaluative, emotional, and behavioral intention outcomes of group criticism. This is important, because it provides a comprehensive view of group members' responses when they are faced with criticism of their group.

To test the proposed theoretical model, three pilot studies and one main study were conducted. The first pilot study collected common criticisms of the United States and U.S. Americans. Similar criticisms were aggregated to yield a pool of U.S.-directed criticisms. Another sample of U.S. participants rated the perceived accuracy of each criticism in the pool. Two pairs of criticisms were selected; each pair contained one accurate and one inaccurate criticism.

The second pilot study validated the instruments that were to be used in the main study. Participants' feedback was used to improve the wording of the items, so the items were easier to understand. PCAs and CFAs were conducted to evaluate the content,

convergent, and discriminant validity of the measures. Criterion-related validity was assessed for some of the measures I created. Coefficient *H* was used as an estimate of reliability. All measures were found to be reliable and valid. A pair of criticisms was selected from the two pairs to be used in the third pilot study and the main study.

The third pilot study checked the manipulation of message accuracy and several assumptions made by the theoretical model. The manipulation was successful, and all assumptions were met: (1) Group criticism elicited group salience; (2) perceived outgroup access was higher in the intergroup context than in the intragroup context; and (3) people assumed that ingroup members possess more group-related knowledge than outgroup members.

The main study was a three factor between-subjects experiment testing the theoretical model. U.S. participants were randomly assigned to one of eight conditions: an accurate or an inaccurate criticism of U.S. Americans, delivered by an ingroup or outgroup critic, with or without the presence of an outgroup audience. Participants then rated their agreement with a series of statements. Below I discuss the results obtained from the main study and how these results have addressed the objectives of this study.

Predicting Responses to Group Criticism: What Matters?

In Chapter 1, I argued that responding to group criticism is a complex social phenomenon. Other than the critic's group membership, which is the key variable involved in the contradictory predictions of the black sheep effect and the intergroup sensitivity effect, a combination of contextual factors (e.g., presence of an outgroup audience), message attributes (e.g., perceived accuracy), and individual differences (e.g., presumed media influence, identity importance) may work together to affect collective face threat and perceived critic's constructiveness (H1-H4).

The results did not support most of the specific hypotheses but still showed the utility of considering the plurality of causes (Ragin, 2008). Specifically, it was found that the presence of an outgroup audience and presumed media influence each had a statistically significant main positive effect on positive collective face threat: Positive collective face threat was significantly higher when an outgroup audience was present than absent, and it significantly increased as people presumed that an outgroup would be influenced by the criticism. These two variables also had a marginally significant ordinal interaction (see Figure 6): Positive collective face threat was higher when an outgroup audience was present than absent, but this difference caused by presence of an outgroup audience decreased as presumed media influence on the outgroup increased. In other words, presumed media influence reduced the effect of presence of an outgroup audience.

Although not hypothesized, this finding makes sense: The more group members believed that the criticism influenced the outgroup, the more they might believe that the outgroup had access to the criticism of their group. In other words, there might be two types of perceived access to the criticism here: direct access and indirect access. Direct access was manipulated by the intragroup (i.e., Facebook closed group) versus intergroup (i.e. Sina Weibo) conditions. Perceived indirect access was captured by the items for presumed media influence ("The message influences Chinese people's opinions about the United States."). Even when an outgroup audience was absent, stronger presumed media influence on the outgroup would suggest higher perceived probability that the outgroup had indirect access to the criticism, thus reducing the difference between the intragroup and intergroup context.

Research on presumed media influence suggests that people's behaviors are affected by how they perceive others to be influenced by mass-communicated messages

(Gunther & Storey, 2003). This effect can be observed the group level, such that the perceived message influence on an outgroup can affect behaviors of ingroup members (Atwell Seate et al., 2012). For example, Hoffner et al. (Hoffner, Fujioka, Cohen, & Atwell Seate, 2015) examined the news coverage on the Virginia Tech shootings and used mental illness as a group membership. They found that for people with mental illness, perceiving others' attitudes to be negatively influenced by the news coverage predicted less engagement in support activities. My findings suggest that it may be valuable to incorporate the idea of direct versus indirect access to the literature on presumed media influence, and to examine how these two types of perceived access can work in tandem to predict the outcomes, such as collective face threat.

Another finding was that people perceived the critic to be more constructive when he delivered an accurate criticism than an inaccurate criticism. In other words, there was a significant main effect of message accuracy on perceived critic's constructiveness. Although not formulated as a hypothesis, this prediction was consistent with the logic of Chapter 1 (see "Perceived Accuracy of the Criticism"): Message content, especially the perceived accuracy of a criticism, can be used as a cue for people to infer the critic's intention; the critic is seen as well-intentioned and constructive when the criticism is accurate.

Importance of the Communicative Context and Message Attributes

The above findings show the importance of considering the communicative context and perceived message attributes when predicting responses to group criticism. The presence of an outgroup audience is a factor of the communicative context that can influence responses to group criticism. Hornsey (2005) has argued that people expect a criticism of their group to be kept "in-house" (i.e., to ingroup members only) so that the

reputation and image of the group are not damaged by the negative message. Providing evidence for this claim, Elder et al. (2005) found that an ingroup critic was evaluated less negatively than an outgroup critic only when the criticism was communicated in private. The findings of the present study are consistent with the results in Elder et al. (2005), but here I also addressed the issue of what is being threatened. More specifically, the presence of an outgroup audience threatened the group's positive face (i.e., group members' need for their group to be appreciated and approved by outgroups).

Perception of criticism accuracy is the message attribute examined here. People are motivated to pay attention to the accuracy of the message (although not always) when they process information (Chen et al., 1999). Moreover, when people describe a target (e.g., a social group), social norms expect them to describe it in a nonnegative and accurate way (Bergsieker et al., 2012). Group criticism is negative by definition, making the motivation for accuracy more salient. When people are motivated to consider the accuracy of the message, they infer the critic's intention from their perception of the accuracy of the criticism by asking why the critic would say what was said (see Chapter 1, "Perceived Accuracy of the Criticism"). Thus, a perceptually accurate criticism is perceived to have constructive intentions, and a perceptually inaccurate criticism is perceived to have destructive intentions. Contrary to what was hypothesized, identity importance did not moderate the effect of message accuracy, probably because there was not much variability in identity importance (SD = 0.93; maximum of the scale = 6.91, minimum of the scale = 0). Future research can manipulate, rather than measure, identity importance to examine its moderating role on perception of constructiveness. For example, Ellemers, Spears, and Doosje (1997) manipulated ingroup identification by telling participants that their group-involvement score in a previous task was higher

(high-identification condition) or lower (low-identification condition) than average.

Null Effects of Critic's Group Membership

One of the main objectives of this study was to resolve the inconsistency between the black sheep effect (Marques & Paez, 1994) and the intergroup sensitivity effect (Hornsey et al., 2002). As introduced in Chapter 1 and earlier in this chapter, the critic's group membership is the key variable in these two literatures. The black sheep effect predicts a more negative evaluation of an ingroup critic (vs. an outgroup critic), whereas the intergroup sensitivity effect predicts a more negative evaluation of an outgroup critic (vs. an ingroup critic). I argued that whether people are more tolerant of an ingroup or outgroup critic depends on the communicative context and message attributes. However, here the critic's group membership did not have any significant main effect or interaction effect on collective face threats or perceived critic's constructiveness.

There are four possible explanations for the null effects of the critic's group membership. First, it is possible that the manipulation of critic's group membership was not successful. Perhaps many participants did not notice the nationality of the critic. However, this speculation is not likely. In the Main Study, the nationality of the critic was manipulated using typical Chinese and U.S. male names. The message stimuli also explicitly pointed out the nationality of the critic. For the Chinese critic, it stated "Zhang Wei (Chinese, male; pseudonym to protect identity)," and for the U.S. critic, it stated "James Smith (American, male; pseudonym to protect identity)." This text was in bold font. Moreover, when participants responded to the variables' scale items, many contained the name of the critic, depending on which critic the participant was assigned (e.g., "James Smith [or Zhang Wei] is intelligent"). Therefore, it is unlikely that participants failed to notice the group membership of the critic. Moreover, previous

studies that used a similar manipulation did find an effect of critic's group membership (e.g., Elder et al., 2005).

Second, it is possible that, because the United States is a diverse society, U.S. Americans welcome different opinions about their country, regardless of the person who holds these opinions. However, this speculation might be overly optimistic. Atwell Seate et al.'s (Atwell Seate, Ma, Iles, McCloskey, & Parry-Giles, 2016) study showed that the mere exposure to a short promotional video of the U.S. team in the 2014 World Cup was sufficient to enhance U.S. participants' self-worth and to elicit nationalistic attitudes. Based on the social identity perspective (Tajfel & Turner, 1986), when a social identity is activated, people automatically differentiate "us" (i.e., the ingroup) and "them" (i.e., the outgroups). Given how easily U.S. national identity can be activated, it would be hard to imagine that U.S. participants saw no difference between an outgroup member versus an ingroup member criticizing U.S. Americans.

Third, it is possible that there were two competing motivations that participants experienced. On the one hand, members of the criticized group could be suspicious of the outgroup critic's intention, believing that he would do harm to the ingroup. On the other hand, group members were threatened by the ingroup member who violated the group norm and put the group in a negative light. However, this speculation does not explain why neither the black sheep effect nor the intergroup sensitivity effect was supported in any condition in the Main Study.

Fourth, the null effects of the critic's group membership could be due to the specific outgroup included in this study, Chinese people, and its relation to the two criticisms. The inaccurate criticism states that "Americans don't have a culture." The accurate criticism states that "Americans are obsessed with guns." These two criticisms

were both perceived to be inaccurate when they were used to describe Chinese people (see Table 1): In a total of 67 criticisms, the rank of accuracy was 63 and 67 for the two criticisms respectively when they were directed at Chinese people. Therefore, it is possible that the outgroup critic, who was a Chinese person, was perceived to have the "qualifications" to criticize U.S. Americans, because his country is in a superior position regarding the issue mentioned in the criticism. Thus, any privilege that the ingroup critic could have had disappeared because the outgroup critic was qualified to criticize. This speculation would support the intergroup sensitivity effect rather than the black sheep effect, but it would require that researchers take into account the perceived qualifications of the critic. To my knowledge, this proposed variable has not been examined in the literature on group criticism. Studying its effect on responses to group criticism can help researchers examine the nuances regarding critic's group membership: It is not merely about ingroup versus outgroup, but about the specific outgroup that is involved.

In summary, solely based on the results, the effect of the critic's group membership on responses to group criticism is unclear, but it provides new directions for research. More research is needed to examine this important factor by, for example, changing the outgroup. Varying the group membership of the outgroup critic could potentially shed light on the reasons why critic's group membership did not have any effect in this study.

Threat Perceptions of Group Criticism

Two types of threat perceptions of group criticism were examined: collective face threats and social identity threats. I hypothesized that collective face threats are predicted by the interaction of critic's group membership and the presence of an outgroup audience (H1), which is also moderated by presumed media influence (H2). As discussed above,

these hypotheses were not supported. Rather, the presence of an outgroup audience predicted positive collective face threat; this effect decreased the more people presumed that an outgroup was influenced by the criticism. I also hypothesized that social identity threats are negatively predicted by perceived critic's constructiveness (H5), which was partially supported. Simply put, the two collective face threats did not have the same causes, nor did the four social identity threats.

Presence of an Outgroup Audience and Collective Face Threat

In Chapter 1, I drew on theories of face (Brown & Levinson, 1987; Ting-Toomey & Dorjee, 2017) and social identity (Tajfel & Turner, 1986) to create the term "collective face," which was conceptualized as a person's group-level image in social interaction. Collective face mirrors individual-level face (e.g., Goffman, 1967). Based on the intergroup literature (e.g., Mackie et al., 2009), as a group-level concept, collective face would be more predictive of group-based (e.g., evaluation of the critic based on how he treats the group), rather than individual-based, processes. I further posited that the concept of face implies the presence of others in social interaction; for collective face, it implies the presence of an outgroup or outgroups. Moreover, just as individual-level face is categorized as positive face (i.e., need for appreciation and acceptance) and negative face (i.e., need for autonomy and freedom of action; Brown & Levinson, 1987), there is positive collective face and negative collective face. Group criticism should result in the threat to both positive and negative collective face, because the criticism questions the ability or morality of the group (i.e., threatens positive collective face), and it indicates that the issue mentioned should be addressed, thus restricting the autonomy of group members (i.e., threatens negative collective face). Therefore, I did not hypothesize different causes for the two collective face threats.

Results showed that the presence of an outgroup audience and presumed media influence only predicted positive collective face threat. This result appears reasonable and is consistent with the conceptualization of collective face threat: When an outgroup audience was present and witnessed a criticism of the group, it hurt the group-level image of members of the criticized group. Moreover, because a criticism is negative, it is against group members' need for the group to be accepted and appreciated. For negative collective face threat, however, only presumed media influence was a significant predictor in the regression analysis (i.e., linear regression predicting negative collective face threat using critic's group membership, presence of an outgroup audience, presumed media influence, and their interactions); this predictor was nonsignificant in the SEM analyses that followed. Therefore, in the final SEM, there was no significant predictor of negative collective face threat other than the covariate, expectation of the critic's effort. This does not mean that negative collective face threat is irrelevant to group-directed criticism. Rather, this result suggests that negative collective face threat could be unchanged under the various conditions of group criticism.

Perceived Constructiveness and Social Identity Threats

Unlike collective face threat, which requires the presence of an outgroup, I argued that social identity threat can occur regardless of whether the criticism was delivered in an intragroup or intergroup context. As long as the subjective validity (i.e., the perception that the ingroup is correct) or the positive distinctiveness (i.e., the perception that the ingroup is different from and better than outgroups) is jeopardized, group members experience threat to their social identity (see Chapter 1). Moreover, the less the critic is perceived to be constructive and well-intentioned, the more the critic is believed to intentionally harm the criticized group, and the greater social identity threat will be. This

idea was the rationale undergirding the hypothesis that perceived critic's constructiveness negatively predicts social identity threat (H5).

Branscombe et al. (1999) differentiated five types of social identity threats: categorization, distinctiveness, competence, morality, and acceptance threat. Because acceptance threat (i.e., the threat of not being accepted by the ingroup) was deemed irrelevant for group members in the context of group criticism, it was not included in the model (see Chapter 2, "Instruments"). Morality threat and competence threat were combined into one variable, value threat, based on the PCA and CFA results in Pilot Study 2. Also, overall threat was added to examine group members' overall feeling that their social identity was threatened. In other words, four types of social identity threats were examined here: categorization threat (i.e., the threat of being categorized into a group against one's will), distinctiveness threat (i.e., the threat that the ingroup is not different from outgroups), value threat (i.e., the threat that the ingroup values are violated), and overall threat. However, overall threat neither was predicted by perceived critic's constructiveness nor did it have a significant effect on any of the outcomes. This could be due to the items that measured overall threat, which might sound vague to participants and unclear about what is being threatened (e.g., "The message is threatening to me as an American."). Therefore, overall threat is excluded from the following discussion.

This study did not hypothesize different causes and effects for these social identity threats. However, results showed that perceived critic's constructiveness influenced the four threats differently. Specifically, perceived critic's constructiveness negatively predicted categorization threat. This was consistent with H5. Perceived constructiveness positively predicted distinctiveness threat and value threat, which was

opposite to H5. At first sight, these mixed results seem confusing. However, they may reflect important reasoning processes of group members when their group is criticized. A critic who is perceived to be not constructive suggests that the critic is not making sense, and that the criticism about the group is illegitimate. As a result, it is reasonable for members of the criticized group to feel that they were categorized into the group wrongfully and that they were "discriminated against," "judged negatively" and "slandered" as group members (see Appendix A for the items for categorization threat), because the group depicted by the critic was not their "true" group at all. On the other hand, the constructive critic suggests that the critic has good reason to make negative comments about the group and has done in the best interests of the group. Thus, group members do not feel that they have been wrongfully categorized into the group, nor were they discriminated against. Instead, they feel that their social identity is less distinct, meaningful, and valuable. These findings demonstrate the necessity to specify the object of perceived threat when examining threat to social identity.

Message accuracy also directly influenced distinctiveness threat. Group members thought that their social identity (being U.S. Americans) was not unique or meaningful when they read the inaccurate criticism. Although not previously hypothesized, this result is sensible. The accurate criticism mentioned that U.S. Americans are obsessed with guns, whereas the inaccurate criticism indicated that U.S. Americans do not have a real culture. The former message criticized one specific aspect of a group, and it was more about "what they do"; the latter one questioned the existential meaning of a group, which was more about "who they are." As a result, U.S. participants could have felt that being U.S. Americans was not a distinctive social identity, because the criticism suggested that they did not have a unique culture. This suggests that the two criticisms do not differ on

perceived accuracy only, a limitation that I will discuss in more detail below.

Outcomes of Threat Perceptions

I proposed that threat perceptions mediate the effects of the experimental variables and other individual difference variables (e.g., presumed media influence) on the outcomes of group criticism. Greater threat perceptions were hypothesized to lead to more negative outcomes, such as more negative evaluation of the criticism (H6a) and the critic (H6c), more anger (moderated by blame on the critic; H10), and lower agreement (H6b). However, the two collective face threats and the three social identity threats (excluding overall threat; see above) did not have the same effects on the outcomes. Some threats tended to act similarly, meaning that their effects were mostly in the same direction; some other threats had opposite effects in almost all the outcomes. To be specific, categorization threat predicted the outcomes in the hypothesized direction, leading to more negative evaluations and behavioral intention. The effects of negative collective face threat were consistent with categorization threat for some of the outcomes; its effects were nonsignificant for other outcomes. Distinctiveness threat, value threat, and positive collective face threat almost always had the opposite effect to categorization threat, leading to more positive outcomes. Put simply, two clusters of threat perceptions emerged. One cluster consisted of categorization threat and negative collective face threat; they mostly had negative outcomes. The other cluster consisted of distinctive threat, value threat, and positive collective face threat; they mostly had positive outcomes. It is therefore reasonable to discuss these threat perceptions and their outcomes based on the clusters to which they fall.

Note that some of the hypotheses were unable to be tested based on the results of SEM. H8 hypothesized the effect of threat perceptions on evaluation of an outgroup when

the critic was from the outgroup. However, the evaluation of the outgroup was removed from the model (see Chapter 3, "Measured Variable Path Analysis"), so this hypothesis was not tested. Also, H10 hypothesized that blame attributed to the critic moderates the effect of threat perceptions on anger. However, because blame was removed from the model (see Chapter 3, "Measured Variable Path Analysis"), only the main effect of threat perceptions on anger was examined.

Categorization Threat and Negative Collective Face Threat

The effects of categorization threat, and to a lesser extent, negative collective face threat, were in consistence with H6. The more people felt that they were judged negatively because of their social identity as U.S. Americans (i.e., the stronger categorization threat), the more negatively they evaluated the criticism (H6a) and the critic (H6c), and the less they agreed with the criticism (H6b). Moreover, the stronger the categorization threat, the less they intended to act upon the criticism (but not mediated by agreement as H7 suggested), and the angrier they became (but not moderated by blame as H10 suggested). For negative collective face threat, it led to more negative evaluation of the criticism (marginally significant) and of the critic, and greater anger, but it did not significantly predict agreement or intention to act.

Although categorization threat and negative collective face threat had similar effects, there might be different processes underlying them. Categorization threat was predicted by a lack of perceived constructiveness of the criticism. When people experienced categorization threat, they might feel that they were portrayed by the criticism in an untruthful way, that they were treated unfairly, and that the criticism hurt their social identity wrongfully. As a result, group members evaluated such criticism and the critic negatively.

On the other hand, negative collective face threat does not depend on whether the critic was being constructive. Rather, based on its conceptualization and the items that measure it (e.g., "The message forces Americans to alter their behavior when interacting with Chinese people."), negative collective face threat is the perception that one's freedom of choice is restricted. Experiencing negative collective face threat does not necessarily mean that members of the criticized group perceived the criticism or the critic to be intentionally harming the ingroup; they reacted negatively to the criticism because they believed that they *had to* do something or not do something because of the message. Therefore, the concept of negative collective face threat seems to be closely related to *psychological reactance* (Dillard & Shen, 2005), which is often examined in research on persuasion. Reactance is a motivational state that people have when they perceive their freedom to be threatened (Brehm & Brehm, 1981), and it is usually operationalized using a composite of anger and negative cognitions (e.g., asking participants to list negative thoughts). When reactant, people are motivated to restore their freedom by, for example, evaluating the message negatively (and thus discrediting its value) and refusing to act in accordance with the message (Dillard & Shen, 2005), two variables that were also examined here. Therefore, it is possible that reactance mediates the effect of negative collective face threat on the outcomes. If this speculation were true, for people who want to provide critical comments or suggestions for their ingroup or outgroups (e.g., social activists), group criticism can be designed to reduce negative reactions through reducing reactance. For example, Richards and Banas (2015) found that including an inoculation message (i.e., a message that warns readers that their freedom of choice might be threatened by the upcoming persuasive message) before a persuasive message can reduce reactance. Following this logic, including an inoculation message before presenting the

group criticism may help obtain responses to the criticism that are less negative, thus reducing the potential of the group criticism to cause intragroup or intergroup conflict.

The Possibility of "Desirable" Threat Perceptions?

Although categorization threat and negative collective face threat had effects on the outcomes that were mostly consistent with the hypotheses, the effects of distinctiveness threat, value threat, and positive collective face threat were mostly opposite to the hypotheses. These results were surprising and worthy of attention, because they suggest that it may be desirable for communicators to induce some types of threat perceptions, which may lead to group members' acceptance rather than derogation of the criticism and the critic, as well as the intention to perform behaviors that could improve their social group.

To reiterate, stronger distinctiveness threat led to more positive evaluation of the critic and stronger agreement with the criticism, but it did not significantly predict evaluation of the criticism, intention to act on the criticism, or anger. Stronger value threat led to more positive evaluation of the criticism, stronger agreement with the criticism, stronger intention to act on the criticism, and less anger (marginally significant), but it did not have a significant effect on evaluation of the critic. Positive collective face threat led to more positive evaluation of the critic (marginally significant), stronger agreement with the criticism, stronger intention to act, and less anger, but it did not affect evaluation of the criticism.

These findings contradict the common view of threat perceptions as causing negative reactions. Branscombe et al. (1999) posited that people have different responses under different types of social identity threat. Regardless of the type of threat, the responses are mostly negative (e.g., displaying outgroup derogation) or neutral (e.g.,

perceiving ingroup heterogeneity). The only positive response they proposed is "undoing morally objectionable behavior" (p. 37) when experiencing morality threat (which is a type of value threat), but it only applies to low identifiers of the group. Also, intergroup threat theory conceptualized realistic threat (i.e., threat to group's wellbeing) and symbolic threat (i.e., threat to group values), and it outlined the cognitive, emotional, and behavioral consequences of these threats; none of the outcomes are positive (Stephan et al., 2009). Moreover, Hornsey et al.' (2002) work on group criticism suggests that group criticism leads to negative outcomes such as defensive reactions of group members, because such criticism is threatening.

In conclusion, it seems that threat perceptions have been consistently seen by researchers as something negative, resulting in negative attitudes, negative emotions (e.g., anger, anxiety) and defensiveness. Based on this reasoning, threat perceptions should be reduced or eliminated if we want to achieve better intragroup and intergroup relations. Yet, positive collective face threat, value threat, and distinctiveness threat led to positive outcomes here. It leaves us to wonder why they resulted in positive reactions. For scholars and social activists who want to encourage social change, can they induce these threats strategically, rather than reduce them, to achieve desirable outcomes? To answer these questions, it might be useful to consider two ways of restoring the positive and distinctive social identity that group members may have used in the face of group criticism, and the effects of facework in social interaction.

Two Ways to Restore Positive and Distinctive Social Identity

As discussed in Chapter 1, group criticism is threatening to group members because it harms the positive distinctiveness (i.e., that the ingroup is superior to outgroups on some valued dimension; Turner, 1985) of the group identity (Morier et al.,

2013): Group criticism points out some negative performance of the group, implying that the group is not distinct from outgroups in a positive way on the dimension mentioned in the criticism. Thus, group members are motivated to restore the group's positive distinctiveness, so that they can continue to have a positive and unique social identity.

However, as suggested by my findings, there may be two ways to restore the positive and distinctive social identity. One way is to derogate and reject the criticism, arguing that it is not true. This is reflected here as a negative evaluation of the criticism and the critic, anger, lower agreement, and weaker intention to act. In this way, group members are no longer responsible for the negative performance mentioned, and therefore their social identity remains intact. This method should be most useful when the criticism is perceived to be inaccurate and not constructive. A second way to restore the positive and distinct social identity may be to accept the criticism that the ingroup is not performing satisfactorily in some aspects and to strive to improve the group in that regard. As a result, members of the criticized group may show positive attitudes toward and agreement with the criticism, and they may be motivated to take action to change the situation. This method may be used when the criticism is considered to be accurate and constructive.

The two ways to restore a group's positive distinctiveness in the face of group criticism mentioned above may remind the reader of the positive distinctiveness strategies originally proposed by social identity theory (Tajfel & Turner, 1986). The theory proposes that people protect the positive distinctiveness of their ingroup through three strategies: social mobility (i.e., dissociating oneself from the ingroup and moving to a higher-status outgroup), social creativity (e.g., comparing the ingroup with a lower-status outgroup, redefining ingroup characteristics), and social competition (i.e., directly

challenging the higher-status outgroup; Abrams & Hogg, 2010). The two ways proposed here are different from the positive distinctiveness strategies in social identity theory in two ways. First, unlike the strategies suggested by social identity theory, people can still be motivated to protect and restore their positive and distinctive social identity when no outgroup is involved (e.g., when the group is criticized by an ingroup member). Second, although derogating the message can be categorized as a social competition strategy, taking action to improve the group has not been mentioned as a strategy to restore positive distinctiveness. This strategy is important and should be acknowledged in the social identity literature, because it may provide a route for group members to not only restore a positive social identity, but also maintain positive intragroup and intergroup relations.

Although the literature on group criticism has not explicitly differentiated these two responses (i.e., derogating the criticism vs. amending the situation) to restore the positive and distinctive social identity, theory and research in other areas have addressed "dual methods" that are parallel to what is mentioned here. One example is Lazarus' (1991) appraisal theory of emotions, which suggests that people cope with an emotional encounter in two ways: problem-focused coping and cognitive coping. Problem-focused coping means that the person changes his or her actual relationship with the environment through action. For example, if the person feels upset about a problem, he or she copes with the situation by directly tackling the problem. This coping behavior can flow from emotions or from "an initial appraisal of harm, threat, or challenge" (p. 113), and it can change subsequent appraisals. This may change the emotion or even "short-circuit" the emotion that could have emerged. To be applied to the context of group criticism, when group members appraise the criticism as threatening to the ingroup's distinctiveness or

values, they may use problem-focused coping, formulating ways to improve, so their group will not continue to fit into the description in the criticism. This coping effort is reflected in a stronger intention to act upon the criticism. This way, group members may instead appraise the criticism as an opportunity rather than a threat, thereby having more positive evaluations, stronger agreement, and less anger. In other words, negative reactions such as anger are "short-circuited" because the criticism is reappraised through problem-focused coping. On the other hand, cognitive coping does not concern changing the actual relationship with the environment; instead, it changes how the person interprets such a relationship. Denying the group criticism, arguing that the criticism is not well-intentioned and is discriminating against the criticized group are examples of cognitive coping. As a result, the criticism is evaluated negatively and leads to more anger.

Another comparison can be made with the danger control versus fear control processes that are instigated by threat perceptions (Witte, 1994). Explaining the effects of fear appeals in health promotion messages, the extended parallel process model (Witte, 1994) posits that threat perceptions can lead to danger control, which motivates people to take action to reduce the threat. However, if no action is available to avert the threat, people will engage in fear control by denying or derogating the health message (Ruiter, Kessels, Peters, & Kok, 2014). Although the above arguments were made in the context of health communication and fear appeals, it can be applied to group criticism, which also involves threat perceptions, albeit at the group level (see Atwell Seate et al. 2017). Specifically, it is possible that perceived threats to the group's distinctiveness and values instigated danger control. Because these threats are possible for group members to cope with by taking action to change the situation, group members are motivated to cope with the situation. However, if group members feel the threat of being categorized into the

group, it may suggest that they do not think they fit into the criticism, and thus cannot take any action regarding the criticism. In other words, no effective action is available to them. As a result, they may derogate the criticism instead.

A more explicit connection can be made with uncritical and constructive patriotism (Schatz, Staub, & Lavine, 1999). Uncritical patriotism is characterized by an "intolerance of criticism" (p. 151), which is reflected in the responses of derogating and rejecting the criticism found in my study. Constructive patriotism is characterized by "support of questioning and criticism" (p. 151) and intentions for the positive change of the group, which is linked to the responses of accepting the criticism and striving to make improvements found in my study. Atwell Seate and colleagues (2016) found that a promotional video of the U.S. team increased both uncritical and constructive patriotism of U.S. participants indirectly via satisfying social identity needs. Applied to the context of group criticism, it is useful to examine how variables such as political ideology and authoritarianism (Huddy & Khatib, 2007) can predict the two types of responses of restoring positive distinctiveness, and to what extent these findings can be generalized to social identities other than national identity.

Positive Collective Face Threat and Facework

In the last section, I have argued that social identity threats may lead to two ways to restore the positive and distinctive social identity. One way is to deny and derogate the group criticism (under categorization threat), and the other way is to improve the group (under distinctiveness threat and value threat). However, in this study positive collective face threat also led to desirable outcomes. The mechanism of its effect has not been explained. Here I argue that the reason may lie in group members' facework strategies. Facework refers to the behaviors that are intended to maintain or restore a person's

positive self-image (i.e., face) in social interaction when the person's face is threatened (Oetzel, Ting-Toomey, Yokochi, Masumoto, & Takai, 2000). Elevated to the group level, when group members' collective face is threatened, they should be motivated to enact facework strategies to restore that collective face.

The outcomes of positive collective face threat may reflect the facework efforts of group members. Oetzel et al. (2000) proposed and tested a typology of facework. They found that thirteen facework behaviors (e.g., defending self, considering the other) can be categorized into three facework styles: dominating, avoiding, and integrating. In the context of group criticism, derogating the criticism can be seen as using a dominating facework style, which involves aggression and defending the self. On the other hand, improving the group can be seen as using an integrating facework style by directly addressing the problem. Oetzel et al. (2000) also found that U.S. participants considered the integrating style more appropriate and effective, and the dominating and avoiding styles less effective, compared to their Japanese counterparts. The authors speculated that this was because the U.S. culture is individualistic, having a greater concern for the self and emphasizing the direct resolution of the issue. This speculation can also explain the desirable outcomes of positive collective face threat here: The U.S. participants focused more on directly resolving the issue (that the group was criticized because of its negative performance) rather than attacking or avoiding the criticism.

Limitations and Directions for Future Research

This study is not without limitations. First, two endogenous variables, blame on the critic and personality evaluation of the outgroup, were omitted in the SEM analyses. Therefore, I could not formally test the hypotheses that involve these two variables. Removing them was necessary because it greatly improved the model fit (for detailed

reasons to remove these two variables, see Chapter 3, "Measured Variable Path Analysis"). Future research may examine (1) the predictors of blame on the critic, (2) whether blame moderates the effect of threat perceptions on anger, and (3) whether and the conditions under which the evaluation of an outgroup critic can be generalized to the entire outgroup, preferably using a model that is less complex than the one tested in this study.

Second, the model in Figure 5 suggests that all paths are causal. However, I cannot conclude definitely that, for example, threat perceptions *caused* evaluation of the critic, because the threat perceptions were not manipulated. Although the modification indices did not suggest nonrecursive paths, adding some evidence to the causality in the model, and past research supports the proposed causal paths (see Chapter 1, "Time Ordering"), more research is needed to investigate each of the path so that causal inferences can be examined. For example, future research can manipulate value threat (e.g., using a fictitious news article reporting a crime done by an ingroup member vs. an outgroup member) to see whether it influences perception of the communicator's constructiveness.

Third, I manipulated message accuracy using two criticisms. Although the two criticisms differ in accuracy, they are also different on other dimensions. For example, a direct path from message accuracy to distinctiveness threat was added based on the modification indices (see Chapter 3, "Measured Variable Path Analysis"). This modification made sense, because the inaccurate criticism mentioned that the United States does not have a unique culture, thus directly threatening the distinctiveness of the social identity; on the other hand, the accurate criticism (Americans' obsession with guns) does not challenge the uniqueness of the American identity. Future research needs

to test the model using two criticisms that only differ on perceived accuracy and not on other dimensions.

Fourth, expectation of the critic's effort was used as a covariate when testing the model, and its effects were not of theoretical interest. However, results showed that expectation of the critic's effort significantly predicted almost all the endogenous variables (see Table 17). It may suggest that expected critic's effort should be included, and can even be a key variable, in future research on group criticism.

This variable has not been examined in the literature on group criticism, or, to my knowledge, in the literature on intergroup communication in general. However, expectancy violations theory (Burgoon & Hubbard, 2005) may be helpful here in explaining the role of expected critic's effort in response to group criticism. Specifically, the theory views expectations as the central concept in social interaction; a violation to expectations can lead to positive or negative outcomes, depending on the valence of such violation (i.e., whether in a positive or negative direction) and the valence of the communicator (i.e., how positive or negative are the communicator's characteristics; Burgoon & Hubbard, 2005). In my study, higher expectation of critic's effort led to mostly negative outcomes: stronger threat perceptions, lower perceived constructiveness, and more negative message evaluation. It is possible that both criticisms (obsession with guns and lack of culture) provided an incomplete picture of U.S. Americans, making participants think that the critic did not try his best in knowing them. In other words, both criticisms violated group members' expectation of the critic's effort; the higher such expectation was, the stronger the violation. Because such violation was not in a positive direction, it led to negative responses from group members. Therefore, future research on group criticism could potentially benefit from incorporating expectancy violations theory

into the social identity perspective and measuring violation of the expectation of the critic's effort explicitly.

Conclusion

In this study, I investigated how group members respond to a criticism of their group. Realizing the conflict between two literatures, the black sheep effect and the intergroup sensitivity effect, I drew on theories of face, social identity threat, and emotion to create an integrative model. The model proposed that contextual factors (presence of an outgroup audience and critic's group membership), a message attribute (message accuracy), and individual perceptions (presumed media influence on the outgroup and identity importance) work in tandem to predict perceived threats to social identity (through perceived critic's constructiveness) and to collective face. These threat perceptions in turn predict a series of evaluative, emotional, and behavioral intention outcomes.

Although with limitations, this study contributes to theory and research on group criticism specifically, and on intergroup communication more broadly. From an intergroup perspective, the findings have suggested that it may be useful for scholars to examine two strategies that group members use to restore positive distinctiveness of their social identity when it is threatened: One strategy is to derogate and reject the group-directed criticism; the other is to accept the criticism and take action to improve the group. This latter strategy reflects a bright side of social identity-based threat perceptions, which has not received the attention it deserves in the intergroup literature. In the text above, I have pointed out how the two strategies correspond to the "dual method" models in other areas of research. Examining the relationships between threat perceptions and these two positive distinctiveness strategies can point to new directions of obtaining

positive intergroup and intragroup communication outcomes. Second, the findings show the importance of considering the role of group image in one's social identity (i.e., collective face). Threats to collective face are relevant in situations where outgroups are present; they represent group-based perceptions that are distinct from social identity threats. When group members' collective face is threatened, they may be motivated to restore collective face through facework behaviors. Intergroup scholars may benefit from applying the abundant research on face and facework (e.g., Ting-Toomey, 2017) to predict group-level outcomes. Third, it is useful to examine group members' expectations of the (ingroup or outgroup) interaction partner's behavior to understand their responses to the partner and the message he or she communicates. Overall, my study shows the utility of integrating literatures on intergroup communication, media effects, and emotion, among others. It makes important contributions to our understanding of group-based perceptions and behaviors, and it can suggest ways of reducing group conflict in the real world.

Appendix A

Instruments Used in the Main Study

Note: The italicized items were deleted after analyses in Pilot Study 2 Part III.

Identity Importance
Luhtanen and Crocker (1992)
Definition: The extent to which my identity as an American is important.

1. Overall, being an American has very little to do with how I feel about myself. (Negatively worded)
2. Being an American is an important reflection of who I am.
3. Being an American is unimportant to my sense of what kind of a person I am. (Negatively worded)
4. In general, being an American is an important part of my self-image.

Perceived Accuracy of the Criticism
Definition: The perception of accuracy, correctness, and precision of the message.

1. The message presents an accurate picture of Americans.
2. The description of Americans in this message is correct.
3. The message is based on facts about Americans.
4. *The message is true about Americans.*
5. The description of Americans in this message is realistic.

Presumed Media Influence on the Outgroup
Definition: The perception of the impact of the message on Chinese people. (The message is about Americans not having a culture, being obssesed with guns, being aggressive, or being snobby.)
Intensity:

1. The message influences Chinese people's opinions about the United States.
2. The message changes Chinese people's opinions about the United States.

Direction:

1. *The message makes Chinese people believe that Americans are aggressive.*
2. *The message makes Chinese people believe that Americans are not aggressive. (Negatively worded)*
3. *The message makes Chinese people believe that Americans are snobby.*
4. *The message makes Chinese people believe that Americans are not snobby. (Negatively worded)*
5. The message makes Chinese people believe that Americans are obsessed with guns.
6. *The message makes Chinese people believe that Americans are not obsessed with guns. (Negatively worded)*
7. The message makes Chinese people believe that Americans don't have a culture.
8. *The message makes Chinese people believe that Americans have a culture. (Negatively worded)*

Perceived Threat to Social Identity
Categorization Threat

Definition: The threat (caused by the message) of being categorized as an American when one is not willing to.

1. *The message categorizes me as an American against my will.*
2. *The message makes me feel like I am merely an American, not a unique person.*
3. The message makes me feel discriminated against because I am an American.
4. The message makes me feel like I am judged negatively because of being an American.
5. The message makes me feel like I am slandered because I am an American.

Distinctiveness Threat

Definition: The threat (caused by the message) of not having a distinctive and unique social identity as an American.

1. The message makes me feel like Americans are not unique.
2. The message makes me feel like Americans are not different from the rest of the people in the world.
3. *The message makes me feel like being an American is not meaningful.*
4. *The message makes me feel that Americans are not better than the rest of the people in the world.*
5. The message implies that Americans are just the same as the rest of the people in the world.

Value Threat

Definition: The perception that the American value of being competent or moral is threatened by the message.

Note: The item below was originally measuring distinctiveness threat and was assigned to measure value threat after PCAs in Pilot Study 2 Part III.

1. The message makes me feel like being an American is not meaningful.

Note: The four items below were originally measuring competence threat and were assigned to measure value threat after PCAs in Pilot Study 2 Part III.

2. The message makes me feel that Americans are incompetent.
3. The message makes me feel that Americans are unsuccessful.
4. The message makes me feel that Americans are incapable of accomplishing things.
5. The message makes me feel that Americans can't do things well.

Note: The four items below were originally measuring moral threat and were assigned to measure value threat after PCAs in Pilot Study 2 Part III.

6. The message makes me feel that Americans are immoral.
7. The message makes me feel that Americans don't know what is right or wrong.
8. The message makes me feel that Americans don't conform to the rules of proper conduct.
9. The message makes me feel that Americans are bad people.

Overall Perceived Threat

Definition: The perception that my identity of being an American is threatened by the message.

1. The message is threatening to me as an American.
2. The message threatens my sense of being an American.
3. Being an American, the message puts my identity in danger.
4. My identity as an American is at risk because of this message.
5. The message damages my sense of being an American.

Perceived Threat to Collective Face

Perceived Threat to Positive Collective Face

Items 1-10: Cupach & Carson (2002)

Definition: The perception that the message threatens Americans' positive social image (specifically, need for appreciation and approval).

1. *The message is polite to Americans. (Negatively worded)*
2. *The message is rude to Americans.*
3. *The message is insensitive to Americans.*
4. *The message shows disrespect toward Americans.*
5. *The message is justified. (Negatively worded)*
6. *The message is hostile toward Americans.*
7. *The message will strengthen the relationship between Americans and Chinese people. (Negatively worded)*
8. The message shows contempt toward Americans.
9. *The message will damage the relationship between Americans and Chinese people.*
10. *The message is tactful. (Negatively worded)*
11. The message threatens the positive image of Americans in the eyes of Chinese people.
12. The message brings shame to Americans in front of Chinese people.
13. The message leaves a negative impression of Americans on Chinese people.
14. Chinese people will see Americans more negatively because of this message.

Note: The item below was originally measuring negative face threat and was assigned to measure positive face threat after PCAs in Pilot Study 2 Part III.

15. The message makes Americans look bad in the eyes of Chinese people. (neg3)

Perceived Threat to Negative Collective Face

Items 1-4: Cupach & Carson (2002)

Definition: The perception that the message threatens Americans' need for freedom of action.

1. The message puts a constraint on the choices of Americans.
2. The message takes away some independence from Americans.
3. *The message makes Americans look bad in the eyes of Chinese people.*
4. The message invades the privacy of Americans.
5. The message forces Americans to alter their behavior when interacting with Chinese people.

6. The message makes Americans feel the need to take different action when interacting with Chinese people.
7. The message makes Americans feel that they can't speak or act freely when interacting with Chinese people.

Perceived Critic's Constructiveness

Items 1-3: Hornsey & Imani (2004)

Definition: The perception of the message or the critic's constructiveness.

1. The message is intended to be constructive.
2. The message was created with good intentions for the United States.
3. *The message is for the greater good of the United States.*
4. [Critic's name] cares about the United States.
5. [Critic's name]'s message was made in the best interests of the United States.

Evaluation of the Criticism/Message

Items 1-8: Hornsey and Imani (2004); item 9: Hornsey, Oppes, and Svensson (2002)

1. *The message is threatening. (Negatively worded)*
2. The message is disappointing. (Negatively worded)
3. The message is irritating. (Negatively worded)
4. The message is offensive. (Negatively worded)
5. *The message is insulting. (Negatively worded)*
6. The message is judgmental. (Negatively worded)
7. The message is hypocritical. (Negatively worded)
8. The message is arrogant. (Negatively worded)
9. *The message is fair.*

Agreement with the Criticism/Message

Item 1: Hornsey and Imani (2004)

1. I agree with the message.
2. I disagree with the message. (Negatively worded)
3. I support the message.
4. I'm opposed to the message. (Negatively worded)

Intention to Act on the Criticism/Message

1. I want to take action regarding the message.
2. I want to change the negative things mentioned in the message.
3. This message makes me want to improve the way I behave.
4. I intend to change my behavior so that I don't fit the description in the message.

Personality Evaluation of the Critic

Hornsey, Oppes, and Svensson (2002)

1. [Critic's name] is intelligent.
2. [Critic's name] is trustworthy.
3. [Critic's name] is friendly.
4. [Critic's name] is open-minded.
5. *[Critic's name] is likable.*
6. *[Critic's name] is nice.*
7. *[Critic's name] is respectable.*

8. [Critic's name] is interesting.

Personality Evaluation of the Outgroup (i.e., Chinese people)
Hornsey, Oppes, and Svensson (2002) Modified

1. Chinese people are intelligent.
2. Chinese people are trustworthy.
3. Chinese people are friendly.
4. Chinese people are open-minded.
5. *Chinese people are likable.*
6. *Chinese people are nice.*
7. *Chinese people are respectable.*
8. Chinese people are interesting.

Blame on the Critic (for delivering the message)

1. [Critic's name] should be held accountable for any potential damage that the message could cause.
2. [Critic's name] is responsible for any threat presented in the message.
3. [Critic's name] should take the blame for any potential damage that this message could cause.
4. [Critic's name] should be blamed for any threat that this message poses to me.

Anger at the Critic

1. I am angry with [critic's name].
2. I am irritated by [critic's name].
3. *[Critic's name] annoys me.*
4. I hate [critic's name].
5. I am furious at [critic's name].

Perceived Outgroup Access to the Criticism
Definition: The perception that Chinese people have access to the message.

1. Chinese people might learn about the message.
2. Chinese people might have access to the message.
3. The message might be accessible to Chinese people.
4. Chinese people might get to know the content of the message.

Expectation of Ingroup/Outgroup Critic's Effort
Definition: The expectation that the critic should try to learn about Americans.

1. [Critic's name] should try to find out the truth about Americans.
2. [Critic's name] should make an effort to learn more about Americans.
3. [Critic's name] should find out what's true about Americans.
4. [Critic's name] should strive to know more about Americans.

Presumed Group-Related Knowledge
Definition: The expectation or presumption of an American's/a Chinese person's knowledge of the United States/Americans.

1. I expect Americans/Chinese people to have knowledge about the United States.
2. I suppose an American/a Chinese person would probably know a lot about the United States.

3. Americans/Chinese people probably know many facts about the United States.
4. I imagine an American/a Chinese person would have a good understanding of what Americans are like.

Group Salience

Palomares (2009) Modified

Definition: The extent to which my identity being an American is pronounced when reading the message.

1. While reading the message, I was thinking about being an American.
2. While reading the message, I evaluated myself with respect to my nationality (i.e., American).
3. *While reading the message, I thought my nationality was central to my identity.*
4. *While reading the message, I was unaware of my nationality. (Negatively worded)*
5. While reading the message, I thought my nationality was important.
6. While reading the message, I thought my nationality was relevant.

Appendix B

Consent Forms

Consent to Participate (Pilot Study 1 Part I)

Project Title	Criticisms about the United States
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park in the United States of America. You are invited to participate in this research project because you are at least 18 years old. The purpose of this research project is to collect common criticisms about the United States.
Procedures	The procedures involve providing five criticisms about the United States or U.S. Americans that you perceive to be accurate, and five such criticisms that you perceive to be inaccurate. You will need to focus on one aspect only in each criticism that you provide by writing down a word, phrase, or short sentence. Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 15 minutes. If you agree to participate you will receive $1.25 (US dollars) in exchange. Please note: You will need to provide all ten criticisms and answer all questions to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. However, you may feel uncomfortable recalling criticisms about the United States. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, other people might benefit from this study through improved understanding of how the United States is perceived by people around the world.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of

	them. If you decide to withdraw before completing the survey, you will not be compensated. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **United States of America** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 United States of America E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 1 Part II)

Project Title	Accuracy of statements
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine how people perceive a series of statements about a country.
Procedures	The procedures involve rating how accurate you perceive a series of statements to be. You will go through a training session for the scale you will use, and you will give an accuracy score for each of the statements, where 0 = not accurate at all, and 100 = moderately accurate. Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take 10-15 minutes. If you agree to participate you will receive $1.00 in exchange. Please note: You will need to answer all the questions and answer the attention checking question correctly to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. However, you may feel uncomfortable reading the statements. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, other people might benefit from this study through improved understanding of how people perceive different countries.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated.

	If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnosn** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 2 Part I)

Project Title	Feedback on item wording
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine whether the statements to be used in future studies are worded clearly.
Procedures	The procedures involve providing feedback on a series of statements. For each statement, you will be asked to write in a blank space anything that is unclear, difficult to understand, or difficult to answer. For items that are clear, you will need to write "N/A" in the blank space. Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 30 minutes. If you agree to participate you will receive $2.00 in exchange. Please note: You will need to answer all the questions to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, other people might benefit from this study through improved understanding of concept measurement.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated.

	If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 2 Part II, MTurk sample)

Project Title	Feedback on item matching
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine whether the statements to be used in future studies represent the concepts that they are supposed to represent.
Procedures	The procedures involve rating match of each item with the concept that it is supposed to represent. You will be presented with a series of concepts (some concepts have definitions under them). For each concept, you will read a series of statements. You will need to rate the match of each item with its concept using a percentage score from 0% to 100%. Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 30 minutes. If you agree to participate you will receive $2.00 in exchange. Please note: You will need to answer all the questions and answer the attention checking question correctly to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, other people might benefit from this study through improved understanding of concept measurement.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated.

	If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 2 Part II, SONA sample)

Project Title	Feedback on item matching
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine whether the statements to be used in future studies represent the concepts that they are supposed to represent.
Procedures	The procedures involve rating match of each item with the concept that it is supposed to represent. You will be presented with a series of concepts (some concepts have definitions under them). For each concept, you will read a series of statements. You will need to rate the match of each item with its concept using a percentage score from 0% to 100%. Then, you will provide your demographic information, such as age and ethnicity. You will also be asked to provide your SONA ID, which is provided when you register under this research project. This numeric code will allow us to grant you credit without being able to identify you as a participant. The questionnaire will take approximately 30 minutes. If you agree to participate you will receive 0.5 hour of SONA credit in exchange. Please note: You will need to answer all the questions and answer the attention checking question correctly to get credit. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. We hope that, in the future, other people might benefit from this study through improved understanding of concept measurement.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and

	answering all of them. If you decide to withdraw before completing the survey, you will not be compensated. If you are an employee or student at UMD, your grades, standing or employability at UMD will not be positively or negatively affected by your decision to participate in the study. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 2 Part III)

Project Title	Perception of messages on social media
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine how people perceive messages posted on social networking websites.
Procedures	The procedures involve reading a message that was posted on social media and filling out a questionnaire about your perception and evaluation of the message. Specifically, you will indicate your agreement with a series of statements. Example statements include: "The message is intended to be constructive" and "The message is threatening." Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 40 minutes. If you agree to participate you will receive $3.00 in exchange. Please note: You will need to answer all the questions and answer the attention checking questions correctly to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. However, you might feel uncomfortable reading the message that is presented to you or indicating your agreement on some items. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. However, possible benefits include a better understanding of your own thoughts about messages on social media. We hope that, in the future, other people might benefit from this study through improved understanding of how messages that people post on social media are perceived and interpreted.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time.

	Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Pilot Study 3)

Project Title	Perception of messages of social media
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine how people perceive and evaluate messages on social media.
Procedures	The procedures involve reading a message that was posted on social media and filling out a questionnaire about your perception and evaluation of the message. Specifically, you will indicate your agreement on a series of statements. For example, "The message is based on facts." Then, you will be provided with more information about the situation in which the message was posted, and you will indicate your agreement on statements such as "Chinese people might learn about the message." Next, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 20 minutes. If you agree to participate you will receive $1.50 in exchange. Please note: You will need to answer all the questions and answer the attention checking questions correctly to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. However, you might feel uncomfortable reading the message that is presented to you or indicating your agreement on some items. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. However, possible benefits include a better understanding of your own thoughts about messages on social media. We hope that, in the future, other people might benefit from this study through improved understanding of how messages that people post on social media are perceived and interpreted.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.

Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Consent to Participate (Main Study)

Project Title	Perception of Messages on Social Media
Purpose of the Study	This research is being conducted by Emma Johnson at the University of Maryland, College Park. You are invited to participate in this research project because you are a U.S. citizen and are at least 18 years old. The purpose of this research project is to examine how U.S. Americans perceive and evaluate messages they see on social media.
Procedures	The procedures involve reading a message that was posted on social media and filling out a questionnaire about your perception and evaluation of the message. Specifically, you will indicate your agreement with a series of statements. Example statements include: "The message is intended to be constructive" and "The message is threatening." Then, you will provide your demographic information, such as age and ethnicity. Last, the survey will generate a random code for you to enter into Amazon Mechanical Turk to get paid. The questionnaire will take approximately 40 minutes. If you agree to participate you will receive $3.00 in exchange. Please note: You will need to answer all the questions, and answer the attention checking questions correctly to get payment. On questions about your personal demographics, you will be given the option not to answer.
Potential Risks and Discomforts	There are no known risks from participating in this research study. However, you may feel uncomfortable reading the message presented to you or indicating your agreement on some items. You have the right to withdraw at any time. We will never connect your name with your participation so there is no risk that your opinions will be disclosed.
Potential Benefits	There are no direct benefits from participating in this research. However, possible benefits include a better understanding of your own thoughts about messages on social media. We hope that, in the future, other people might benefit from this study through improved understanding of how messages that people post on social media are perceived and interpreted.
Confidentiality	Any potential loss of confidentiality will be minimized by storing data in a password-protected computer in a limited access space. Participants' individuating information will not be linked to their responses in anyway. Only approved researchers will have access to the data you provide. If we write a report or article about this research project, your identity will be protected to the maximum extent possible. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.
Right to Withdraw and Questions	Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in

	this research, you may stop participating at any time. Compensation is dependent upon you reading the questions and answering all of them. If you decide to withdraw before completing the survey, you will not be compensated. If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator: **Emma Johnson** **4300 Chapel Lane** **2130 Skinner Building** **College Park, MD 20742-7635** **Emmajohnson.mt@gmail.com**
Participant Rights	If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: University of Maryland College Park Institutional Review Board Office 1204 Marie Mount Hall College Park, Maryland, 20742 E-mail: irb@umd.edu Telephone: 301-405-0678 This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.
Statement of Consent	By clicking on the button below you indicate that you are at least 18 years of age; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. If you want a copy of this consent form, feel free to email the principal investigator of this study. You can also print a copy of the consent form for yourself. If you agree to participate, click on the button below. I have read the above information and ☐ I agree to participate in this study ☐ I decline participation in this study

Appendix C

Instructions for Participants

Pilot Study 1 Part I

Thank you for participating in my research! My study examines common criticisms about the United States (the country) or Americans (the people), meaning negative feedback that addresses the performance of United States or Americans. Please think carefully about the criticisms you have heard about the United States or Americans, either from media, the internet, or from daily interactions with other people. **You will be asked to write five criticisms that you think are accurate, and five criticisms that you think are inaccurate. For simplicity, please focus on one aspect only in every criticism, by writing down one word, phrase or short sentence.** Please refrain from searching the internet while completing this survey. You will need to write down all ten criticisms to get paid. Thank you for your contribution!

Note: The word "Americans" refers to Americans from the United States.

First, please write down five criticisms about the United States or Americans that you've heard and you think are **accurate** (that is, you think the criticisms are based on facts). You can start each criticism with something like "The United States…" or "Americans…"

Next, please write down five criticisms about the United States or Americans that you've heard and you think are **inaccurate** (that is, you think the criticisms are NOT based on facts). You can start each criticism with something like "The United States…" or "Americans…"

Pilot Study 1 Part II

Thank you for participating in my research! My study examines common criticisms about countries. Please read each of the criticisms carefully, and indicate how accurate you think each criticism is using any number that is equal to or greater than 0, where **0 = not accurate at all, and 100 = moderately accurate**. You will need to rate all statements to get paid. Thank you for your contribution!

Pilot Study 2 Part I

Thank you for participating in my research! As a researcher, I want to ensure that the statements I use in my research are easy to understand. Now you will read multiple statements. Under each statement is a blank space. **Please write in the blank space anything you think is unclear, hard to understand, or difficult to answer.** You can do this by either pointing out the things that are confusing, or directly revising the statement. **If you think any statement is clear and easy to understand, please write "N/A" in the blank space.** Thank you for your contribution!

Note: The word "Americans" in all the sentences refer to Americans from the United States.

Pilot Study 2 Part II, MTurk Sample

Thank you for participating in my research! As a researcher, I want to ensure that the statements I use in my research represent the concepts I want them to represent. Now you will read multiple concepts (some have definitions) and a series of statements under each concept. **Please use a percentage score (from 0% to 100%) to indicate how much you think each statement matches its concept.** If the statement does not reflect the concept at all, you would give a 0%. If the statement perfectly reflects the concept, you would give a 100%. If the statement reflects the concept to some extent, you would give a number between 0% and 100%.

Please note: You will get paid only after you've answered all the questions, and you've answered the attention checking question correctly (e.g., "Please fill in 80 for this question."). Thank you for your contribution!

Notes:
1. The word "Americans" in all the sentences refers to Americans from the United States.
2. If you see the phrase "Chinese people" in any of the sentences, it refers to Chinese citizens in China, NOT Chinese Americans.
3. Negatively worded items mean that the items measure the opposite of the definition.

Pilot Study 2 Part II, Round Two (SONA Sample)

Thank you for participating in my research! **Please read the following instructions carefully before you proceed.** This survey is part of a larger project that examines how people respond to a criticism. This survey contains some words/phrases, which will be used in future parts of the project. I really would like your help about how these words/phrases are used. For example, if I want to know about a person's "happiness," I want to make sure the sentences I use (e.g., "I smile a lot." or "I cry everyday.") can describe the level of happiness.

Now you will read many words/phrases (some have definitions) and a list of sentences under each word/phrase. **Please use a percentage score between 0% (no match at all) to 100% (perfect match) to indicate how much you think each sentence matches its word/phrase (that is, describes the word/phrase).** Please remember, you will give percentage scores based on how each sentence describes the word/phrase, NOT based on how much you agree with the sentence itself.

Important:
1. Some sentences are marked as "**Negatively worded**." It means they describe the opposite of the definition. For example, "I am unhappy" is a negatively worded sentence for the word "happiness," and it still has good match with the concept.
2. For a sentence to match its word/phrase, it does NOT need to reflect every aspect of the word/phrase. **It just needs to be relevant to and can describe the word/phrase, and not describing something else.**

You will get credit only after you've answered all the questions, and you've answered the attention checking question correctly (e.g., "Please fill in 80 for this question."). Thank you for your contribution!

Notes:
1. The word "Americans" in all the sentences refers to Americans from the United States.
2. The phrase "Chinese people" refers to Chinese citizens in China, NOT Chinese Americans.

Pilot Study 2 Part III, Pilot Study 3, and Main Study

Thank you for participating in my research! This study examines how people perceive and think of messages on social media. You will first read a message posted on a social networking website, then you will indicate your agreement on a series of statements.

Please note: You will get paid only after you've answered all the questions, and you've answered the attention checking questions correctly (e.g., "Please fill in 150 for this question."). Thank you for your contribution!

Notes:
1. The word "Americans" in all the sentences refers to Americans from the United States.
2. The phrase "Chinese people" refers to Chinese citizens in China, NOT Chinese Americans.

Appendix D

Debriefing about the Pseudonym

Thank you for participating in my study! This survey is part of a large project that examines U.S. Americans' thoughts about criticisms directed toward the U.S, when these criticisms come from either another U.S. American or a Chinese person. I am the principal investigator, and my name is Rong Ma. I was afraid that my non-U.S. name would change your responses, so I used a pseudonym in the consent form. I am sorry for keeping this information from you until now. For this reason, you have the option to withdraw your responses if you desire.

Please indicate: Do you want to withdraw your responses?

a. Please delete my data.
b. You can keep my data.

For the validity of future responses, please do not share any information of this study with others. If you have any questions about my research, please do not hesitate to contact me at emmajohnson.mt@gmail.com or rmah@umd.edu. Again, thank you so much for your contribution!

Appendix E

Demographic Questions

1. What was your sex at birth?
    a. Male
    b. Female
    c. Other _____
    d. I prefer not to answer

2. What is your age in years?
    a. Please write your age in years_____
    b. I prefer not to answer

3. What is your household's annual income?
    a. Less than $10, 000
    b. $10,000-$30,000
    c. $30,001-$50,000
    d. $50,001-$70,000
    e. $70,001-$90,000
    f. $90,001-$110,000
    g. More than $110,000
    h. I prefer not to answer

4. What is your highest level of educational attainment?
    a. Some high school
    b. High school
    c. Some college
    d. Vocational degree
    e. Associate's degree
    f. Bachelor's degree
    g. Graduate/Professional degree
    h. I prefer not to answer

5. With which racial or ethnic group do you most identify?
    a. African American
    b. Asian/Pacific Islanders
    c. Caucasian
    d. Latino or Hispanic
    e. Native American
    f. Multiracial
    g. Other _____
    h. I prefer not to answer

6. Are you a U.S. citizen?
    a. Yes
    b. No. I am a lawful permanent resident.

    c. No. I am neither a U.S. citizen nor a lawful permanent resident (What country is your citizenship)
    d. I prefer not to answer
7. (*If c. is selected in 6) What is your country of citizenship? (If you prefer not to answer, you can skip this question.) *Select from a dropdown menu

8. (*If a. is selected in 6) Were you born as a U.S. citizen?
    a. Yes
    b. No
    c. I prefer not to answer

9. (*If b. is selected in 8) In which year did you become a U.S. citizen? (If you prefer not to answer, you can skip this question.) _____

Appendix F

Training for Magnitude Scale

Pilot Study 1 Part II

Before you continue, we want to make sure you are familiar with the scales you will be using throughout the study.

For every statement you will be asked to use a specific number **from 0 (zero) to infinity** to indicate how accurate your think the statement is: 0 means the statement is not accurate at all, 100 means the statement is moderately accurate, and you may use any number from zero to infinity.

For example, suppose the statement is "McDonald's sells healthful food."

If you don't think the statement is accurate at all, you would answer 0.

If you think the statement is moderately accurate, you would answer 100.

If you think the statement is only a little bit accurate, you could use a number such as 20 or 40 (you will make the choice of what number to use).

If you think the statement is very accurate, you could use a number such as 245 or 400, depending on how much you really like it (again, you will make the choice of what number to use).

So, let's practice this scale a little bit:

1. Most U.S. Americans can speak more than one language. (0 = not accurate at all, 100 = moderately accurate)
2. Young people are more tech-savvy than older people. (0 = not accurate at all, 100 = moderately accurate)

Loop questions (participants will need to answer the three questions correctly in order to proceed to the next page):

1. What's the lowest number you can use according to this scale?
2. What number would you use to indicate a moderate level of agreement?
3. Can you use a number such as 245 to answer a question?

Pilot Study 2 Part III, Pilot Study 3, and Main Study

Before you continue, we want to make sure you are familiar with the scales you will be using throughout the study.

For every statement you will be asked to use a specific number **from 0 (zero) to infinity** to indicate your agreement: 0 means you don't agree at all, 100 means a moderate level

of agreement, and you may use any number from zero to infinity.

For example, suppose the statement is “I like McDonald’s.”

If you don’t like McDonald’s at all (i.e., you don’t agree with the statement at all), you would answer 0.

If you like McDonald’s moderately (i.e., you agree with the statement moderately), you would answer 100.

If you like McDonald’s only a little bit (less than moderately), you could use a number such as 20 or 40 (you will make the choice of what number to use).

If you really like McDonald’s (i.e., you strongly agree with the statement), you could use a number such as 245 or 400, depending on how much you really like it (again, you will make the choice of what number to use).

So, let’s practice this scale a little bit:

3. It is important for me to do well in my study or work. (0 = do not agree at all, 100 = moderately agree)
4. I like spending time with my family. (0 = do not agree at all, 100 = moderately agree)

Loop questions (participants will need to answer the three questions correctly in order to proceed to the next page):

4. What’s the lowest number you can use according to this scale?
5. What number would you use to indicate a moderate level of agreement?
6. Can you use a number such as 245 to answer a question?

Appendix G

Accurate and Inaccurate Criticisms

Pair 1

Accurate Criticism
Americans are aggressive. We/They want to give orders to other people all the time and we/they don't listen to others' opinions. The way we/they behave is annoying. Most Americans I know are really aggressive. All we/they want is power and dominance and we/they are really pushy toward people around us/them!

Inaccurate Criticism
Americans are snobby. We/They want people to see us/them being rich and we/they look down on those who do not have a lot of money. The way we/they behave is annoying. Most Americans I know are really snobby. All we/they want is high social status and money and we/they are horrible toward poor people!

Pair 2

Accurate Criticism
Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. We/They overstate the importance of guns and think guns mean freedom. We/They can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.

Inaccurate Criticism
Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. We/They overstate the so-called American cultural values. We/They think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.

Note: The messages were written in the first person when delivered by a U.S. American, and in the third person when delivered by a Chinese person.

Appendix H

Criterion Measures

Criterion for Perceived Accuracy of the Criticism:
Perceived Usefulness (adapted from Brett & Atwater, 2001)

1. This message was useful to me.
2. This message is valuable for helping Americans diagnose our shortcomings.

Criterion for Presumed Media Influence on the Outgroup:
Negativity of Perceived Image (adapted from Tsfati, 2007, items 2, 4, 5, 6)

1. Chinese people think Americans are aggressive.
2. Chinese people think Americans are snobby.
3. Chinese people think Americans are obsessed with guns.
4. Chinese people don't think Americans have a culture.
5. Chinese people think about Americans in a stereotypical manner.
6. Stereotypical perceptions of Americans are prevalent in the Chinese public.
7. Americans suffer from a negative image among Chinese people.

Criteria for social identity threat measures:
Anger & Anxiety (Atwell Seate, Ma, Chien, & Mastro, 2017)
Please look at each of the following words and indicate how well they describe your feelings towards the message in general. Please be frank in your opinions.

1. Anger
2. Uneasy
3. Anxiety
4. Uncomfortable
5. Fear

Criterion for Perceived Threat to Positive Collective Face:
Original measure, items 1-10 (Cupach & Carson, 2002)

1. The message is polite to Americans. (Negatively worded)
2. The message is rude to Americans.
3. The message is insensitive to Americans.
4. The message shows disrespect toward Americans.
5. The message is justified. (Negatively worded)
6. The message is hostile toward Americans.
7. The message will strengthen the relationship between Americans and Chinese people. (Negatively worded)
8. The message shows contempt toward Americans.
9. The message will damage the relationship between Americans and Chinese people.
10. The message is tactful. (Negatively worded)

Criterion for Perceived Threat to Negative Collective Face:
Original measure, items 1-4 (Cupach & Carson, 2002)

1. The message puts a constraint on the choices of Americans.
2. The message takes away some independence from Americans.

3. The message makes Americans look bad in the eyes of Chinese people.
4. The message invades the privacy of Americans.

Criteria for Perceived Threat to Positive Collective Face and Perceived Threat to Negative Collective Face:
Anger/Hurt (Cupach & Carson, 2002)

1. Angry
2. Upset
3. Frustrated
4. Hurt
5. Unhappy
6. Resentful
7. Defensive
8. Outraged

Criterion for Perceived Critic's Constructiveness*:*
Original measure, items 1-3 (Hornsey & Imani, 2004)

1. The message is intended to be constructive.
2. The message was created with good intentions for the United States.
3. The message is for the greater good of the United States.

Criterion for Agreement with the Criticism/Message*:*
Original measure, item 1 (Hornsey & Imani, 2004)

1. I agree with the message.

Appendix I

Messages and Contexts in Pilot Study 3

Messages

Accurate Criticism
Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. We/They overstate the importance of guns and think guns mean freedom. We/They can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.

Inaccurate Criticism
Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. We/They overstate the so-called American cultural values. We/They think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.

MTurk Worker (Control Condition)
MTurk Workers perform tasks on the internet. They use the Amazon Mechanical Turk website to find and accept assignments. They enter values into the question form and submit the results. Then, they get reward from the Requester, who pays them for satisfactory work. MTurk Workers are a large group of people. That's impressive.

Intragroup versus Intergroup Context

Intragroup Context
Facebook is the largest social networking website in the United States. "Everything about the United States" is a Facebook closed group (i.e., a group that can be joined only by request or invitation), in which around 94% of the members are Americans and the other 6% are from other countries. In February 2018, a discussion was started on "Everything about the United States", asking its members to share their thoughts about what Americans are like. **The message you read above was posted on the page of "Everything about the United States".** The post received more than 16,000 comments. It was estimated that around 155,000 American Facebook users saw the message since the day it was posted, although the number of non-Americans who saw the message was negligibly small.

Intergroup Context
Sina Weibo is the largest social networking website in China. Around 94% of its members are Chinese and the other 6% are from other countries. In February 2018, a discussion was started on Sina Weibo, asking its members to share their thoughts about what Americans are like. **The message you read above was posted on Sina Weibo.** The post received more than 16,000 comments. It was estimated that around 155,000 Chinese Sina Weibo users saw the message since the day it was posted, although the number of non-Chinese who saw the message was negligibly small.

Appendix J

Messages in the Main Study

Accurate Criticism, U.S. American Critic, and Intragroup Context

Facebook is the largest social networking website in the United States. "Everything about the United States" is a Facebook closed group (i.e., a group that can be joined only by request or invitation), in which around 94% of the members are Americans and the other 6% are from other countries. In February 2018, a discussion was started on "Everything about the United States", asking its members to share their thoughts about what Americans are like.

A Facebook user named **James Smith (American, male; pseudonym to protect identity)** posted the message below on the page of "Everything about the United States" The post received more than 16,000 comments. It was estimated that around 155,000 American Facebook users saw the message since the day it was posted, although the number of non-Americans who saw the message was negligibly small. The message is as follows:

> **Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. We overstate the importance of guns and think guns mean freedom. We can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.**

Accurate Criticism, Chinese Critic, and Intragroup Context

Facebook is the largest social networking website in the United States. "Everything about the United States" is a Facebook closed group (i.e., a group that can be joined only by request or invitation), in which around 94% of the members are Americans and the other 6% are from other countries. In February 2018, a discussion was started on "Everything about the United States", asking its members to share their thoughts about what Americans are like.

A Facebook user named **Zhang Wei (Chinese, male; pseudonym to protect identity)** posted the message below on the page of "Everything about the United States" The post received more than 16,000 comments. It was estimated that around 155,000 American Facebook users saw the message since the day it was posted, although the number of non-Americans who saw the message was negligibly small. The message is as follows:

> **Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. They overstate the importance of guns and think guns mean freedom. They can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.**

Accurate Criticism, U.S. American Critic, and Intergroup Context

Sina Weibo is the largest social networking website in China. Around 94% of its members are Chinese and the other 6% are from other countries. In February 2018, a discussion was started on Sina Weibo, asking its members to share their thoughts about what Americans are like.

A Sina Weibo user named **James Smith (American, male; pseudonym to protect identity)** posted the message below on Sina Weibo. The post received more than 16,000 comments. It was estimated that around 155,000 Chinese Sina Weibo users saw the message since the day it was posted, although the number of non-Chinese who saw the message was negligibly small. The message has been translated into English and is as follows:

> **Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. We overstate the importance of guns and think guns mean freedom. We can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.**

Accurate Criticism, Chinese Critic, and Intergroup Context

Sina Weibo is the largest social networking website in China. Around 94% of its members are Chinese and the other 6% are from other countries. In February 2018, a discussion was started on Sina Weibo, asking its members to share their thoughts about what Americans are like.

A Sina Weibo user named **Zhang Wei (Chinese, male; pseudonym to protect identity)** posted the message below on Sina Weibo. The post received more than 16,000 comments. It was estimated that around 155,000 Chinese Sina Weibo users saw the message since the day it was posted, although the number of non-Chinese who saw the message was negligibly small. The message has been translated into English and is as follows:

> **Americans are obsessed with guns. The country is going in a completely wrong direction with gun violence, but Americans just can't see it. They overstate the importance of guns and think guns mean freedom. They can have guns legally and easily, which is insane. Americans are crazy about guns. That's unfortunate.**

Inaccurate Criticism, U.S. American Critic, and Intragroup Context

Facebook is the largest social networking website in the United States. "Everything about the United States" is a Facebook closed group (i.e., a group that can be joined only by request or invitation), in which around 94% of the members are Americans and the other 6% are from other countries. In February 2018, a discussion was started on "Everything about the United States", asking its members to share their thoughts about what Americans are like.

A Facebook user named **James Smith (American, male; pseudonym to protect identity)** posted the message below on the page of "Everything about the United States" The post received more than 16,000 comments. It was estimated that around 155,000 American Facebook users saw the message since the day it was posted, although the number of non-Americans who saw the message was negligibly small. The message is as follows:

> **Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. We overstate the so-called American cultural values. We think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.**

Inaccurate Criticism, Chinese Critic, and Intragroup Context

Facebook is the largest social networking website in the United States. "Everything about the United States" is a Facebook closed group (i.e., a group that can be joined only by request or invitation), in which around 94% of the members are Americans and the other 6% are from other countries. In February 2018, a discussion was started on "Everything about the United States", asking its members to share their thoughts about what Americans are like.

A Facebook user named **Zhang Wei (Chinese, male; pseudonym to protect identity)** posted the message below on the page of "Everything about the United States" The post received more than 16,000 comments. It was estimated that around 155,000 American Facebook users saw the message since the day it was posted, although the number of non-Americans who saw the message was negligibly small. The message is as follows:

> **Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. They overstate the so-called American cultural values. They think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.**

Inaccurate Criticism, U.S. American Critic, and Intergroup Context

Sina Weibo is the largest social networking website in China. Around 94% of its members are Chinese and the other 6% are from other countries. In February 2018, a discussion was started on Sina Weibo, asking its members to share their thoughts about what Americans are like.

A Sina Weibo user named **James Smith (American, male; pseudonym to protect identity)** posted the message below on Sina Weibo. The post received more than 16,000 comments. It was estimated that around 155,000 Chinese Sina Weibo users saw the message since the day it was posted, although the number of non-Chinese who saw the message was negligibly small. The message has been translated into English and is as follows:

> **Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. We overstate the so-called American cultural values. We think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.**

Inaccurate Criticism, Chinese Critic, and Intergroup Context

Sina Weibo is the largest social networking website in China. Around 94% of its members are Chinese and the other 6% are from other countries. In February 2018, a discussion was started on Sina Weibo, asking its members to share their thoughts about what Americans are like.

A Sina Weibo user named **Zhang Wei (Chinese, male; pseudonym to protect identity)** posted the message below on Sina Weibo. The post received more than 16,000 comments. It was estimated that around 155,000 Chinese Sina Weibo users saw the message since the day it was posted, although the number of non-Chinese who saw the message was negligibly small. The message has been translated into English and is as follows:

Americans don't have a culture. The country doesn't have its own traditions or shared beliefs among its people, but Americans don't even realize it. They overstate the so-called American cultural values. They think things like sports or pop music is culture, which they're not. Americans lack culture. That's unfortunate.

Appendix K

Mplus Syntax for Initial Measured Variable Path Analysis Model

```
TITLE:
      MEASURED VARIABLE PATH ANALYSIS MODEL

DATA:
      FILE IS /Users/rong/Desktop/MS_composites_3-7-2019.csv;

VARIABLE:
      NAMES ARE sexd crigrd mesaccd audiend idimp accu pres
      cat dist val over posf negf const evalm agree inten
      evalp evalo blame ang aces effo prein preou sali idth fth;

      USEVARIABLES = crigrd mesaccd audiend idimp pres
      cat dist val over posf negf const evalm agree inten
      evalp evalo blame ang effo
      crau crpr aupr
      crcat crdist crval crover crposf crnegf
      blcat bldist blval blover blposf blnegf;

DEFINE:
      crau = crigrd * audiend;
      crpr = crigrd * pres;
      aupr = audiend * pres;

      crcat = crigrd * cat;
      crdist = crigrd * dist;
      crval = crigrd * val;
      crover = crigrd * over;
      crposf = crigrd * posf;
      crnegf = crigrd * negf;

      blcat = blame * cat;
      bldist = blame * dist;
      blval = blame * val;
      blover = blame * over;
      blposf = blame * posf;
      blnegf = blame * negf;


MODEL:
      posf ON crigrd audiend pres crau crpr aupr effo;
      negf ON pres effo;

      const ON mesaccd idimp effo posf negf;

      cat ON const effo;
      dist ON const effo;
      val ON const effo;
      over ON const effo;

      blame ON const effo;

      evalm ON posf negf cat dist val over const effo;
```

```
      agree ON posf negf cat dist val over const effo mesaccd;

      evalp ON posf negf cat dist val over const effo;

      inten ON agree posf negf cat dist val over const effo ang;

      evalo ON posf negf cat dist val over const effo crigrd
      crcat crdist crval crover crposf crnegf;

      ang ON posf negf cat dist val over const effo blame
      blcat bldist blval blover blposf blnegf;

      cat WITH dist val over posf negf;
      dist WITH val over posf negf;
      val WITH over posf negf;
      over WITH posf negf;
      posf WITH negf;


      crcat WITH cat;
      crdist WITH dist;
      crval WITH val;
      crover WITH over;
      crposf WITH posf;
      crnegf WITH negf;

      blcat WITH cat;
      bldist WITH dist;
      blval WITH val;
      blover WITH over;
      blposf WITH posf;
      blnegf WITH negf;
      blame WITH blcat bldist blval blover blposf blnegf;


OUTPUT:
      standardized modindices(10);
```

Appendix L

Mplus Syntax for Final Latent Variable Path Analysis Model

```
TITLE:
      LATENT VARIABLE PATH ANALYSIS MODEL

DATA:
      FILE IS /Users/rong/Desktop/MS_2-16-2019_forMplus.csv;

VARIABLE:
      NAMES ARE idimp1-idimp4 accu1-accu4 pres1-pres3 cat1-cat5
      dist1-dist3 val1-val9 over1-over5 posf1-posf6 negf1-negf6
      const1-const4 evalm1-evalm6 agree1-agree4 inten1-inten4
      evalp1-evalp5 evalo1-evalo5 blame1-blame4 ang1-ang4
      aces1-aces4 effo1-effo4 prein1-prein4 preou1-preou4
      sali1-sali4 blain1-blain4 angin1-angin4 angou1-angou4
      guilt1-guilt4 shame1-shame5 typ1-typ4 age sexd
      crigrd mesaccd audiend;

      USEVARIABLES = idimp1-idimp4 pres1-pres3 cat3-cat5
      dist1-dist3 val2-val9 over1-over5 posf1-posf6 negf1-negf6
      const1-const4 evalm1-evalm6 agree1-agree4 inten1-inten4
      evalp1-evalp5 ang1 ang3 ang4 effo1-effo4
      crigrd mesaccd audiend crau;

      MISSING ALL(-99);

DEFINE:
      crau = crigrd*audiend;

ANALYSIS:
      TYPE = RANDOM;
      ALGORITHM = INTEGRATION;

MODEL:
      idimp BY idimp1-idimp4*;
      pres BY pres1-pres3*;
      cat BY cat3-cat5*;
      dist BY dist1-dist3*;
      val BY val2-val9*;
      over BY over1-over5*;
      posf BY posf1-posf6*;
      negf BY negf1-negf6*;
      const BY const1-const4*;
      evalm BY evalm1-evalm6*;
      agree BY agree1-agree4*;
      inten BY inten1-inten4*;
      evalp BY evalp1-evalp5*;
      ang BY ang1* ang3 ang4;
      effo BY effo1-effo4*;

      idimp1 WITH idimp3;
      agree2 WITH agree4;
      inten4 WITH inten3;
      negf4 WITH negf5;
```

```
      dist3 WITH dist2;
      effo3 WITH effo1;

      aupr | audiend XWITH pres;

      idimp@1;
      pres@1;
      cat@1;
      dist@1;
      val@1;
      over@1;
      posf@1;
      negf@1;
      const@1;
      evalm@1;
      agree@1;
      inten@1;
      evalp@1;
      ang@1;
      effo@1;

      posf ON crigrd audiend pres crau effo aupr;
      negf ON pres effo;

      const ON mesaccd idimp effo posf negf;

      cat ON const effo;
      dist ON const effo mesaccd;
      val ON const effo;
      over ON const effo;

      evalm ON posf negf cat dist val over
      const effo;

      agree ON posf negf cat dist val over
      const effo mesaccd;

      evalp ON posf negf cat dist val over
      const effo;

      inten ON agree posf negf cat dist val over
      const effo ang;

      ang ON posf negf cat dist val over
      const effo;

      cat WITH dist val over posf negf;
      dist WITH val over posf negf;
      val WITH over posf negf;
      over WITH posf negf;
      posf WITH negf;
      evalm WITH ang;


OUTPUT:
      standardized;
```

References

Abrams, D., & Hogg, M. A. (2010). Social identity and self-categorization. In J. F. Dovidio, M. Hewston, P. Glick, & V. M. Esses (Eds.), *The Sage handbook of prejudice, stereotyping, and discrimination* (pp. 179-193). London, England: Sage.

Abrams, D., Marques, J. M., Bown, N., & Henson, M. (2000). Pro-norm and anti-norm deviance within and between groups. *Journal of Personality and Social Psychology, 78*, 906–912. doi:10.1037/0022-3514.78.5.906

Abrams, D., Palmer, S. B., Rutland, A., Cameron, L., & Van de Vyver, J. (2014). Evaluations of and reasoning about normative and deviant ingroup and outgroup members: Development of the black sheep effect. *Developmental Psychology, 50*, 258–270. doi:10.1037/a0032461

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour.* Englewood Cliffs, NJ: Pretice Hall.

Atwell Seate, A., Cohen, E. L., Fujioka, Y., & Hoffner, C. (2012). Exploring gun ownership as a social identity to understanding the perceived media influence of the Virginia Tech news coverage on attitudes toward gun control policy. *Communication Research Reports, 29*, 130–139. doi:10.1080/08824096.2012.667773

Atwell Seate, A., Joyce, N., Harwood, J., & Arroyo, A. (2015). Necessary and sufficient conditions for positive intergroup contact: A fuzzy set qualitative comparative analysis approach to understanding intergroup attitudes. *Communication Quarterly, 63*, 135–155. doi:10.1080/01463373.2015.1012215

Atwell Seate, A., Ma, R., Chien, H.-Y., & Mastro, D. (2017). Cultivating intergroup

emotions: An intergroup threat theory approach. *Mass Communication and Society, 21*, 178–197. doi:10.1080/15205436.2017.1381262

Atwell Seate, A., Ma, R., Iles, I., McCloskey, T., & Parry-Giles, S. (2016). “This is who we are!” National identity construction and the 2014 FIFA World Cup. *Communication & Sport, 5*, 428–447. doi:10.1177/2167479516636638

Atwell Seate, A., & Mastro, D. (2016). Media's influence on immigration attitudes: An intergroup threat theory approach. *Communication Monographs, 83*, 194-213. doi:10.1080/03637751.2015.1068433

Barber, B., & Fox, R. C. (1958). The case of the floppy-eared rabbits: An instance of serendipity gained and serendipity lost. *American Journal of Sociology, 64*, 128-136. doi:10.1086/222420

Baron, R. A. (1988). Negative effects of destructive criticism: Impact on conflict, self-efficacy, and task performance. *Journal of Applied Psychology, 73*, 199-207. doi:10.1037//0021-9010.73.2.199

Baxter, L. A., & Babbie, E. (2004). *The basics of communication research*. Belmont, CA: Wadsworth.

Bergsieker, H. B., Leslie, L. M., Constantine, V. S., & Fiske, S. T. (2012). Stereotyping by omission: Eliminate the negative, accentuate the positive. *Journal of Personality and Social Psychology, 102*, 1214–1238. doi:10.1037/a0027717

Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat. In N. Ellemers, R. Spears, & B. Doosje (Eds.), *Social identity: Context, commitment, content* (pp. 35-58). Hoboken, NJ: Wiley.

Brehm, S. S., & Brehm, J. W. (1981). *Psychological reactance: A theory of freedom and control*. New York, NY: Academic Press.

Brett, J. F., & Atwater, L. E. (2001). 360° feedback: Accuracy, reactions, and perceptions of usefulness. *Journal of Applied Psychology, 86*, 930–942. doi:10.1037/0021-9010.86.5.930

Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. *Advances in Experimental Social Psychology, 37*, 255-343. doi:10.1016/s0065-2601(05)37005-5

Brown, P., & Levinson, S. C. (1987). *Politeness: Some universals in language usage*. Cambridge, England: Cambridge University Press.

Burgoon, J. K., & Hubbard, A. S. E. (2005). Cross-cultural and intercultural applications of expectancy violations theory and interaction adaptation theory. In Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 149-171). Thousand Oaks, CA: Sage.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology, 39*, 752–766. doi:10.1037/0022-3514.39.5.752

Chen, S., Duckworth, K., & Chaiken, S. (1999). Motivated heuristic and systematic processing. *Psychological Inquiry, 10*, 44–49. doi:10.1207/s15327965pli1001_6

Chung, S., & Moon, S.-I. (2016). Is the third-person effect real? A critical examination of rationales, testing methods, and previous findings of the third-person effect on censorship attitudes. *Human Communication Research, 42*, 312–337. doi:10.1111/hcre.12078

Cionea, I. A. (2013). *A dual perspective on the management of relational transgressions in romantic relationships* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (3587414)

Council on Foreign Relations (2018, July 1). Global conflict tracker. Retrieved from https://www.cfr.org/interactives/global-conflict-tracker#!/global-conflict-tracker

Cristobal, E., Flavián, C., & Guinalíu, M. (2007). Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality: An International Journal, 17*, 317–340. doi:10.1108/09604520710744326

Cupach, W. R., & Carson, C. L. (2002). Characteristics and consequences of interpersonal complaints associated with perceived face threat. *Journal of Social and Personal Relationships, 19*, 443–462. doi:10.1177/0265407502019004047

Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly, 47*, 1-15. doi:10.1086/268763

Dietz-Uhler, B., & Murrell, A. (1998). Effects of social identity and threat on self-esteem and group attributions. *Group Dynamics: Theory, Research, and Practice, 2*, 24–35. doi:10.1037/1089-2699.2.1.24

Difallah, D., Filatova, E., & Ipeirotis, P. (2018). Demographics and dynamics of Mechanical Turk workers. Proceedings of the Eleventh ACM International Conference on Web Search and Data Mining - WSDM '18. doi:10.1145/3159652.3159661

Dillard, J. P., & Seo, K. (2013). Affect and persuasion. In J. P. Dillard & L. Shen (Eds.), *The SAGE handbook of persuasion: Developments in theory and practice* (2nd ed., pp. 150-166). Thousand Oaks, CA: Sage.

Dillard, J. P., & Shen, L. (2005). On the nature of reactance and its role in persuasive health communication. *Communication Monographs, 72*, 144–168. doi:10.1080/03637750500111815

Elder, T. J., Sutton, R. M., & Douglas, K. M. (2005). Keeping it to ourselves: Effects of audience size and composition on reactions to criticisms of the ingroup. *Group Processes & Intergroup Relations, 8*, 231–244. doi:10.1177/1368430205053940

Ellemers, N., Spears, R., & Doosje, B. (1997). Sticking together or falling apart: In-group identification as a psychological determinant of group commitment versus individual mobility. *Journal of Personality and Social Psychology, 72*, 617–626. doi:10.1037/0022-3514.72.3.617

Enes Kanter (n.d.). In *Wikipedia*. Retrieved November 25, 2017, from https://en.wikipedia.org/wiki/Enes_Kanter#Personal_life

Fink, E. L. (2009). The FAQs on data transformation. *Communication Monographs, 76*, 379–397. doi:10.1080/03637750903310352

Fink, E. L. (2017). Measurement of validity. In M. Allen (Ed.), *The SAGE encyclopedia of communication research methods* (pp. 1827-1833). Thousand Oaks, CA: Sage.

Frijda, N. H. (1987). Emotion, cognitive structure, and action tendency. *Cognition & Emotion, 1*, 115–143. doi:10.1080/02699938708408043

Frings, D., & Abrams, D. (2010). The effect of difference oriented communication on the subjective validity of an in-group norm: DOC can treat the group. *Group Dynamics: Theory, Research, and Practice, 14*, 281-291. doi:10.1037/a0019162

Gagné, P., & Hancock, G. R. (2006). Measurement model quality, sample size, and solution propriety in confirmatory factor models. *Multivariate Behavioral Research, 41*, 65–83. doi:10.1207/s15327906mbr4101_5

Goffman, E. (1967). On face-work: An analysis of ritual elements in social interaction. *Interaction ritual: Essays in face-to-face behavior* (pp. 5-45). Chicago, IL: Aldine.

Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making, 26*, 213–224. doi:10.1002/bdm.1753

Graham, J. M. (2006). Congeneric and (essentially) tau-equivalent estimates of score reliability. *Educational and Psychological Measurement, 66*, 930–944. doi:10.1177/0013164406288165

Gunther, A. C., & Storey, J. D. (2003). The influence of presumed influence. *Journal of Communication, 53*, 199–215. doi:10.1093/joc/53.2.199

Hancock, G. R., & Mueller, R. O. (2001). Rethinking construct reliability within latent variable systems. In R. Cudeck, S. du Toit, & D. Sörbom (Eds.), S*tructural equation modeling: Present and future—A festschrift in honor of Karl Jöreskog* (pp. 195-216). Lincolnwood, IL: Scientific Software International.

Harwood, J., Giles, H., & Palomares, N. (2005). Intergroup theory and communication processes. In J. Harwood & H. Giles (Eds.), *Intergroup communication: Multiple perspectives* (pp. 1-17). New York, NY: Peter Lang.

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.

Haynes, S. N., Richard, D. C. S., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment, 7*, 238–247. doi:10.1037/1040-3590.7.3.238

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral Brain Sciences, 33*, 61-135. doi:10.2139/ssrn.1601785

Hoffner, C. A., Fujioka, Y., Cohen, E. L., & Atwell Seate, A. (2017). Perceived media influence, mental illness, and responses to news coverage of a mass shooting.

Psychology of Popular Media Culture, 6, 159–173. doi:10.1037/ppm0000093

Hogg, M. A., Fielding, K. S., & Darley, J. (2005). Fringe dwellers: Processes of deviance and marginalization in groups. In D. Abrams, M. A. Hogg, & J. M. Marques (Eds.), *The social psychology of inclusion and exclusion* (pp. 191-210). New York, NY: Psychology Press.

Hogg, M. A., & Reid, S. A. (2006). Social identity, self-categorization, and the communication of group norms. *Communication Theory, 16*, 7–30. doi:10.1111/j.1468-2885.2006.00003.x

Hollander, E. P. (1958). Conformity, status, and idiosyncrasy credit. *Psychological Review, 65*, 117-127. doi:10.4135/9781412952392.n157

Hornsey, M. J. (2005). Why being right is not enough: Predicting defensiveness in the face of group criticism. *European Review of Social Psychology, 16*, 301–334. doi:10.1080/10463280500436040

Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass, 2*, 204–222. doi:10.1111/j.1751-9004.2007.00066.x

Hornsey, M. J., & Esposo, S. (2009). Resistance to group criticism and recommendations for change: Lessons from the intergroup sensitivity effect. *Social and Personality Psychology Compass, 3*, 275–291. doi:10.1111/j.1751-9004.2009.00178.x

Hornsey, M. J., & Imani, A. (2004). Criticizing groups from the inside and the outside: An identity perspective on the intergroup sensitivity effect. *Personality and Social Psychology Bulletin, 30*, 365–383. doi:10.1177/0146167203261295

Hornsey, M. J., Oppes, T., & Svensson, A. (2002). “It's OK if we say it, but you can't”: Responses to intergroup and intragroup criticism. *European Journal of Social*

Psychology, 32, 293-307. doi:10.1002/ejsp.90

Hornsey, M. J., Trembath, M., & Gunthorpe, S. (2004). "You can criticize because you care": Identity attachment, constructiveness, and the intergroup sensitivity effect. *European Journal of Social Psychology, 34*, 499–518. doi:10.1002/ejsp.212

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1–55. doi:10.1080/10705519909540118

Huddy, L., & Khatib, N. (2007). American patriotism, national identity, and political involvement. *American Journal of Political Science, 51*, 63–77. doi:10.1111/j.1540-5907.2007.00237.x

Ilgen, D. R., Fisher, C. D., & Taylor, M. S. (1979). Consequences of individual feedback on behavior in organizations. *Journal of Applied Psychology, 64*, 349–371. doi:10.1037/0021-9010.64.4.349

Iyer, A., Schmader, T., & Lickel, B. (2007). Why individuals protest the perceived transgressions of their country: The role of anger, shame, and guilt. *Personality and Social Psychology Bulletin, 33*, 572-587. doi:10.1177/0146167206297402

Jackson, K. M., & Trochim, W. M. (2002). Concept mapping as an alternative approach for the analysis of open-ended survey responses. *Organizational Research Methods, 5*, 307-336. doi:10.1177/109442802237114

Jetten, J., & Hornsey, M. J. (2014). Deviance and dissent in groups. *Annual Review of Psychology, 65*, 461-485. doi:10.1146/annurev-psych-010213-115151

Kenny (2015). Measuring model fit. Retrieved from http://davidakenny.net/cm/fit.htm

Khoo, B. L., & See, Y. H. M. (2014). Mortality salience and evaluations of in-group

versus out-group critics: The role of criticism legitimacy and perceived threat. *European Journal of Social Psychology, 44*, 242-254. doi:10.1002/ejsp.2012

Kim, M.-S., & Hunter, J. E. (1993). Relationships among attitudes, behavioral intentions, and behavior. *Communication Research, 20*, 331–364. doi:10.1177/009365093020003001

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: Guilford Press.

Kruglanski, A. W., & Thompson, E. P. (1999). Persuasion by a single route: A view from the unimodel. *Psychological Inquiry, 10*, 83–109. doi:10.1207/s15327965pl100201

Lazarus, R. S. (1991). *Emotion & adaptation*. New York, NY: Oxford University Press.

List of ongoing armed conflicts (n.d.). In *Wikipedia*. Retrieved November 21, 2017, from https://en.wikipedia.org/wiki/List_of_ongoing_armed_conflicts

Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302-318. doi:10.1177/0146167292183006

Ma, R., & Atwell Seate, A. (2017). Reexamining the use of tentative language in emails: The effects of gender salience and gender typicality. *Journal of Language and Social Psychology, 36*, 694–714. doi:10.1177/0261927x17706941

Ma, R., & Hample, D. (2018). Appraisal models of intercultural communication apprehension among sojourners. *Journal of International and Intercultural Communication, 11*, 192–215. doi:10.1080/17513057.2018.1450889

Mackie, D. M., Maitner, A. T., & Smith, E. R. (2009). Intergroup emotions theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp.

285-308). New York, NY: Taylor & Francis Group.

Maitner, A. T., Mackie, D. M., & Smith, E. R. (2006). Evidence for the regulatory function of intergroup emotion: Emotional consequences of implemented or impeded intergroup action tendencies. *Journal of Experimental Social Psychology, 42*, 720–728. doi:10.1016/j.jesp.2005.08.001

Marques, J., Abrams, D., & Serôdio, R. G. (2001). Being better by being right: Subjective group dynamics and derogation of in-group deviants when generic norms are undermined. *Journal of Personality and Social Psychology, 81*, 436–447. doi:10.1037/0022-3514.81.3.436

Marques, J. M., & Paez, D. (1994). The black sheep effect: Social categorization, rejection of ingroup deviates, and perception of group variability. *European Review of Social Psychology, 5,* 37–68. doi:10.1080/14792779543000011

Maslowsky, J., Jager, J., & Hemken, D. (2014). Estimating and interpreting latent variable interactions: A tutorial for applying the latent moderated structural equations method. *International Journal of Behavioral Development, 39*, 87–96. doi:10.1177/0165025414552301

Mastro, D. E. (2003). A social identity approach to understanding the impact of television messages. *Communication Monographs, 70*, 98–113. doi:10.1080/0363775032000133764

Mastro, D., & Atwell Seate, A. (2012). Group membership in race-related media processes and effects. In H. Giles (Ed.), *The handbook of intergroup communication* (pp. 357-369). New York, NY: Routledge.

McLaughlin-Volpe, T., Aron, A., Wright, S. C., & Lewandowski, G. W., Jr. (2005). Exclusion of the self by close others and by groups: Implications of the self-

expansion model. In D. Abrams, M. A. Hogg, & J. M. Marques (Eds.), *The social psychology of inclusion and exclusion* (pp. 113-134). New York, NY: Psychology Press.

Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist, 50*, 741-749. doi:10.1037//0003-066x.50.9.741

Morier, D., Bryan, A. E. B., & Kasdin, L. (2013). The effects of group identity, group choice, and strength of group identification on intergroup sensitivity. *Group Dynamics: Theory, Research, and Practice, 17*, 14–29. doi:10.1037/a0030190

Muthén, L.K. and Muthén, B.O. (1998-2015). Mplus User's Guide (7th ed.). Los Angeles, CA: Muthén & Muthén.

Nevo, B. (1985). Face validity revisited. *Journal of Educational Measurement, 22*, 287–293. doi:10.1111/j.1745-3984.1985.tb01065.x

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychological theory*. New York, NY: McGraw-Hill.

Oetzel, J. G., Ting-Toomey, S., Yokochi, Y., Masumoto, T., & Takai, J. (2000). A typology of facework behaviors in conflicts with best friends and relative strangers. *Communication Quarterly, 48*, 397–419. doi:10.1080/01463370009385606

Palomares, N. A. (2009). Women are sort of more tentative than men, aren't they? How men and women use tentative language differently, similarly, and counterstereotypically as a function of gender salience. *Communication Research, 36*, 538-560. doi:10.1177/0093650209333034

Paolacci, G., & Chandler, J. (2014). Inside the Turk: Understanding Mechanical Turk as

a participant pool. *Current Directions in Psychological Science, 23*, 184-188. doi:10.1177/0963721414531598

Park, S.-Y. (2005). The influence of presumed media influence on women's desire to be thin. *Communication Research, 32*, 594–614. doi:10.1177/0093650205279350

Perloff, R. M. (1999). The third person effect: A critical review and synthesis. *Media Psychology, 1*, 353–378. doi:10.1207/s1532785xmep0104_4

Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*. Thousand Oaks, CA: Sage.

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology, 49*, 65-85. doi:10.1146/annurev.psych.49.1.65

Pettigrew, T. F., & Tropp, L. R. (2008). How does intergroup contact reduce prejudice? Meta-analytic tests of three mediators. *European Journal of Social Psychology, 38*, 922–934. doi:10.1002/ejsp.504

Pew Research Center (2016, June 22). *Partisanship and political animosity in 2016*. Retrieved from http://www.people-press.org/2016/06/22/partisanship-and-political-animosity-in-2016/

Pew Research Center (2017, February 23). *Partisan conflict and congressional outreach.* Retrieved from http://www.people-press.org/2017/02/23/partisan-conflict-and-congressional-outreach/

Pinto, I. R., Marques, J. M., Levine, J. M., & Abrams, D. (2010). Membership status and subjective group dynamics: Who triggers the black sheep effect? *Journal of Personality and Social Psychology, 99*, 107–119. doi:10.1037/a0018187

Rabinovich, A., & Morton, T. A. (2010). Who says we are bad people? The impact of

criticism source and attributional content on responses to group-based criticism. *Personality and Social Psychology Bulletin, 36*, 524–536. doi:10.1177/0146167210362980

Rabinovich, A., & Morton, T. A. (2015). Things we (don't) want to hear: Exploring responses to group-based feedback. *European Review of Social Psychology, 26*, 126–161. doi:10.1080/10463283.2015.1115214

Ragin, C. C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond*. Chicago, IL: University of Chicago Press.

Reid, S. A., & Hogg, M. A. (2005). Uncertainty reduction, self-enhancement, and ingroup identification. *Personality and Social Psychology Bulletin, 31*, 804–817. doi:10.1177/0146167204271708

Richards, A. S., & Banas, J. A. (2015). Inoculating against reactance to persuasive health messages. *Health Communication, 30*, 451-460. doi:10.1080/10410236.2013.867005

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: A meta-analytic review. *Personality and Social Psychology Review, 10*, 336-353. doi:10.1207/s15327957pspr1004_4a

Ruiter, R. A. C., Kessels, L. T. E., Peters, G.-J. Y., & Kok, G. (2014). Sixty years of fear appeal research: Current state of the evidence. *International Journal of Psychology, 49*, 63–70. doi:10.1002/ijop.12042

Schachter, S. (1951). Deviation, rejection, and communication. *Journal of Abnormal and Social Psychology, 46*, 190-207. doi:10.1037/h0062326

Schatz, R. T., Staub, E., & Lavine, H. (1999). On the varieties of national attachment: Blind versus constructive patriotism. *Political Psychology, 20*, 151–174.

doi:10.1111/0162-895x.00140

Shadish, W., Cook, T. & Campbell, D. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology, 48*, 813–838. doi:10.1037/0022-3514.48.4.813

Statistica (2017, November). Number of social media users worldwide from 2010 to 2021 (in billions). Retrieved from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/

Stephan, W. G., Ybarra, O., & Morrison, K. R. (2009). Intergroup threat theory. In T. D. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 43-59). New York, NY: Taylor & Francis Group.

Sun, Y., Pan, Z., & Shen, L. (2008). Understanding the third-person perception: Evidence from a meta-analysis. *Journal of Communication, 58*, 280–300. doi:10.1111/j.1460-2466.2008.00385.x

Tajfel, H. & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7-24). Chicago, IL: Nelson-Hall.

Tekman, H. G., Hortaçsu, N., & Ok, A. B. (2008). Message content, group identification and the intergroup sensitivity effect: Responses to the message and recognition memory. *Asian Journal of Social Psychology, 11*, 279–285. doi:10.1111/j.1467-839x.2008.00268.x

Ting-Toomey, S. (2005). The matrix of face: An updated face-negotiation theory. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 71-92).

Thousand Oaks, CA: Sage.

Ting-Toomey, S. (2017). Conflict face-negotiation theory. In X. Dai & G. Chen (Eds.), *Conflict management and intercultural communication: The art of intercultural harmony* (pp. 123-143). Arbingdon, England: Routledge.

Ting-Toomey, S., & Dorjee, T. (2017). Multifaceted identity approaches and cross-cultural communication styles: Selective overview and future directions. In L. Chen (Ed.), *Intercultural communication* (pp. 141-178). Berlin, Germany: De Gruyter.

Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations, 22*, 187–225. doi:10.1016/s0147-1767(98)00004-2

Trees, A. R., & Manusov, V. (1998). Managing face concerns in criticism: Integrating nonverbal behaviors as a dimension of politeness in female friendship dyads. *Human Communication Research, 24*, 564–583. doi:10.1111/j.1468-2958.1998.tb00431.x

Trompenaars, F. J., Masthoff, E. D., Van Heck, G. L., Hodiamont, P. P., & De Vries, J. (2005). Content validity, construct validity, and reliability of the WHOQOL-Bref in a population of Dutch adult psychiatric outpatients. *Quality of Life Research, 14*, 151–160. doi:10.1007/s11136-004-0787-x

Tsfati, Y. (2007). Hostile media perceptions, presumed media influence, and minority alienation: The case of Arabs in Israel. *Journal of Communication, 57*, 632–651. doi:10.1111/j.1460-2466.2007.00361.x

Turner, J. C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E. J. Lawler (Ed.), *Advances in group processes: Theory*

and research (Vol. 2, pp. 77-122). Greenwich, CT: JAI Press.

Van der Toorn, J., Ellemers, N., & Doosje, B. (2015). The threat of moral transgression: The impact of group membership and moral opportunity. *European Journal of Social Psychology, 45*, 609–622. doi:10.1002/ejsp.2119

Wang, Q., Fink, E. L., & Cai, D. A. (2012). The effect of conflict goals on avoidance strategies: What does not communicating communicate? *Human Communication Research, 38*, 222–252. doi:10.1111/j.1468-2958.2011.01421.x

White, J. B., Tynan, R., Galinsky, A. D., & Thompson, L. (2004). Face threat sensitivity in negotiation: Roadblock to agreement and joint gain. *Organizational Behavior and Human Decision Processes, 94*, 102–124. doi:10.1016/j.obhdp.2004.03.005

Witte, K. (1994). Fear control and danger control: A test of the extended parallel process model (EPPM). *Communication Monographs, 61*, 113–134. doi:10.1080/03637759409376328

Woods, C. M. (2006). Careless responding to reverse-worded items: Implications for confirmatory factor analysis. *Journal of Psychopathology and Behavioral Assessment, 28*, 186–191. doi:10.1007/s10862-005-9004-7

Xie, X. (2009). *A roles approach to conflict strategies: Modeling the effects of self-and other-role enactment on conflict strategies through goals and emotion* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses. (2009-99230-261)

Zhu, L., Liu, M., & Fink, E. L. (2016). The role of person-culture fit in Chinese students' cultural adjustment in the United States: A Galileo mental model approach. *Human Communication Research, 42*, 485-505. doi:10.1111/hcre.12084