

Grocery Shopping for America: External vs. Internal Threats to National Identity

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Abstract

The potential for a brand to attract or alienate consumers may depend on the values the brand reflects. In this paper, we focus specifically on American national values, as brands often desire that association. We compare the effects of external threats—threats to the nation from outgroups—and internal threats—threats from within the nation—on Americans' attachment to national identity and its spillover effects on brand choice. We provide observational and experimental evidence that while external threats strengthen national attachment, internal threats weaken national attachment. National attachment, in turn, affects purchases of American-sounding brands. We analyze weekly supermarket scanner data, encompassing sales of over 8,000 brands across more than 1,100 US stores in 2004. We find that Americans purchased more American-sounding brands following war casualties (external threat) but purchased less of them during the Abu Ghraib torture scandal (internal threat). Political ideology moderates the effect. In two lab studies, we provide evidence for the hypothesized psychological process (national attachment) and find implementable strategies for managers to cope with this phenomenon.

Keywords: National values, political ideology, brand choice, social identity, internal threats, external threats

Statement of Intended Contribution

We respond to calls from prior research to consider consumer behavior through the lens of geopolitical events. We identify spillovers of external and internal threats to national identity on brand choice. War and trade disputes represent external threats, while prisoner torture and separation of children at the border represent internal threats to national identity. Social identity theory forms the basis for our theoretical predictions. Through a large-scale observational study and two lab experiments, we establish the relationship between external and internal threats to national identity and brand choice. We use whether a brand name is considered American to identify the extent to which a brand represents national identity.

Consumers increased (decreased) purchases of American sounding brands when there are external (internal) threats to national identity. This effect is stronger among liberals than conservatives. National attachment mediates the relationship between threats to national identity and brand choice. Brands can overcome the negative effects of internal threats by emphasizing qualities of their brands other than nationality. The psychology literature has developed the differences among threats to national identity with high granularity. The marketing literature has focused on the link between social identity, as a monolithic construct, and consumption. We bridge the two streams by examining different threats to national identity and their effects on national identity. We also provide large scale empirical evidence from the field for this relationship.

Our research recommends that brand managers actively consider threats to an individual's national identity and dynamically manage the messages in their advertisements. When faced with internal threats to national identity, managers of American-sounding brands should emphasize non-national identity features in their advertisements, especially when targeting liberal consumers. Our research also urges policy makers to consider the cost of wars and the harsh immigration policies on the competitiveness of their national brands.

Brands exist within a sociopolitical environment and are symbols of a culture including the nationality identity of its consumers (Khan, Misra, and Singh 2013). We explore consequences to a brand's sales when the national identity of its consumers is under threat.

Several popular press outlets suggest a rise in global nationalism (e.g., Duara 2018). War, trade, and immigration are some of the external threats to national identity giving rise to nationalism (Becker et al. 2017). Harsh treatment of a nation's enemies (those who represent the external threats) that is either sponsored by the state or organized by individuals often accompanies nationalism. When pushed far, such as the case with prisoner torture in Abu Ghraib, or the recent separation of children at the Mexican border, these harsh treatments can be perceived as threats to the values America stands for, such as democratic, fair, and respect for human inalienable rights.

Consumption of products that represent national identity provides individuals with a source of indirect support (or protest) to threats to values associated with their national identity (Cutright et al. 2011). We compare the effects of external threats—threats to the nation from outgroups—and internal threats—threats from within the nation—on Americans' attachment to national identity and its spillover effects on choice of brands that are associated with consumers' national identity.

Brands expect to engage customers better if they authentically stand for the values that their consumers care about (Khan, Misra, and Singh 2013; Reed et al. 2012). The potential for a brand to attract or alienate consumers depends not just on the brand's product attributes, but on the national values that the brand reflects (Shepherd, Chartrand, and Fitzsimons 2015). Brands often play up this attachment to patriotism and national identity. For example, in Chrysler's 2012 Super Bowl ad, Clint Eastwood assured Americans of its resilience to weather a recession, and Coca-Cola's 2014 Super Bowl ad included several voices singing "America the Beautiful" as Americans from different backgrounds shared tender moments with a Coke (Weiss 2014). But what happens

to brand sales when the national identity faces external (e.g., death of soldiers in a war on terror, trade war with a foreign nation) and internal (e.g., torture of prisoners by a nation's military, immoral treatment of illegal immigrants) threats?

Social identity theory posits that individual identity derives partially from group affiliations (Tajfel and Turner 1979) via categorization (e.g., "I am American") and self-enhancement (e.g., "I am proud to be American") (Hogg 2006). Self-enhancement is a type of motivation that works to make people feel good about themselves and to maintain self-esteem (Sedikides and Strube 1997). This motive becomes especially prominent in situations of threat, because threats to the group in turn threaten the self-esteem derived from group membership.

When this esteem is threatened by external entities, members of the ingroup tend to stick together and give each other preferential treatment professionally, financially, or socially (Branscombe et al. 1999; Dion 2002). We argue that the same need for self-enhancement that strengthens attachment to national identity in response to external threats can weaken attachment in response to certain internal threats. When the actions of political leaders and institutions threaten the nation's values, common responses to internal threats, such as justification or dismissal, may be less effective. Leaders' actions may be harder to justify morally or dismiss as aberrations (Elsbach and Bhattacharya 2001; Marques, Paez, and Abrams 1998). In these cases, people cope with the situation by weakening their personal attachment to national identity.

The relationship between people and their national identity should be reflected in their consumption, as consumers indeed prefer brands consistent with their most salient social identities (Khan, Misra, and Singh 2013). Furthermore, we propose that the political ideology of the consumers, liberals or conservatives, moderates the relationship between national identity threats and brand choice. We base this on prior research that has documented a higher (lower) need for

protecting the status quo among conservatives (liberals). Finally, we evaluate whether highlighting national identity or quality aspects of a brand in advertisements can let managers effectively react to the spillover effects of national identity threats.

To summarize, our specific research questions are: (1) What is the spillover of the nationalist sociopolitical events that threaten national identity on brand choice?; (2) Do events in the sociopolitical environment affect the salience of national identity and thereby brand sales?; (3) Do the reactions of consumers to national identity threats vary with their political ideology?; and (4) How can brands manage the spillover effects of national identity threats on brand choice?

We use multiple methods in three separate studies to address these research questions. In study 1, we evaluate the causal effects of US war casualties (external threat) and the Abu Ghraib torture scandal (internal threat) on weekly sales of American-sounding supermarket brands, a behavioral proxy for national attachment. In our sample spanning over 8,000 brands and 1,100 supermarkets, the market share of American-sounding brands increased in stores following the death of a soldier from the same county. These same brands' national market shares declined when there was widespread coverage of the Abu Ghraib scandal. In studies 2 and 3, we conduct lab experiments to (a) test the mediational role of national attachment and its downstream effects on charity donation, and (b) consider marketing strategies (e.g., advertising messages) brands can adopt to reduce the negative effects of internal threats. As such, and differently from previous literature, we do not investigate the effect of negative or positive information on brands. Rather, we explore consumers' indirect reactions to threats to national identity through their brand choices.

Research Contribution

Our study makes four important substantive contributions. First, our research answers calls from prior research to consider consumer behavior through the lens of the geographical, governmental, and marketplace systems in which each behavior occurs (Jung et al. 2017). Our study provides large-scale empirical evidence that brand market shares are affected by external

and internal value threats to national identity. The results from our empirical analyses show that brand shares have the potential to increase (decrease) by more than 100% in reaction to external (internal) value threats to the national identity. This is a substantial shift in market share when we consider that consumer packaged goods had revenue and profit growth of less than 10% during 2006–11 (Meacham et al. 2018). The changes in market share we report are comparable to the effect of product harm crises reported in previous literatures where brands' estimated losses in sales following a crisis ranged from 59% to 29% (Van Heerde, Helsen, and Dekimpe 2007). The effects are moderated by political ideology (conservative versus liberal). Counties with a liberal majority are more likely to react to internal and external threats. This provides brand managers the ability to anticipate consumer reactions and develop localized tactics. Several brands including Capital One, Anheuser-Busch, and Under Armour have programs that support veterans' affairs and the military. Our study suggests that it is more consistent for brands that are representative of American values to also support veterans' issues and activities in case of external threats. With regard to internal threats, our study encourages brands to educate regulators, through lobbying activities, about the economic costs of nationalist policies that justify harsh treatment of outgroups by ingroup members. We also show that brands can reduce the effects of internal threats by highlighting features other than the national identity, such as the quality of ingredients.

Second, the psychology literature on social identity threats has focused with high granularity on the different types of threats (e.g., categorization threats, distinctiveness threats, acceptance threats, and threats to the value of social identity; Branscombe et al. 1999), but has not focused on consumption. On the other end, literature in marketing has focused on the link between threats to social identity and consumption but has focused mostly on competence threats (e.g.,

product failure; Chae, Dahl, and Zhu 2017). We create a bridge between these two literatures by both homing in on specific threats to social identity (value threats to national identity—different from competence threats) and investigating their relationship with consumption.

Third, with a few exceptions (e.g., Eder et al. 2006), most of the previous literature has focused on threats that either focused on a specific group identity (e.g., minority) or, when focused on national identity, easily allowed the identification of a few clear responsible people that were easy to use as a scapegoat. We focus on a situation when scapegoating is a more difficult coping mechanism given that the threats encompass singular individuals and include leaders and institutions. Similarly, prior work on responses to torture emphasizes emotional responses (Wohl, Branscombe, and Klar 2006) and moral disengagement (Aquino et al. 2007) but does not evaluate change in attachment to national identity. Note that we are not contradicting this literature. These coping strategies (emotional responses and moral disengagement) and weaker national attachment could be deployed simultaneously.

Finally, we contribute to the literature studying *simultaneous* and *real-time* external and internal threats, using both experiments and secondary data. Most of the research on social identity threats focuses either on internal or external threats to value, but not on both (for exceptions, see White, Argo, and Sengupta 2012; and Chae, Dahl, and Zhu 2017). We study *simultaneous* external and internal threats, which allows us to test how the same underlying mechanism—self-enhancement derived from national identity—can have opposite effects on the strength of attachment to national identity. Also, previous literature on threat usually asked participants to recall past threats (Simon, Pantaleo, and Mummendey 1995). However, memory recall could be vulnerable to dissonance and ex-post rationalization (Brewer 1984; Tsang 2002). We provide a multi-method approach to this topic, presenting strong internal and external

reliability with measurable effects on consumer behavior and actionable strategies.

The rest of the paper is organized as follows. First, we discuss prior research pertinent to developing our conceptual framework, which we then test using secondary data and lab studies. We end with a discussion of our results, limitations, and suggestions for future research.

Conceptual Framework

Social Identity and Threats

Social identity theory (SIT; Tajfel and Turner 1979; Hogg 2006) focuses on how group membership influences both one's self-concept and one's relations with ingroup and outgroup members. At the foundation of SIT are two connected socio-cognitive processes: self-categorization and self-enhancement (Kreiner, Ashforth, and Sluss 2006). First, people tend to categorize themselves and others into different social categories (e.g., "I am American") to reduce the uncertainty inherent in social relations. Then, people seek positive distinctiveness in each group as a vehicle for individual self-enhancement (e.g., "I am proud to be American," Sedikides and Strube 1997). Individuals have a fundamental need for positive self-esteem, and self-enhancement is the tendency to "develop, protect, and more generally to sustain the positivity of [social] identities" (Brown et al. 1992, p. 328) as a means of supporting self-esteem (see also Steele 1988). Thus, individuals seek to affirm the value of their own group (ingroup) relative to comparison groups (outgroups), resulting in intergroup comparisons.

Given the importance of social identities and the need for self-enhancement, people are as likely to defend against threats to collective aspects of self as they are to threats to personal aspects of self, even if these events do not directly connect to oneself (Kreiner, Ashforth, and Sluss 2006). However, not all threats to social identity are equal. Branscombe et al. (1999) delineated a

taxonomy of four distinct classes of social identity threat: *categorization* threats, *distinctiveness* threats, *acceptance* threats, and threats to the *value* of social identity. *Categorization* threats consist of being categorized against one's will. Social categorization involves the assignment of stereotypical group characteristics to individual group members. Individuals might feel threatened if they are categorized in a way in which they do not identify. *Distinctiveness* threats can be considered the opposite of categorization since they represent the threat associated with not having a distinct social identity, or one that is not distinctive enough from other groups. *Acceptance* threats are understood as the unwillingness of the ingroup to accept the self as a group member. Finally, threats to the *value* of social identity are when the group's value is undermined. The concept that people will defend the value of an important group membership when it is attacked by an outgroup is a basis of SIT (Tajfel and Turner 1979). Branscombe et al. (1999) noted that a threat to value could have a *moral* connotation (a threat that affects the values that the group represents) or could have a *competence* connotation (competence threat), when it refers to status and mere performance. Each class of threat provokes distinct reactions and outcomes.

In this paper, we are interested in threats to national identity, and specifically to the values it holds. As such, we focus on threats to the *value* of social identity in its moral connotation.

Next, we continue our discussion on threats to social identity by distinguishing between the sources of threat: ingroup (internal threat) and outgroup (external threat). The source of the threat is of pivotal importance given that it affects how the threat is experienced and the individual's reaction.

External threats. A common and well-documented reaction to external threats is an increase in ingroup favoritism and identification (Branscombe et al. 1999). For example, Dion (2002) reported an experiment in which Jewish participants failed in an interpersonal situation.

Participants who believed that their non-Jew evaluators were prejudiced against them were more inclined to describe themselves as possessing positively evaluated stereotypic Jewish attributes. Note that these participants evaluated themselves more strongly on positive, but not negative, aspects of the Jewish stereotype—evidence, of at least temporary increases in ingroup identification and attachment. Previous research has also found effects of external threats on consumption. For example, Cutright et al. (2011), despite using a different framework (system justification theory; see Jost and Banaji 1994), found that participants preferred American national brands when threatened by an external group (the authors made American participants read an article by a British journalist discrediting American values).

Internal threat. When considering internal threats (threats from the ingroup), one common reaction is to reject the threatening ingroup member(s) (Elsbach and Bhattacharya 2001) and scapegoating them (Marques, Paez, and Abrams 1998). Another strategy is to resist negative information by derogating the source of the message and counter-arguing (Wilson, Giebelhausen, and Brady 2017). Another strategy is reframing and downplaying the importance of the threat (Petriglieri 2011). In some cases, the ingroup might diminish the ingroup culpability, such as by denying ingroup responsibility (Badea and Sherman 2019).

Finally, previous research shows that ingroup threat could lead individuals to being more open to negative information about the self (Gardner, Gabriel, and Hochschild 2002). Consequently, ingroup commentary enables critical evaluation and detachment rather than defensive reaction when negative information is conveyed (Doosje, Ellemers, and Spears 1995). White and Argo (2009) and White, Argo, and Sengupta (2012) found that consumers often respond to internal threats by avoiding products linked to the threat. Similarly, Chae, Dahl, and Zhu (2017) focused on internal competence threats (negative information about a product) and found that when

negative information about an ingroup is communicated by a member, the ingroup consumer is more likely to derogate the products from the ingroup (versus from the outgroup).

National identity threats: The role of self-enhancement

This review of previous results—although not exhaustive given the vast amount of research on this topic—sufficiently underlines the multitude of reactions external and internal threats may elicit. The variety of reactions is due to the complexity of the social identity construct. In this paper, we make specific predictions regarding threats to the values of national identity, a specific threat almost neglected in literature (for exceptions, see Eder et al. 2006; and Finnel, Reed, and Aquino 2011). We propose that because of individual self-enhancement (need to develop, protect, and more generally to sustain the positivity of social identities), external and internal threats to the values of national identity will produce two opposite outcomes. In both external and internal threats, negative information regarding the nation is viewed as a threat to the self (Sherman and Cohen 2006), which results in a psychological “self-defense” process whereby individuals cognitively react to the threatening information to reestablish self-enhancement (Sherman and Cohen 2006; Badea and Sherman 2019). In the case of *external* threats to the values of national identity, we hypothesize that people increase ingroup favoritism (strengthen individual national attachment) to reestablish a positive self-view. Patriotism and pride in one’s national citizenship should increase particularly when one’s country faces an external threat. For example, Lyubansky described that in the period immediately following the events of 9/11, the nation experienced “a unity, a coming together of people that typically define themselves by their differences more than their similarities” (2008).

However, what happens in the case of *internal* threats to national identity that degrade an

ingroup's constituent values, when the actions of political leaders and institutions threaten the nation's values (e.g., the Abu Ghraib scandal)?

We argue that the same need for positive self-esteem that strengthens attachment to national identity in response to external threats can weaken attachment in response to certain internal threats. When the actions of political leaders and institutions threaten the nation's values, common responses to internal threats, such as justification or dismissal, may be less effective. Leaders' actions are harder to justify morally or dismiss as aberrations. Scandals contradicting the nation's core values are too big to deny. These internal threats threaten people's national identity, thus affecting their self-esteem. We propose that, in these cases, people desire to restore their self-esteem, which can be achieved by weakening their attachment with the negatively affected aspect of social identity (i.e., national identity). By weakening the attachment with national identity, people are able to see the self in a more positive light. More formally:

H1a (*external threat–national attachment effect*): External threats to the values of national identity will strengthen individual national attachment.

H1b (*internal threat–national attachment effect*): Internal threats to the values of national identity will weaken individual national attachment.

Purchases as Proxy for Behavior: Social identity threat and consumption

According to self-enhancement mechanism, people wish to protect and maintain self-esteem (Steele 1988). Further, one way of maintaining positive self-esteem is to weaken or strengthen the attachment with brands associated with some aspects of social identity (White and Argo 2009; White and Dahl 2007). Consumers indeed prefer brands consistent with their most salient social identities (Coleman, Verrochi, Morales 2018; Reed et al. 2012) and those that bolster their self-

esteem (Shachar et al. 2011). Consumer research has also shown that brands can be used to communicate and reinforce national identity (Shimp and Sharma 1987). As such, we expect shifts in Americans' national attachment to affect purchase behavior and brand choice. Formally:

H2 (*threat–consumption effect*): External (internal) threats to the value of national identity will increase (decrease) purchases of brands connected with national identity.

H3 (*mediation*): The effect of external (internal) threats on purchase behavior is mediated by national attachment.

Moderation by Political Ideology

In considering how threats to national values affect consumption, we need to consider political ideology. Political ideology plays a critical role in shaping individuals' attitudes, opinions, and behaviors. For example, research has shown that conservatives are more likely than liberals to yield to authority figures, accept coercive social control to maintain order, and support conventionalism (Duckitt and Sibley 2010). In a similar vein, Graham, Haidt, and Nosek (2009) suggest that conservatives—as compared to liberals—display a greater tendency to obey traditions and legitimate authority. For example, when complaining to reputable and stable institutions (e.g., banks and other financial establishments) conservatives, compared to liberals, tend to defer more to financial institutions and their decisions, avoiding disagreement. Similarly, Jost and Hunyady (2005) noted that political conservatism (versus liberalism) tends to justify the political status quo, including potential failings of the existing social system and its institutions.

Building on these assumptions, recent research has identified that political ideology has a clear and direct effect on consumption behaviors. Khan, Misra, and Singh (2013) found that conservatism is positively associated with preference for national brands and with a lower

propensity to buy new or different products. Jung et al. (2017) found that conservatives are less likely than liberals to report complaints or to dispute the resolution that an institution offers. Conversely, liberals are more prone to challenge the status quo. Indeed, liberals are more likely (than conservatives) to buy—or to refrain from buying—a consumer product for political reasons (Jost, Langer, and Singh 2017).

Based on this literature, we hypothesize a moderating effect of political ideology for which conservatives will be more reluctant to switch brands and consumption habits in response to threat. Formally:

H4 (*moderation*): The effect of threat on consumption is weaker (stronger) for conservatives (liberals).

Advertising Strategy

Finally, we theorize an advertising strategy that managers could implement in response to our hypothesized effect (H1–H3). Research has shown that the advertised nationality of a product may influence consumers' product or brand attitudes (Bilkey and Nes 1982; Leclerc, Schmitt, and Dubé 1994). Previous research has also shown that a change in the advertising message can affect consumer favorability toward the brand (e.g., Cian, Krishna, and Schwarz 2015).

For H1a, external threats to the values of national identity strengthen an individual's national attachment. H2 and H3 postulate that a stronger national attachment leads to an increase in purchases of brands connected with national identity. As such, in the case of an external threat to the values of American identity, a manager of an American brand could emphasize the “Americanness” of the brand via marketing communications. Creating a stronger association with being American should increase the consumer favorability toward the brand.

By the same logic, in the case of an internal threat to the value of American identity, a manager of an American brand should deemphasize the Americanness of the brand. As such, a shift in the focus on the marketing campaign, from associating the brand with Americanness to something equally positive but not necessarily connected with nationality (e.g., quality), should lead to an increase in the consumer favorability toward the brand. Formally:

H5a: In the event of an *external* threat to the values of national identity, brands will benefit from an emphasis on the Americanness of the brand (versus other equally positive associations).

H5b: In the event of an *internal* threat to the values of national identity, brands will benefit from an emphasis on an association different from the Americanness of the brand, but equally positive.

Insert Figure 1 Here

OVERVIEW OF STUDIES

Figure 1 summarizes the proposed conceptual framework and provides an overview of the three studies. We use *simultaneous* and *real-time* external and internal threats in all the studies. In our main study, study 1, we use war-related threats the United States faced in 2004. Specifically, we identify war casualties as an *external* threat to the values of national identity: US soldiers (ingroup members) die while defending against an outgroup. We identify the Abu Ghraib scandal as an *internal* threat to the values of national identity (US soldiers who tortured members of the outgroup). As a dependent variable, we analyze weekly sales of American-sounding brands for a representative sample of over 1,100 stores in 50 geographic markets. Our data span over 8,000 brands across 30 product categories.

In study 1, we assumed consumption of American-sounding brands to be a proxy for national attachment. Study 2 more directly tests this mechanism (H1a and H1b) and provides mediation

(H3) in an experimental setting. This study drew treatments from 2019 nationalist policies: Chinese accused of using unfair and unethical trade competition (external threat), and public opposition to refugee family separations at the US-Mexico border (internal threat). As predicted, external (internal) threats strengthened (weakened) national attachment. This experiment shows behavioral effect on charity donations (American charities versus none).

Study 3 explores a potential coping strategy that managers could implement (H5a/b). It shows that a focus on the Americanness (e.g., in an ad) can benefit a brand in the event of an external threat to national identity. A focus on a positive element not necessarily connected with being American (i.e., quality) can benefit in the event of an internal threat to national identity.

Study 1: Observational Evidence

In study 1 we test the connection between threats and purchase behavior (H2 and H4) using a large observational study. To capitalize on tight links between social identity and purchases (Reed et al 2012; Coleman, Williams, and Morales 2018), we measure shifts in Americans' national identification using weekly supermarket scanner data of American-sounding supermarket brands as symbols of American identity. With grocery store sales data, we observe nearly real-time responses to threats and we obtain a high degree of external validity.

By observing the differential effects of external and internal threats, we can establish their opposite effects on national identification. Specifically, we identify war casualties as an *external* threat to the values of national identity: US soldiers (ingroup members) die while defending against an outgroup. By the end of 2004, nearly 1,500 American soldiers had died in Iraq and Afghanistan.

We identify the Abu Ghraib scandal as an *internal* threat to the values of national identity (US soldiers who tortured members of the outgroup). In late April 2004, images of American soldiers

torturing Iraqi prisoners emerged and were seen by 76% of Americans within two weeks (Pew Research Center 2004). Abu Ghraib was widely condemned as an affront to American ideals; a majority of Americans reported being upset or angry about the incident (Greenberg 2005). The scandal undermined American democratic ideals, one of the main justifications for the Iraq War (Greenberg 2005). For example, US Defense Secretary Rumsfeld described the incident as “un-American” and “inconsistent with the values of our nation” (May 7, 2004; see Web Appendix A for in-depth discussion of public response to the Abu Ghraib scandal).

Using the formulation of social identity threats outlined by Branscombe et al. (1999), war casualties and Abu Ghraib are best interpreted as external and internal threats to values of national identity, respectively. In 2004, 70% of Americans described the Iraq War as going “very/fairly well” (Pew Research Center 2004), suggesting casualties were not a competence threat.

Method

We analyze weekly sales of American-sounding brands for a representative sample of over 1,100 stores in 50 geographic markets. Our data span over 8,000 brands across 30 product categories. We measure brands’ perceived American origin using surveys. For a given store, weekly casualty exposure is the count of war casualties in a week whose hometowns are in the same county as the store. Google Trends search patterns capture weekly variation in Abu Ghraib exposure.

War casualties and Abu Ghraib were both exogenous shocks that influenced market share only through their effects of consumers’ national identification. For each store week in 2004, we model the change in the weekly market share of American-sounding brands in 2004 as compared to the same store week in 2001. By analyzing differences, we hold constant time invariant store

characteristics including the ex-ante demand for American-sounding brands, customer demographics, and seasonal fluctuations. The timing of a store's exposure to local casualties is quasi-random, which holds constant all national-level factors that may influence national identification, such as politicians' rhetoric or war performance. We control for zip code-level military enlistment to account for cross-sectional variation in potential casualty exposure. Abu Ghraib was a common shock across all stores. We control for weekly zip code-level housing prices in case time-varying economic conditions incidentally coincided with casualties or Abu Ghraib.

Measurement. Our analysis requires measurement of three concepts: the perceived American origin of brands, weekly supermarket purchases, and the exposure to local war casualties and the Abu Ghraib scandal.

Perceived Brand Nationality. We measure perceived brand nationality based on product brand names because names are a highly salient, readily available cue (Usunier and Shaner 2002). Previous research shows that consumers frequently misidentify the national origin of products because they infer nationality from marketing cues (e.g., the product name), rather than searching for official country-of-origin labels (Balabanis and Diamantopoulos 2011). Brand nationality is a cue that operates outside consumer conscious awareness in a manner analogous to social stereotypes (Liu and Johnson 2005).

We administered surveys to assess the perceived nationality of brands via an online US-based subject pool. 1,203 participants received a randomly selected brand name and its product category and were asked, "What nationality does this brand most make you think of?" Ten possible responses included eight nationalities (American, Chinese, English, French, German, Italian, Japanese, Spanish), "none," and "other." Participants were paid for each brand evaluation and allowed a maximum of 20 evaluations to minimize respondent fatigue. Each of the over 8,000

brands in our data had seven independent evaluations.

Using these data, we calculated *AmericanScore_b*, which ranges 0–7 reflecting the number of respondents who deemed brand *b* to be American. Table 1 provides examples of brands at each variable value. Brands with *AmericanScore_b* = 7 exhibit strong American nationality cues including geographic references and historical figures. Kentucky gold is an example of a high-scoring brand in this survey. Lower-scoring brands have distinct foreign elements including words in other languages and foreign geographic references. American-sounding brands are typically objectively American in as much as they are brands owned by US-based firms and/or are trademarks owned by Americans.

In a follow-up pretest (see Web Appendix B for details), we also corroborated that American-sounding brands indeed symbolize American national identity: The brands that score high (low) on our American Score were perceived to be strong (weak) symbols of America.

Insert Table 1 Here

We measure consumer behavior using weekly supermarket sales data supplied by Information Resources Inc. (IRI), a leading source of US supermarket scanner data (Bronnenberg, Kruger, and Mela 2008). These data cover a representative sample of 1,145 supermarkets across 50 IRI-designated geographic markets. The 135 supermarket chains represented in the data collectively accounted for about 80% of US supermarket sales in 2004. During the sample period, approximately 70% of American grocery purchases were in supermarkets.

We construct our store-level measure of consumer response using weekly unit sales for 8,644 brands across 30 product categories: beer, blades, butter, carbonated beverages, cigarettes, coffee, cold cereal, deodorant, diapers, facial tissue, frozen dinners, frozen pizza, household cleaners, hot dogs, laundry detergent, mayonnaise, milk, mustard/ketchup, paper towels, peanut butter, photos,

razors, salty snacks, shampoo, soup, spaghetti sauce, sugar substitutes, toilet paper, toothbrushes, and yogurt. Major supermarket chains stock mature brands and maintain a relatively stable portfolio of brands within each store. We aggregate data across multiple stock keeping unit (SKU) codes of a single brand-product category (e.g., six-pack of Coke, two-liter bottle of Coke), but not across distinct but related brands (e.g., Coke and Diet Coke).

For each product category-store-week in our dataset, we model the change in market-share growth rate between 2001 and 2004. Our outcome of interest is indexed by: i : 8 American Score levels, j : 1,154 supermarkets, k : 30 product categories, and t : 52 weeks.

A brand's weekly store market share is the number of brand product units sold as a percentage of all units in the product category sold in that store-week. For example, if brand b in product category k (e.g., yogurt) had a 50% market share in a given store j for week t , the brand accounted for half of all units of yogurt sold in that store in that week. Measuring market share, as opposed to the total number of units sold, allows us to scale that store's sales of a brand relative to overall demand for that product category in that store-week. Changes in market share also capture shifts in demand for brands distinct from changes in demand for a particular product category. For each category-store-week we calculate the average market share across brands at each of the eight levels of American score. This aggregation reflects our interest in change across American score levels rather than individual brands and reduces the sample to a computationally feasible size. As compared to sampling a subset of stores, this approach minimizes computational burden, maintains generalizability, and utilizes variation in casualties across all stores.

For every American Score level (i)-product category (k)-store (j)-week (t) in our sample, we calculate the change in market share between 2004 and 2001 ($Share_{ijkt}^{2004} - Share_{ijkt}^{2001}$). 2001 is the first year for which scanner data are available. Measuring change in demand within each store

allows us to hold constant all time-invariant baseline characteristics of the store's customer base that influence sales, including ex ante customer preferences. If we were to observe sales only in 2004, we could not differentiate between a change in demand and preexisting low demand. We choose 2001, the first year for which scanner data are available, as a baseline because it precedes almost all war casualties.¹ For each store, we retain only brands that were sold in all weeks of 2004 and 2001 so our results are not biased by attrition and entry. We also hold constant seasonal fluctuations by comparing 2004 and 2001 shares in the same week. For example, sales of American-sounding brands may rise around July 4th or Memorial Day.

External and Internal Threats to National Identity: War Casualties and Abu Ghraib

From the perspective of given supermarket, a “local” casualty, Cas_{jt} , is the death of a deployed US soldier whose hometown is in the same US county as the store j in week t . Casualty data are from US Defense Department press releases as compiled by the Associated Press. We matched each casualty's self-reported hometown to its corresponding county and summed county-week casualties. Hometown is distinct from service unit. For example, Fort Hood, Texas, had 504 Iraq War casualties representing 427 unique US hometowns. We measure casualties at the county level because it is the most conservative measure of exposure we can accurately construct and is consistent with existing studies of local casualty responses (Kriner and Shen 2010). Figure 2 summarizes weekly national casualty counts (denoted on left vertical axis) in 2004. In most weeks, the US had no more than 25 casualties total.

Insert Figure 2 Here

Consumers are more likely to be aware of local casualties. Proximity increases the likelihood

¹ If 9/11 and/or the 11 US war casualties in 2001 increased sales of American-sounding brands, this would bias against our expected finding for 2004.

of exposure to information about the casualty through local media, social networks, or a personal connection. Local casualties shift war support among non-consumers of news media, suggesting they obtain information about casualties through other conduits (Althaus, Bramlett, and Gimpel 2012). Even in the absence of a tangible connection, consumers and casualties share identity rooted in a common place of origin. Self-reported personal connection to someone injured or killed in the Iraq War increases the likelihood that the Iraq War drives one's choice of political candidate (Gartner 2009) and current presidential approval (Gartner 2008). The relatively high percentage of survey respondents who report knowing a casualty, implausible given the number of troops deployed, suggest strong perceived connections to casualties (Gartner 2009; Kriner and Shen 2010). Experimental evidence shows stronger opposition to war in response to casualties from respondents' own states independent of local news framing (Kriner and Shen 2012). Our focus on local casualties holds constant all national-level factors that may influence responses to external threats including current state of the two wars and priming by elected official and/or national media.

We measure weekly variation in Americans' exposure to Abu Ghraib, $AbuG_t$, based on the volume of web searches for "Abu Ghraib." Online search trends capture the revealed salience of the event for the mass public. Data are from Google Trends, which is based on US Google searches to produce a normalized score that can be compared across weeks. The Abu Ghraib scandal came to light in the last week of April 2004, the week scored as 100 on the right vertical axis of Figure 2. Intense search activity lasted three to four weeks. The figure suggests that Abu Ghraib did not influence casualty counts in subsequent weeks.

Empirical Model. We estimate an ordinary least squares model:

$$Share_{ijkt}^{2004} - Share_{ijkt}^{2001} = \beta_0 + \beta_1(AbuG_t * AmScore_{ijk}) + \beta_2(Cas_{jt} * AmScore_{ijk}) + \beta_3(HomePrice_{jt}^{2004} * AmScore_{ijk}) + \beta_4(Enlistments_j^{2004} * AmScore_{ijk}) + \beta_5 AbuG_t +$$

$$\beta_6 Cas_{jt} + \beta_7 AmScore_{ijk} + \beta_8 HomePrice_{jt}^{2004} + \beta_9 Enlistments_j^{2004} + \beta_{10} (Price_{ijkt}^{2004} - Price_{ijkt}^{2001}) + \beta_{11} (NumSkus_{ijkt}^{2004} - NumSkus_{ijkt}^{2001}) + e_{ijkt} \quad (1)$$

$AmScore_{ijk}$ indicates the American score level i in store j in category k for the brands that correspond to the dependent variable, $Share_{ijkt}^{2004} - Share_{ijkt}^{2001}$. The coefficients of interest are β_6 and β_7 . They measure to what extent Abu Ghraib and local casualties respectively shifted the market share of relatively more American-sounding brands.

Control Variables. In order to interpret our findings as causal, we assume that local casualties and Abu Ghraib influenced brand purchases only by shifting consumers' identification with American national identity. Neither war casualties nor Abu Ghraib produced explicit calls for Americans to change their consumption, or systematically changed brand characteristics or availability.

The model includes *Enlistments_j*, the sum of military enlistments for 2001–03 in the same zip code as store j . Enlistment data covers all military branches and are assigned to zip codes based on enlistees' home addresses. These are Department of Defense data obtained via a Freedom of Information Act request. Conditional on military enlistment, a store's exposure to war casualty is quasi-random. The timing of local casualties is quasi-random, but enlistment is not because the US has an all-volunteer military. In 2004, all zip codes in our data had at least one enlistment. To the extent that communities with higher enlistment numbers are systematically different, we can draw sound inferences about only those communities.

The model also includes *HomePrice_{j,t}*, average home prices in store j 's zip code in week t .² These data are from Zillow.com. The variable accounts for zip code-week wealth shocks that may influence the propensity to respond to one or both threats. Local wealth shocks in a given week

² Results are unchanged if variable calculated as the 2004–2001 difference or if the interaction of market share in 2001 and American Score is included to predict market share in 2004.

are unlikely to correlate with weekly exposure to local casualties. Prices of American-sounding brands are not systematically different such that wealth shocks would influence consumer purchases independent of casualties.

We control for two time-varying brand-store characteristics that influence fluctuations in market share (Ataman, Van Heerde, and Mela 2010). $Price_{2004} - Price_{2001}_{ijkt}$ is the difference between 2004 and 2001 in the average price for all brand with AmericanScore i for category k in store j in week t . controls for exogenous price changes and the effect of promotional, time-limited price discounts. Non-pricing responses, such as advertising, were less likely because they require longer lead times to implement. Price promotions are retailers' fastest response to negative demand shocks. Retailers' contracts with manufacturers slow down changes to products' shelf space allocation and location, so no retailer-driven change in product supply or location is possible in the short run.

We also control for weekly changes in the average number of varieties across all the brands within each American Score level that is stocked by a store in a product category. All else equal, consumers are more likely to purchase brands belonging to an American Score level if a store stocks more varieties. $NumSKUs_{2004} - NumSKUs_{2001}_{ijkt}$ is the difference between 2004 and 2001 in the average number of SKUs across all brands with *AmericanScore*, for product category k in store j in week t . Our controls for prices and number of product varieties stocked are relatively stable across weeks, as is characteristic of sales in well-established grocery retailers.

Empirical Findings

Table 2 summarizes estimates of our baseline models. In Model 1, the interaction of Abu Ghraib and American Score is negative and statistically significant ($\beta_i = -4e-06$, $p < .01$), confirming our expectation that American consumers reduced their purchases of American-

sounding brands in the weeks that Abu Ghraib was most salient. This result is unchanged when we add local casualties and its interaction with American Score (Model 2). In Model 2, the interaction between casualty in store j in week t (Cas_{jt}) and American Score level i in store j in category k ($AmScore_{ijk}$) is positive and significant ($\beta_2 = 2.37e-04, p < .01$). This result demonstrates strengthened national identity in response to external threats.

Insert Table 2 Here

The average change in market share between 2004 and 2001 across all brands and stores in any week was $-.08\%$. The estimated model predicts that in counties with a single casualty, the change in market share for brands with an American Score = 2 increases by 65% and the change in market share for brands with an American Score = 5 increases by 154% . The model also predicts that the share of American Score = 2 brands decreases further by 91% and the share of American Score = 5 brands decreases further by 227% during Abu Ghraib. These results provide support for H2.

These findings are robust to zip code-level controls for weekly average housing prices and military enlistment. Shares of American-sounding brands decreased more in stores located in zip codes with higher consumer wealth in 2004 ($\beta_3 = -5e-06, p < .01$) and increased more in stores with greater enlistments or likelihood of exposure to casualties ($\beta_4 = 2.67e-04, p < .01$). The effect of internal and external threats is hence also robust to differences in consumer wealth in 2004 (as measured by the average home prices in a zip code in 2004) and a zip code's likelihood of exposure to casualties. Controls for price and number of varieties perform as expected.

These findings are also robust to (1) restricting the sample to stores that experienced their first local casualty prior to Abu Ghraib (these stores may have been less likely to react to Abu Ghraib due to prior exposure to casualties that strengthened attachment), (2) using cumulative casualty instead of casualty, and 3) higher effect sizes for stores with lower than median ex-ante national

identification in 2001. Please refer to Web Appendix C for further details.

Moderating Effect of Partisanship. We measure partisanship of a county based on their vote share for Bush in the 2000 election. We split the data into three subsets: conservative, liberal, and swing, based on the Bush 2000 vote shares in the county of the store. We classified counties as conservative if their share of votes for Bush in 2000 was greater than or equal to 60%, and as liberal if their share of votes for Bush in 2000 was lesser than or equal to 40%. Counties that had Bush 2000 vote share between 60% and 40% were classified as swing counties. We estimated equation 1 for each of the subsets to evaluate the moderating effect of partisanship. We take this approach because it is easier to interpret the results of the moderation than a three-way interaction. The main results from the estimation are provided in Figure 3.

We see from Panel A of Figure 3 that the effect of external threats (i.e., casualties) on share of American-sounding brands is positive and significant ($\beta_{2\text{liberals}} = 3.37\text{e-}04, p < .01$) for liberals. Whereas the effect of external threats on share of American-sounding brands is not significant for conservatives. Panel B of Figure 3 shows that the effect of internal threats (i.e., Abu Ghraib) is significantly (at $p < .05$) more negative ($\beta_{1\text{liberals}} = 4.54\text{e-}06, p < .01$) for liberals than conservatives ($\beta_{1\text{conservatives}} = 2.59\text{e-}06, p < .01$). These results provide support for H4.

Insert Figure 3 Here

Study 2: Experimental Evidence on Charity Donation

In Study 1, we assumed consumption of American-sounding brands to be a proxy for national identity. Study 2 more directly tests the effect of threats on national identity (H1a/b) and the mediational role of national identity on behavior (H3). This experimental study also provides cross-methodological evidence to establish internal validity of our hypotheses.

Study 2, conducted in February 2019, capitalizes on real-time threats to American national identity: China was accused of unfair and unethical trade competition via espionage and cheating (external threat), and public opposition grew in response to refugee family separations at the US-Mexico border (internal threat). A recent Gallup poll found that 62% of Americans believe Chinese trade policies are unfair to the United States (Newport 2019). At the same time, two-thirds of Americans opposed family separation, and the policy was widely condemned by leaders across the political spectrum (Mehta 2019). About 74% of Americans reported being bothered by images of children separated from their parents (Clement 2019).

Method and Procedure

400 MTurk participants based in the US ($M_{age} = 40.67$, $SD_{age} = 12.67$; 53% female) completed this study. We employed a between-subjects design with three conditions. In the internal-threat condition, participants read an article about abuse of refugee children separated from their parents at the US-Mexico border. In the external-threat condition, participants read an article that accused China of unfair and unethical practices that harm American businesses. Both issues were ongoing threats during the experiment. The third condition was the control, in which participants read an article about noise-canceling headphones (the three articles are reported in Web Appendix D).

Before participants read the article, we informed them that this experiment was a memory test and that we were going to test their recollection of the article. This deception was implemented to assure the participant read the article carefully and to diminish a potential demand effect. After participants read the article, we told them that before testing their recollection about the article, we wanted to wait for a few minutes, and in the meanwhile they would be asked some unrelated questions. Immediately after reading this, we administered the National Attachment Scale

proposed by Huddy and Khatib (2007; $\alpha = .956$; all items used are reported in Web Appendix E). Then, we asked our fictitious question about article recollection (“list five words that you recollect from the article you read”), we concluded with questions related to participants’ gender and age.

To measure the downstream consequences of our manipulations, we measured charity donation. Similar to Wade-Benzoni et al. (2012), after participants ended the survey, they saw a statement saying that, to celebrate our 10th anniversary on MTurk, we were ending each of our surveys with a lottery to thank all the MTurkers that participated in our surveys and contributed to our research. As such, we told each participant that their MTurk ID will be automatically entered into a lottery to win \$1,000. Participants were told they could precommit a portion of the prize to a charity. Participants were presented with information about two charities, one named “C.I.L.I.A. Food Bank” and the other called “L.U.I.C.A. Food Bank.” C.I.L.I.A.’s mission was described as “to distribute food and clothing to American low-income families,” while L.U.I.C.A.’s mission was “to distribute food and clothing to low-income families in developing countries.” The amount of US dollars that individuals indicated they would like to donate was used as the measure of beneficence. Participants had no reason to suspect that the amount indicated was our dependent variable.

Results and Discussion

National Attachment. A one-way ANOVA on national attachment was significant $F(2, 397) = 15.11, p = .000$, and planned contrasts revealed that participants had a lower (higher) attachment to national identity in the presence of an internal (external) threat ($M_{\text{internal}} = 5.96$ vs. $M_{\text{external}} = 7.40; F(1, 399) = 29.76, p = .000$). Both internal threat ($F(1, 399) = 4.61, p = .032$) and external threat ($F(1, 399) = 10.91, p = .001$) conditions differed from control ($M_{\text{control}} = 6.53$). See

Figure 4 for box-plots. As predicted, a (internal versus external) threat to national identity affect (weakening versus strengthening) national attachment. Statistical conclusions do not change if covariates (gender and age) are included in the model.

Charity Donation. To analyze this variable, we have subtracted the amount of money people donated to L.U.I.C.A. to the amount of money people donated to C.I.L.I.A. (i.e., “American charity – Developing countries charity”). As such, a positive result means higher dollar donation for the American charity. A one-way ANOVA on charity donation was significant ($F(2, 397) = 12.53, p = .000$), and planned contrasts revealed that participants donated more money to the American charity (versus the developing countries charity) when there was an external threat ($M_{\text{external}} = \$47.01$) versus an internal threat ($M_{\text{internal}} = -\$21.65; F(1, 399) = 24.86, p = .000$). Both internal threat ($F(1, 399) = 4.41, p = .036$) and external threat ($F(1, 399) = 8.30, p = .004$) conditions differed from control ($M_{\text{control}} = \$7.34$). See Figure 4. Note that 137 people (34.25% of the sample) decided not to donate to any of prize money to either charity (recorded as \$0 in the data analysis). Statistical conclusions do not change if covariates are included in the model.

Insert Figure 4 here

Mediation. A mediation analysis (PROCESS Model 4; Hayes 2017) tested whether the relationship between threat and charity donation was mediated by national attachment. We programmed PROCESS to treat the independent variable as multi-categorical (using the mcx option; Hayes 2018). The mediational path from threat to charity donation was indeed significant through national attachment (95% CI internal threat versus control = -26.83 to $-.51$; CI external threat versus control = 7.91 to 32.18). Thus, these results supported the H3 (mediation) and showed that an internal threat led to lower national attachment, which in turn led to lower

donations to an American charity and higher donations to an international (developing countries) charity. Conversely, an external threat led to higher national attachment, which in turn led to higher donations to an American charity (versus donations to an international charity).

Study 3: Marketing Strategy

Study 1 and 2 provide cross-methodological evidence of our hypotheses. Study 3 explores a potential strategy that managers could implement in response to our hypothesized effect. In most cases, managers cannot control internal or external threats to national identity. What they can do, however, is cope and act accordingly to maximize profit. We hypothesized one potential coping strategy: managers could change the advertised Americanness of their brands in case of external or internal threats to American national identity. A focus on the Americanness of their brands can benefit in the event of an external threat (H5a). A focus on an equally positive element not necessarily related to being American (e.g., quality) could benefit in the case of an internal threat (H5b). We test these predictions in study 3.

Method and Procedure

608 MTurk participants based in the US ($M_{age} = 37.74$, $SD_{age} = 12.18$; 51% female) participated in a 3 (threat: internal, external, control) X 2 (Americanness focus: yes, no) between-subjects design during May 2019. With respect to the threats, we used the same manipulations of study 2: internal-threat conditions (an article about the abuse of refugee children separated from their parents at the US border), versus external-threat conditions (an article about China's unfair and unethical practices that harm American businesses), versus control conditions (an article about noise-canceling headphones). As in study 2, we told participants that the experiment was a memory test and that, before testing their recollection, we were going to ask them unrelated questions.

Participants were then randomly assigned to view one of two ads (Americanness focus: yes, no)

for Lay's, an American potato chip company. We chose potato chips because it is a common, ageless, genderless type of consumption. A pretest indicated Lay's to be a prototypical American potato chip company.³ Both versions of the ad included the same visual (an open bag of chips) and the Lay's logo clearly marked on the bag. The ads, however, differed on the headline they contained. The Americanness-focused ad featured "American potato chips" as the headline. The non-Americanness-focused ad featured "Quality potato chips" as the headline (see Figure 5 - Stimuli).

After viewing the ad, participants rated their purchase intention ("Imagine you want to buy a bag of chips. How likely are you to purchase this bag of potato chips?"; anchored at 1 = not at all likely and 7 = very likely; a single-item question as in Elder and Krishna 2011), and attitudes toward the product (a three-item scale anchored at 1 = dislike/bad/unpleasant and 7 = like/good/pleasant; $\alpha = .959$; adapted from Rhee and Jung 2019). Participants then answered the memory question, and lastly indicated their gender and age.

Results and Discussion

Purchase intention. A 3x2 ANOVA on purchase intention showed a significant main effect of threat ($M_{external} = 4.60$, $M_{internal} = 3.96$, $M_{control} = 4.34$; $F(2, 602) = 5.61$, $p = .004$), a non-significant main effect of Americanness focus ($M_{Americanness\ focus} = 4.39$, $M_{no\ Americanness\ focus} = 4.22$; $p = .285$), and a significant two-way interaction ($F(2, 602) = 9.86$, $p = .000$). Planned contrasts revealed that in the control conditions, the Americanness focus and the no-Americanness focus (quality) did not differ in

³ We asked 100 people from an online panel to evaluate the Americanness of 12 common brands of potato chips: Doritos, Cheetos, Lay's, Terra, Ruffles, Kettle Foods, Utz Quality Foods, Cape Cod Potato Chips, Old Dutch, Zapp's, Herr's Snacks, and Pringles, shown in random order in a within-subject design. To measure Americanness, we adapted a three-item scale from Steenkamp, Batra, and Alden (2003): "To me, this brand is a symbol of America;" "I associate this brand with things that are American;" and "To me, this brand represents American values." The rating options ranged from 1 to 7, with 1 meaning "I completely disagree with this statement," and 7 meaning "I completely agree with this statement;" $\alpha = .954$. Lay's scored the highest ($M = 5.30$) and significantly higher than any other brand (all p 's < .05)

terms of purchase intention: they were perceived equally positive ($M_{\text{Americanness focus}} = 4.47$, $M_{\text{no Americanness focus}} = 4.24$; $p = .351$). However, as hypothesized, in the external-threat condition, people preferred the product advertised by the Americanness-focused headline (versus no Americanness-focused headline) ($M_{\text{Americanness focus}} = 5.01$, $M_{\text{no Americanness focus}} = 4.10$; $F(1, 602) = 12.81$, $p = .000$). In the internal-threat condition, we observed the opposite: people preferred the product advertised by the non-Americanness-focused headline (versus Americanness-focused headline) ($M_{\text{Americanness focus}} = 3.63$, $M_{\text{no Americanness focus}} = 4.30$; $F(1, 602) = 7.15$, $p = .008$). See Figure 5 - Results. Statistical conclusions do not change if covariates (gender and age) are included in the model.

Attitudes toward the product. A 3x2 ANOVA on product attitudes toward the product showed a significant main effect of threat ($M_{\text{external}} = 4.66$, $M_{\text{internal}} = 4.22$, $M_{\text{control}} = 4.43$; $F(2, 602) = 4.60$, $p = .010$), a non-significant main effect of Americanness focus ($M_{\text{Americanness focus}} = 4.47$, $M_{\text{no Americanness focus}} = 4.41$; $p = .697$), and a significant two-way interaction ($F(2, 602) = 8.56$, $p = .000$). Planned contrasts revealed that in the control conditions, the Americanness focus and the no-Americanness focus (quality) did not differ ($M_{\text{Americanness focus}} = 4.48$, $M_{\text{no Americanness focus}} = 4.39$; $p = .596$). However, in the external-threat condition, people preferred the product advertised by the Americanness-focused headline ($M_{\text{Americanness focus}} = 4.91$, $M_{\text{no Americanness focus}} = 4.35$; $F(1, 602) = 8.88$, $p = .003$), and in the internal-threat condition, people preferred the product advertised by the non-Americanness-focused headline ($M_{\text{Americanness focus}} = 3.97$, $M_{\text{no Americanness focus}} = 4.49$; $F(1, 602) = 8.11$, $p = .005$). See Figure 5 for box plots. Statistical conclusions do not change if covariates are included in the model.

Insert Figure 5 Here

This study shows how managers can benefit from a change in their marketing communication strategy in the case of an external or internal threat to national identity. In the case of external threat, it would be beneficial to promote the Americanness of the brand (corroborating H5a). In

the case of internal threat, managers should promote elements of their brand (e.g., quality) that are positive but not necessarily connected with the American nationality (H5b). The results of this study are compatible with the findings of the observational data in study 1.

Theoretical and Managerial Implications

External and internal threats to social groups produce opposite shifts in national identification. Study 1 distinguishes between external threats—the death of US soldiers—and internal threats—torture committed by US soldiers. Study 1 showed that war casualties strengthened Americans' national attachment, corresponding to greater market share of American-sounding brands. The Abu Ghraib scandal reduced these same brands' market share, indicative of weaker national attachment. These effects are stronger among liberals than conservatives. Study 2 leveraged real-time threats to test the mechanism (national attachment) in a lab setting and to measure behavioral effects on charity donations. Study 3 provides an example of an implementable strategy: managers can shift the Americanness relevance of their brand depending on current (external/internal) threats.

Our study shows that while brands benefit from the associations with national identity, managers need to actively manage the brands when those associations are under threat.

In the case of external threats to national identity, brands strengthening their national association should expect an increment in sales. National identity associations can be bolstered not just through the brand names or advertisements. Support of veterans and charities that help victims of war and causes connected to national identity can be an effective strategy as well. For example, Capital One has a dedicated website for recruiting veterans and supports Hiring 500,000 Heroes, Clif Bar, supports the Farmer Veteran Coalition, UnderArmour committed at least \$5 million to the wounded warrior project and has also developed cobranded apparel with the wounded warrior

project, Jeep has donated \$500,000 to organizations that support veterans and their families, and Anheuser-Busch has donated \$11 million to various veteran causes from 1987 to 2016. The ongoing trade war with China suggests that brands with strong American associations can expect share increases. They can leverage the trade discussions by promoting fair trade practices and supporting local communities such as farmers that are affected by the trade war.

The internal threats pose a greater challenge for brands. Scandals that challenge American values such as Abu Ghraib, Hurricane Katrina, missing weapons of mass destruction in Iraq, and child separation policies at the US-Mexico border can lead consumers to dissociate from brands with strong associations to an American identity. Such effects are stronger among liberals. Brands can use geographic targeting in TV ads or through display ads to counter the internal threats. They should highlight strong attributes of the brand that are not related to national identity. Today's social media have probably increased the speed and momentum of social threats compared to the past. We show that brands can implement quick coping strategies as well: a simple change in ad copy can affect consumer purchase intentions.

The rise of nationalism and the increased external and internal threats to national identity associated with nationalism highlight the importance for brands to be vigilant. Brand managers need to understand that while an association with national identity pays dividends, it comes with strings attached. Any threats to national identity spill over to brand sales. Consumers tend to indirectly support (protest) external (internal) threats to national identity through consumption. Furthermore, study 1 results on cumulative casualties suggest that the effects on consumer behavior may be cumulative as well. As such, brand managers cannot afford to ignore threats that in isolation seem fleeting

Limitations and Future Research

We note several possible extensions to our research. The emotional underpinnings of threat responses—shame, guilt, and rage, for example—likely produce distinct responses and need further investigation (see Reed and Forehand 2016). Individual-level moderators may also affect threat responses.

Additionally, our findings on cumulative casualties suggest temporal dynamics in threat responses, which cannot be readily measured in an experimental setting. Understanding these dynamics, including which types of threats are cumulative and the duration over which they accumulate and decay, is a potentially fruitful line of research.

Threats to social identity also undermine the psychological foundations of brand loyalty. Consumers form attachments to specific brands because consistency in consumption goods fosters a subjective sense of stability and safety (Rindfleisch et al 2008). Future research might explore the effect of our hypotheses on different levels of brand loyalty.

A more nuanced study of internal threats can establish which types of threats weaken identification, the tipping point for weaker identification (Marques, Paez, and Abrams 1998), and circumstances when internal criticism can be accepted (Hornsey, Oppes, and Svensson 2002). Also, the point at which internal threats weaken national identification instead of scapegoating (Marques, Paez, and Abrams 1998) may depend on the exact context and nature of the threat. Although not examined here, this is an interesting avenue for future work.

Previous research has also found that consumers are more likely to switch to domestic brands following death-related media coverage (Liu and Smeesters 2010). In study 1, we found compatible results in the case of external threats but not in the case of internal threats, although consumers were exposed to Abu Ghraib prison deaths. More work is needed to reconcile these findings.

In terms of managerial implications, study 3 presents one potential coping mechanism in response to external and internal threats. Although beyond the scope of this paper, a deeper examination of other potential strategies and tactics that brand managers can use is needed and would be of vast interest. Further investigation of our hypotheses is worthwhile, especially outside the United States. Countries whose citizens have weaker baseline attachments to national identity may be less likely to be affected by our proposed mechanism.

Finally, our internal threat findings point to multiple possible consequences for democratic accountability. To the extent that weaker attachments to national identity make nationalist political agendas less appealing, we have established a psychological foundation for democratic accountability that may help restrain nationalist excesses. Alternately, if weaker attachment to national identity prompts broader political disengagement, harsh policies toward outgroups can erode democratic accountability. Given that nationalist political strategies also often magnify internal racial and ethnic differences, the negative consequences of weaker accountability would likely fall disproportionately on these groups. As such, our use of consumption behavior to measure shifting attachments to social identity can be applied more broadly. We hope that this work will spur further exploration of this topic.

References

- Althaus, Scott L., Brittany H. Bramlett, and James G. Gimpel (2012). “When War Hits Home: The Geography of Military Losses and Support for War in Time and Space.” *Journal of Conflict Resolution*, 56 (3), 382–412.
- Aquino, Karl, Americus Reed II, Stefan Thau, and Dan Freeman (2007). “A Grotesque and Dark Beauty: How Moral Identity and Mechanisms of Moral Disengagement Influence Cognitive and Emotional Reactions to War.” *Journal of Experimental Social Psychology*, 43, 385–92.
- Ataman, M. Berk, Harald J. Van Heerde, and Carl F. Mela (2010). “The Long-Term Effect of Marketing Strategy on Brand Sales.” *Journal of Marketing Research*, 47 (5), 866–82.
- Badea, Constantina, and David K. Sherman (2019). “Self-Affirmation and Prejudice Reduction: When and Why?” *Current Directions in Psychological Science*, 28 (1), 40–6.
- Balabanis, George, and Adamantios Diamantopoulos (2011). “Gains and Losses from the Misperception of Brand Origin: The Role of Brand Strength and Country-of-Origin Image.” *Journal of International Marketing*, 19 (2), 95–116.
- Becker, Sascha O., Thiemo Fetzer, and Dennis Novy (2017). “Who Voted for Brexit? A Comprehensive District-Level Analysis.” *Economic Policy*, 32 (92), 601–50.
- Bilkey, Warren J., and Erik Nes (1982). “Country-of-Origin Effects on Product Evaluations.” *Journal of International Business Studies*, 13 (1), 89–100.
- Branscombe, Nyla R., Naomi Ellemers, Russell Spears, and Bertjan Doosje (1999). “The Context and Content of Social Identity Threat.” In *Social Identity: Context, Commitment, Content*. Oxford, England: Blackwell Publishers Inc., p. 35–58.
- Brewer, John D. (1984). “Looking Back at Fascism: A Phenomenological Analysis of BUF Membership.” *Sociological Review*, 32 (4), 742–60.

- Brown, Rupert, Steve Hinkle, Pamela G. Ely, Lee Fox-Cardamone, Pam Maras, and Laurie A. Taylor (1992). "Recognizing Group Diversity: Individualist-Collectivist and Autonomous-Relational Social Orientations and Their Implications for Intergroup Processes." *British Journal of Social Psychology*, 31 (4), 327–42.
- Bronnenberg, Bart J., Michael W. Kruger, and Carl F. Mela (2008). "Database Paper: The IRI Marketing Data Set." *Marketing Science*, 27 (4), 745–48.
- Chae, Boyoun Grace, Darren W. Dahl, and Rui Juliet Zhu (2017). "'Our' Brand's Failure Leads to 'Their' Product Derogation." *Journal of Consumer Psychology*, 27 (4), 466–72.
- Cian, Luca, Aradhna Krishna, and Norbert Schwarz (2015). "Positioning Rationality and Emotion: Rationality Is Up and Emotion Is Down." *Journal of Consumer Research*, 42 (4), 632–51.
- Clement, Scott (2019). "The Public Rejected Trump's Child-Separation Policy, but a Majority Supports His Push to Detain Families until Court Hearings." *Washington Post*, July 13. Retrieved from: <https://tinyurl.com/y2peg9nx>.
- Coleman, Nicole Verrochi, Patti Williams, and Andrea C. Morales (2018). "Identity Threats, Compensatory Consumption, and Working Memory Capacity: How Feeling Threatened Leads to Heightened Evaluations of Identity-Relevant Products." *Journal of Consumer Research* 46, (1): 99-118.
- Cutright, Keisha M., Eugenia C. Wu, Jillian C. Banfield, Aaron C. Kay, and Gavan J. Fitzsimons (2011). "When Your World Must Be Defended: Choosing Products to Justify the System." *Journal of Consumer Research*, 38 (1), 62–77.
- Dion, Kenneth L. (2002). "The Social Psychology of Perceived Prejudice and Discrimination." *Canadian Psychology/Psychologie Canadienne*, 43 (1).
- Doosje, Bertjan, Naomi Ellemers, and Russell Spears (1995). "Perceived Intragroup Variability as

- a Function of Group Status and Identification.” *Journal of Experimental Social Psychology*, 31, 410–36.
- Duara, Prasenjit (2018). “Development and the Crisis of Global Nationalism.” *Brookings*, October 4. Retrieved from: <https://tinyurl.com/yxc7rk9e>.
- Duckitt, John, and Chris G. Sibley (2010). “Personality, Ideology, Prejudice, and Politics: A Dual-Process Motivational Model.” *Journal of Personality*, 78 (6), 1861–94.
- Elder, Ryan S., and Aradhna Krishna (2011). “The ‘Visual Depiction Effect’ in Advertising: Facilitating Embodied Mental Simulation through Product Orientation.” *Journal of Consumer Research*, 38 (6), 988–1003.
- Eder, Paul, Karl Aquino, Carl Turner, and Americus Reed (2006). “Punishing Those Responsible for the Prison Abuses at Abu Ghraib: The Influence of the Negative Reciprocity Norm (NRN).” *Political Psychology*, 27 (6), 807–21.
- Elsbach, Kimberly D., and C. B. Bhattacharya (2001). “Defining Who You Are By What You’re Not: Organizational Disidentification and the National Rifle Association.” *Organization Science*, 12 (4), 393–413.
- Finnel, Stephanie, Americus Reed, and Karl Aquino (2011). “Promoting Multiple Policies to the Public: The Difficulties of Simultaneously Promoting War and Foreign Humanitarian Aid.” *Journal of Public Policy & Marketing*, 30 (2), 246–63.
- Gardner, Wendi L., Shira Gabriel, and Laura Hochschild (2002). “When You and I Are ‘We,’ You Are Not Threatening: The Role of Self-Expansion in Social Comparison.” *Journal of Personality and Social Psychology*, 82 (2), 239.
- Gartner, Scott Sigmund. (2008). “The Multiple Effects of Casualties on Public Support for War: An Experimental Approach.” *American Political Science Review*, 102 (1), 95–106.

- Gartner, Scott Sigmund. (2009). "Evaluating Claims of Social Connection to International Conflict Casualties." *International Interactions*, 35 (3), 352–64.
- Graham, Jesse, Jonathan Haidt, and Brian A. Nosek (2009). "Liberals and Conservatives Rely on Different Sets of Moral Foundations." *Journal of Personality and Social Psychology*, 96 (5), 1029.
- Greenberg, Karen J. (Ed.) (2005). *The Torture Debate in America*. Cambridge University Press.
- Hayes, Andrew F. (2017). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Publications.
- Hogg, Micheal A. (2006). "Social Identity Theory." In Peter James Burke (Ed.), *Contemporary Social Psychological Theories*. Stanford, CA: Stanford University Press, p. 111–36.
- Hornsey, Matthew J., Tina Oppes, and Alicia Svensson (2002). "'It's OK If We Say It, but You Can't': Responses to Intergroup and Intragroup Criticism." *European Journal of Social Psychology*, 32 (3), 293–307.
- Huddy, Leonie, and Nadia Khatib (2007). "American Patriotism, National Identity, and Political Involvement." *American Journal of Political Science*, 51 (1), 63–77.
- Jost, John T., and Mahzarin R. Banaji (1994). "The Role of Stereotyping in System-Justification and the Production of False Consciousness." *British Journal of Social Psychology*, 33 (1), 1–27.
- Jost, John T., Melanie Langer, and Vishal Singh (2017). "The Politics of Buying, Boycotting, Complaining, and Disputing: An Extension of the Research Program by Jung, Garbarino, Briley, and Wynhausen." *Journal of Consumer Research*, 44 (3), 503–10.
- Jost, John T., and Orsolya Hunyady (2005). "Antecedents and Consequences of System-Justifying Ideologies." *Current Directions in Psychological Science*, 14 (5), 260–65.

- Jung, Kiju, Ellen Garbarino, Donnel A. Briley, and Jesse Wynhausen (2017). "Political Ideology and Consumer Research beyond Complaining Behavior: A Response to the Commentaries." *Journal of Consumer Research*, 44 (3), 511–18.
- Khan, Romana, Kanishka Misra, and Vishal Singh (2013). "Ideology and Brand Consumption." *Psychological Science*, 24 (3), 326–33.
- Kreiner, Glen E., Blake E. Ashforth, and David M. Sluss (2006). "Identity Dynamics in Occupational Dirty Work: Integrating Social Identity and System Justification Perspectives." *Organization Science*, 17 (5), 619–36.
- Kriner, Douglas L., and Francis X. Shen (2010). *The Casualty Gap: The Causes and Consequences of American Wartime Inequalities*. Oxford, England: Oxford University Press.
- Kriner, Douglas L., and Francis X. Shen (2012). "How Citizens Respond to Combat Casualties: The Differential Impact of Local Casualties on Support for the War in Afghanistan." *Public Opinion Quarterly*, 76 (4), 761–70.
- Liu, Scott S., Keith F. Johnson, and Keith F. Johnson (2005). "The Automatic Country-of-Origin Effects on Brand Judgments." *Journal of Advertising*, 34 (1), 87–97.
- Leclerc, France, Bernd H. Schmitt, and Laurette Dubé (1994). "Foreign Branding and Its Effects on Product Perceptions and Attitudes." *Journal of Marketing Research*, 31 (2), 263–70.
- Liu, Jia, and Dirk Smeesters (2010). "Have you seen the news today? The effect of death-related media contexts on brand preferences." *Journal of Marketing Research* 47, no. 2 251-262.
- Lyubansky, Mikhail (2008). "On 9-11, Patriotism, and the U.S. Flag." *OpEd News*, September 11. Retrieved from: <https://tinyurl.com/y3ww8sms>.
- Marques, José M., Dario Paez, and Dominic Abrams (1998). "Social Identity and Intragroup Differentiation as Subjective Social Control." In Worchel, Stephen (Ed.). *Social Identity:*

International Perspectives. London: Sage Publications, p. 124–41.

Meacham, Matthew, François Faelli, Eduardo Giménez and John Blasberg (2018). “Overcoming the Existential Crisis in Consumer Goods.” Bain & Company, March 7. Retrieved from: <https://tinyurl.com/yyaeu64o>.

Mehta, Dhruvil (2019). “Separating Families at the Border Is Really Unpopular.” *FiveThirtyEight*, June 19. Retrieved from: <https://tinyurl.com/y2a9yeps>.

Newport, Frank (2019). “Americans Say China Trade Unfair, Trade With Canada, EU Fair.” *Gallup*, July 9. Retrieved from: <https://tinyurl.com/y399lcy2>.

Pew Research Center (2004). “76% Have Seen Prison Pictures; Bush Approval Slips.” May. Retrieved from: <https://tinyurl.com/y4vou6xq>.

Petriglieri, Jennifer Louise (2011). “Under Threat: Responses to and the Consequences of Threats to Individuals’ Identities.” *Academy of Management Review*, 36 (4), 641–62.

Reed II, Americus, and Mark R. Forehand (2016) "The ebb and flow of consumer identities: the role of memory, emotions and threats." *Current Opinion in Psychology* 10 94-100.

Reed II, Americus, Mark R. Forehand, Stefano Puntoni, and Luk Warlop (2012). "Identity-based consumer behavior." *International Journal of Research in Marketing* 29, no. 4 310-321.

Rhee, Eun Soo, and Wan Seop Jung (2019). “Brand Familiarity as a Moderating Factor in the Ad and Brand Attitude Relationship and Advertising Appeals.” *Journal of Marketing Communications*, 25 (6), 571–85.

Rindfleisch, Aric, James E. Burroughs, and Nancy Wong (2008). "The safety of objects: Materialism, existential insecurity, and brand connection." *Journal of Consumer Research* 36, no. 1 1-16.

Sedikides, Constantine, and Michael J. Strube. (1997). “Self-Evaluation: To Thine Own Self Be

- Good, to Thine Own Self Be Sure, to Thine Own Self Be True, and to Thine Own Self Be Better.” In *Advances in Experimental Social Psychology*, vol. 29, p. 209–69.
- Shachar, Ron, Tülin Erdem, Keisha M. Cutright, and Gavan J. Fitzsimons. (2011). “Brands: The Opiate of the Nonreligious Masses?” *Marketing Science*, 30 (1), 92–110.
- Shepherd, Steven, Tanya L. Chartrand, and Gavan J. Fitzsimons (2015). “When Brands Reflect Our Ideal World: The Values and Brand Preferences of Consumers Who Support versus Reject Society’s Dominant Ideology.” *Journal of Consumer Research*, 42 (1), 76–92.
- Sherman, David K., and Geoffrey L. Cohen (2006). “The Psychology of Self-Defense: Self-Affirmation Theory.” *Advances in Experimental Social Psychology*, 38, 183–242.
- Shimp, Terence A., and Subhash Sharma. "Consumer ethnocentrism: construction and validation of the CETSCALE." *Journal of marketing research* 24, no. 3 (1987): 280-289.
- Simon, Bernd, Giuseppe Pantaleo, and Amelie Mummendey (1995). “Unique Individual or Interchangeable Group Member? The Accentuation of Intragroup Differences Versus Similarities as an Indicator of the Individual Self Versus the Collective Self.” *Journal of Personality and Social Psychology*, 69 (1), 106–19.
- Steele, Claude M (1988). “The Psychology of Self-Affirmation: Sustaining the Integrity of the Self.” In *Advances in Experimental Social Psychology*, vol. 21. Academic Press, pp. 261-302.
- Steenkamp, Jan-Benedict EM, Rajeev Batra, and Dana L. Alden (2003). “How Perceived Brand Globalness Creates Brand Value.” *Journal of International Business Studies*, 34 (1), 53–65.
- Tajfel, Henri and John C. Turner (1979). “An Integrative Theory of Intergroup Conflict.” In Austin, William G., and Stephen Worchel (Eds.) *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks/Cole Publishing Company, p. 33–47.
- Tsang, Jo-Ann (2002). “Moral Rationalization and the Integration of Situational Factors and

- Psychological Processes in Immoral Behavior.” *Review of General Psychology*, 6 (1) 25–50.
- Usunier, Jean-Claude, and Janet Shaner (2002). “Using Linguistics for Creating Better International Brand Names.” *Journal of Marketing Communications*, 8 (4), 211–28.
- Van Heerde, Harald, Kristiaan Helsen, and Marnik G. Dekimpe (2007). “The Impact of a Product-Harm Crisis on Marketing Effectiveness.” *Marketing Science*, 26 (2), 230–45.
- Wade-Benzoni, Kimberly A., Leigh Plunkett Tost, Morela Hernandez, and Richard P. Larrick. “It’s only a matter of time: Death, legacies, and intergenerational decisions.” *Psychological Science* 23, no. 7 (2012): 704-709.
- Weiss, Elizabeth (2014). “American Ads, American Values.” *New Yorker*, March 14. Retrieved from: <https://tinyurl.com/y2pufang>.
- Wilson, Andrew E., Michael D. Giebelhausen, and Michael K. Brady (2017). “Negative Word of Mouth Can Be a Positive for Consumers Connected to the Brand.” *Journal of the Academy of Marketing Science*, 45 (4), 534–47.
- White, Katherine, and Jennifer J. Argo (2009). “Social Identity Threat and Consumer Preferences.” *Journal of Consumer Psychology*, 19 (3), 313–25.
- White, Katherine, Jennifer J. Argo, and Jaideep Sengupta (2012). “Dissociative versus Associative Responses to Social Identity Threat: The Role of Consumer Self-Construal.” *Journal of Consumer Research*, 39 (4), 704–19.
- White, Katherine, and Darren W. Dahl (2007). “Are All Out-Groups Created Equal? Consumer Identity and Dissociative Influence.” *Journal of Consumer Research*, 34 (4), 525–36.
- Wohl, Michael J.A., Nyla R. Branscombe, and Yechiel Klar. “Collective Guilt: Emotional Reactions When One’s Group Has Done Wrong or Been Wronged.” *European Review of Social Psychology*, 17 (1), 1–37.

Table 1: Brand Examples Across American Score Values

<i>American Score</i>	Brand Example (Product Category)
7	Sam Adams Boston Lager (beer) Kentucky Gold (ketchup/mustard)
6	Land O'Lakes (margarine/butter) Phillies (hot dogs)
5	Olde Cape Cod (spaghetti sauce) Swanson American Recipes (frozen dinners)
4	Wise (salty snacks) Dad's Root Beer (carb. beverages)
3	Maple Leaf (hot dogs) Van De Kamps (frozen dinners)
2	Life in Provence Aioli (mayonnaise) Jubilee (ketchup/mustard)
1	Royal Scot (margarine/butter) World Trend (toothbrushes)
0	König Ludwig Weiss (beer) Anna Mario's (spaghetti sauce)

Table 2: Baseline Results for External and Internal Threats

Variable	Model 1	Model 2
Intercept	0.001*** (.00012)	9.9e-04*** (1.2e-04)
$AbuG_i * AmScore_{ijk}$	-4e-06*** (1e-06)	-4e-06*** (1e-06)
$Cas_{\mu} * AmScore_{ijk}$		2.37e-04*** (5.7e-05)
$AbuG_i$	1e-06 (3e-06)	2e-06 (3e-06)
$AmScore_{ijk}$	-5.24e-04*** (2.6e-05)	-5.2e-04*** (2.6e-05)
Cas_{μ}		-6.5e-04** (2.6e-04)
$HomePrice_{\mu}$	2.7e-05*** (3e-06)	2.7e-05*** (3e-06)
$Enlistments_j$	-1.74e-03*** (2.8e-04)	-1.68e-03*** (2.8e-04)
$HomePrice_{\mu} * AmScore_{ijk}$	-5e-06*** (1e-06)	-5e-06*** (1e-06)
$Enlistments_j * AmScore_{ijk}$	2.88e-04*** (6.2e-05)	2.67e-04*** (6.2e-05)
$(Price_{ijkt}^{2004} - Price_{ijkt}^{2001})$	-5.28e-04*** (1e-05)	-5.27e-04*** (1e-05)
$(NumSkus_{ijkt}^{2004} - NumSkus_{ijkt}^{2001})$	0.0085*** (9e-06)	0.0085*** (9e-06)
<i>R-square</i>	12.7%	12.7%
<i>N</i>	6,344,222	6,344,222

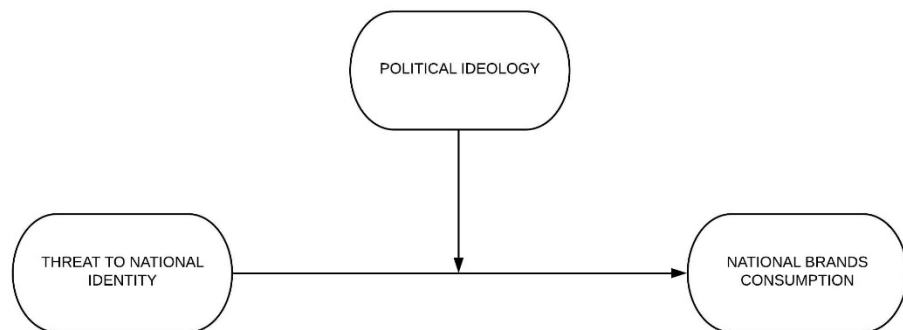
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

Figure 1: Conceptual Framework and Study Overview

Main
phenomenon
Study 1
(observational
data)
H2



Moderation
Study 1
(observational
data)
H4



Mediation
Study 2 and 3
(experimental
data)
H1a/b, H3

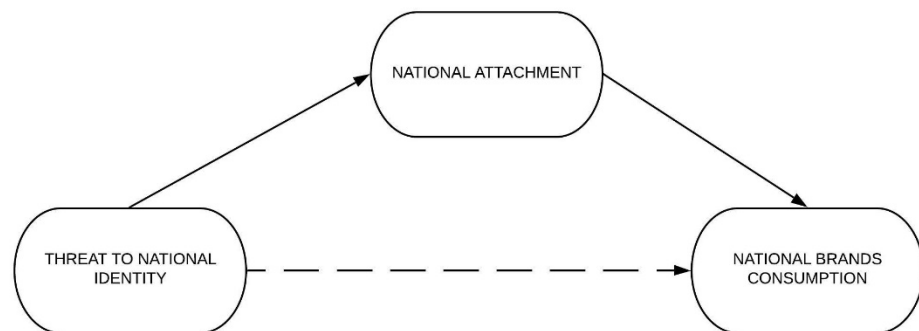


Figure 2: Weekly Trends: US War Casualties and Abu Ghraib Search Trends

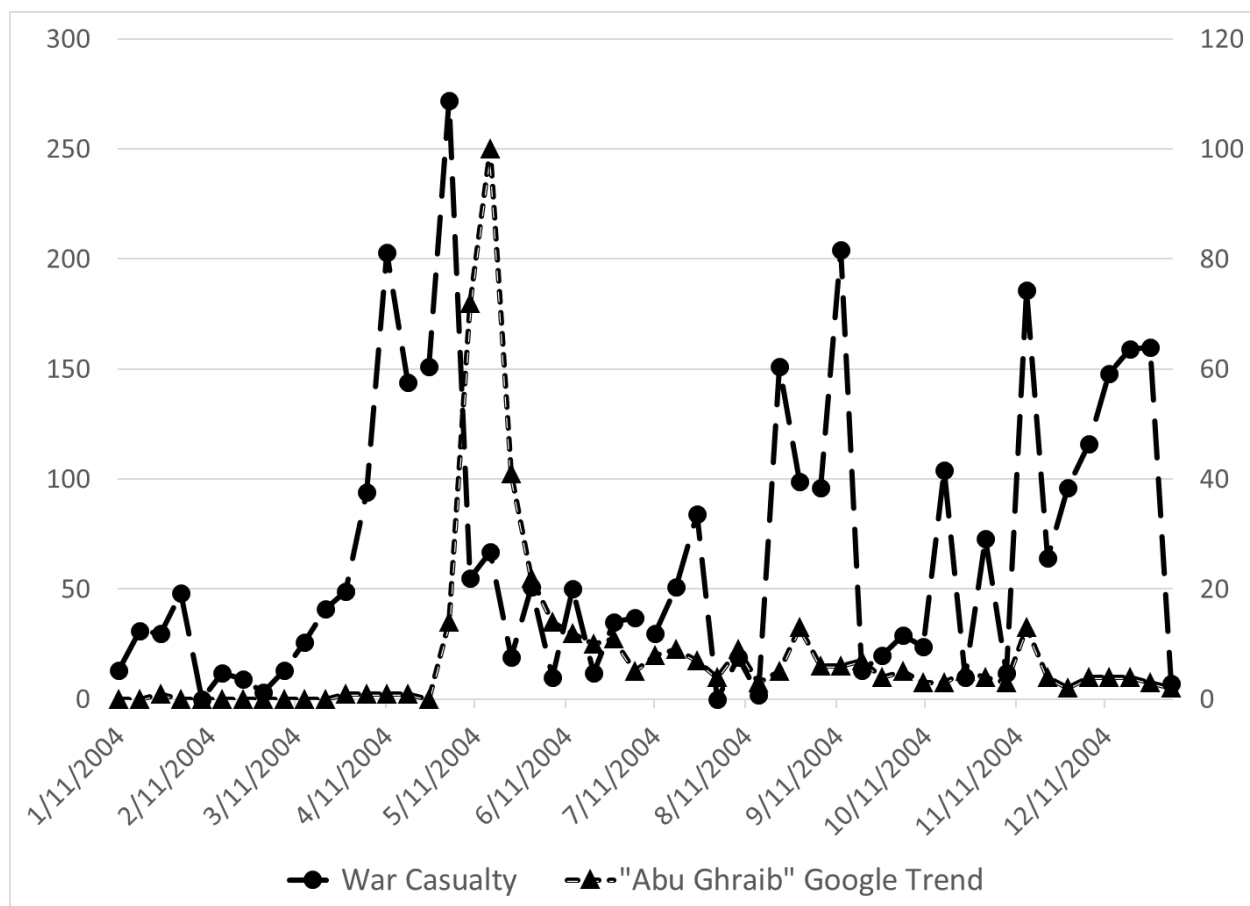


Figure 3: Moderating Effect of Political Ideology

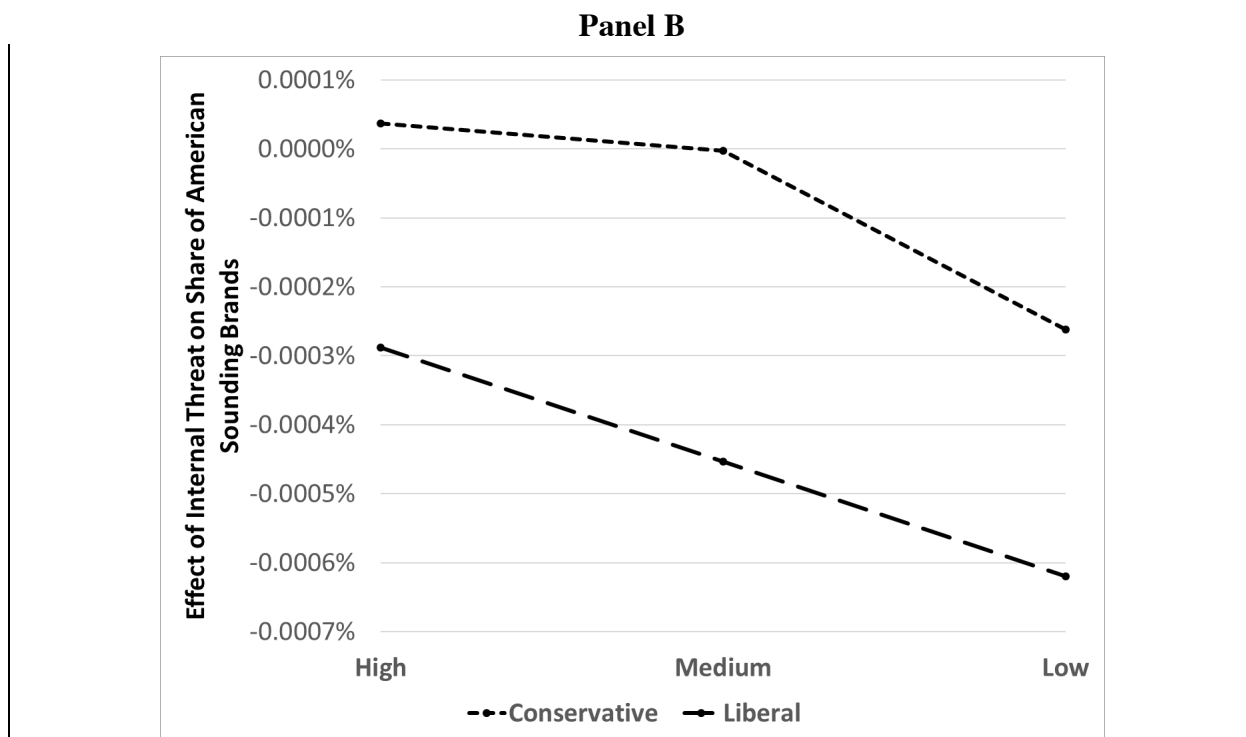
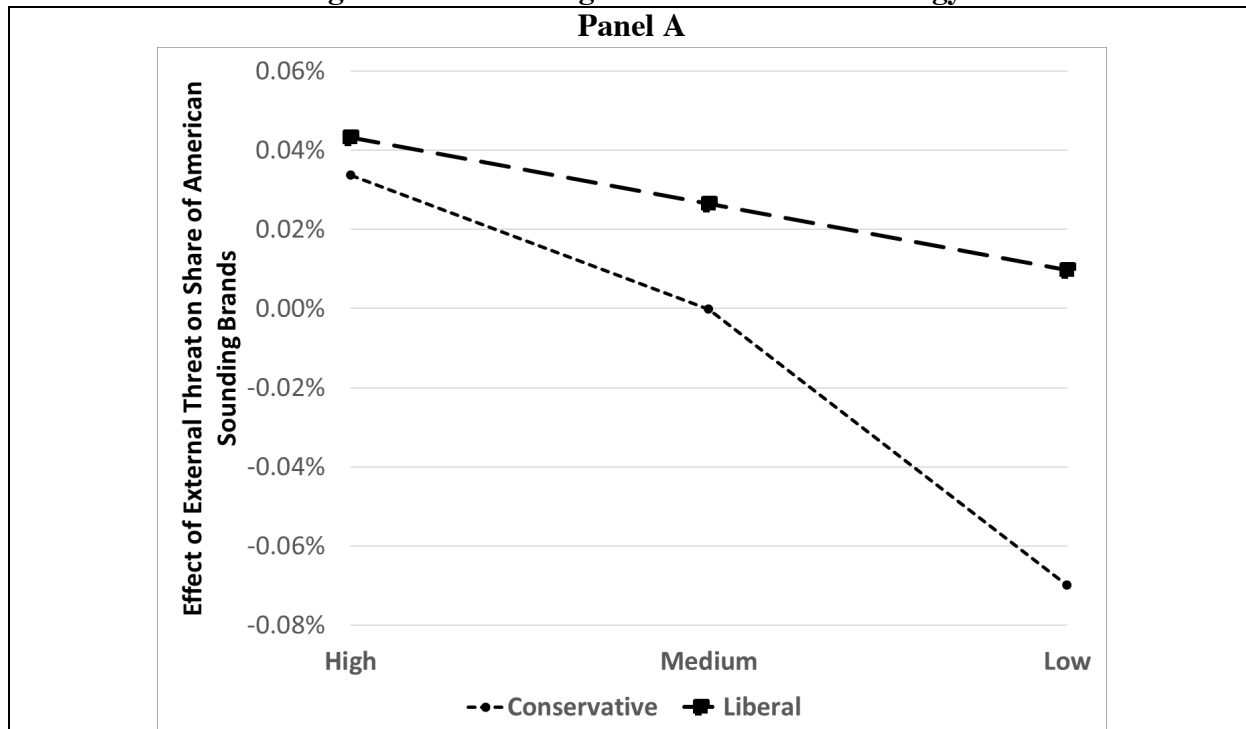


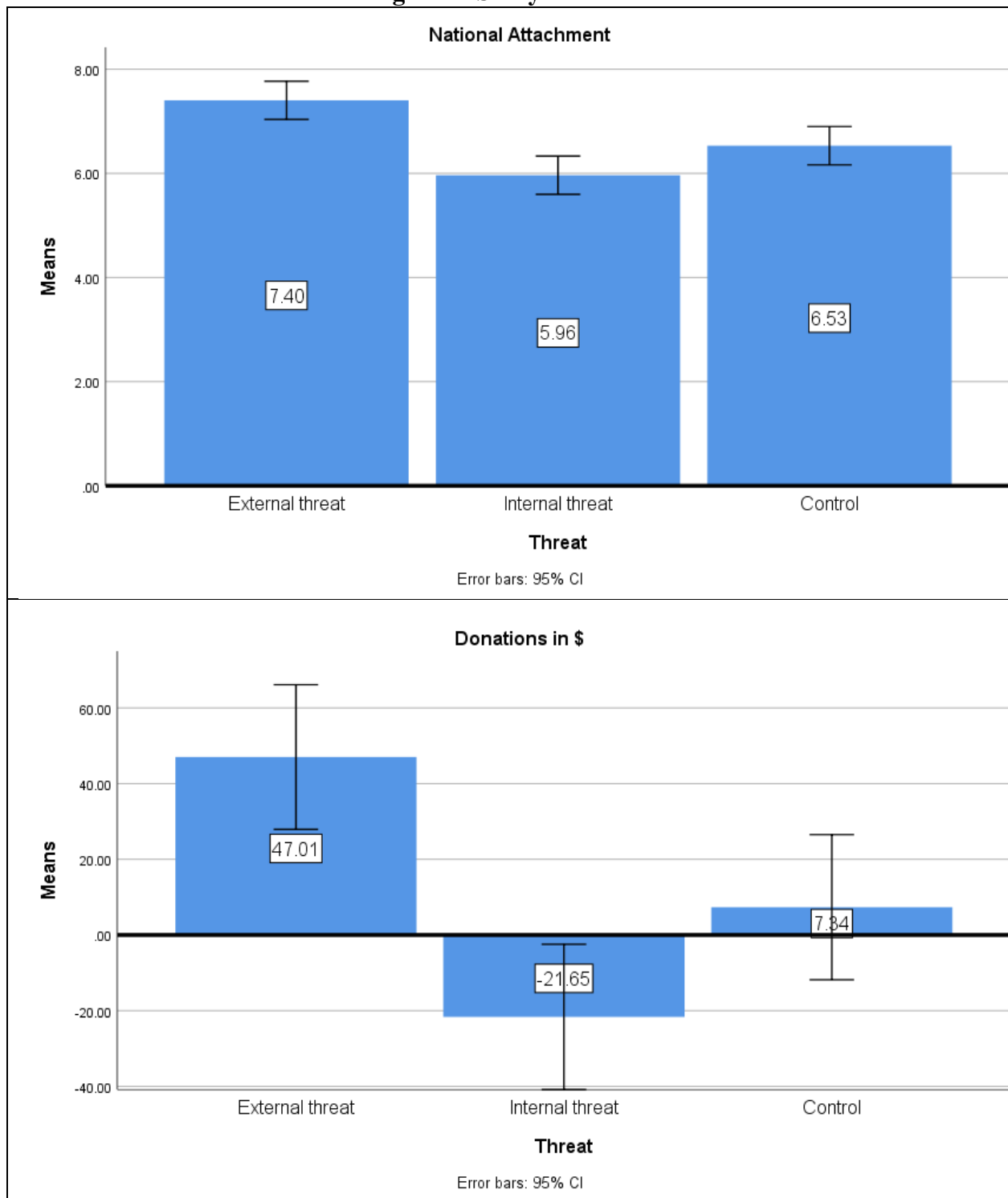
Figure 4: Study 2 Results

Figure 5: Study 3 Stimuli and Results

