On the Automatic Association Between America and Aggression for News Watchers

Melissa J. Ferguson
Cornell University

Ran R. Hassin
The Hebrew University

Across three experiments, the nonconscious perception of American cues increase the accessibility of aggressive constructs in memory, aggressive and negative judgments of other people, and aggressive displays of behavior following a mild provocation. These effects emerge only for American participants who regularly follow the American political news media. For American participants who do not follow the news, these effects are absent or tend to be in the opposite direction. Participants' political party orientation (Republican vs. Democratic) does not moderate any of the results. Interpretations and implications of the findings are discussed.

Keywords: implicit social cognition; nationalism; ideology; aggression

How do the nationalistic images that permeate the social and cultural atmosphere of a nation influence people’s thought and behavior, if at all? The American flag, for instance, is the most widely known symbol of the United States and is displayed throughout the public and private spheres. It shows up on schools, office buildings, homes, libraries, and many a politician’s lapel. National surveys found that between 74% and 82% of Americans reported displaying the flag on their homes, cars, or person following the 9/11 attacks (as cited in Skitka, 2005), and the flag remains an omnipresent symbol in the American political and cultural landscape (e.g., Gerstenfeld, 2002; Kellner, 2003). But, given that such nationalistic cues are normally part of the background—seemingly passive cues in our everyday surroundings—do they exert any influence on Americans’ thoughts and behaviors? And if so, what is the nature of the influence?

Political and social psychologists have speculated that even though nationalistic cues typically remain in the background, they can nevertheless subtly “remind” people of their status as national citizens (see Billig, 1995). For instance, an American flag hanging in front of the public library can reinforce a passerby’s identification as a citizen of the United States, whatever that might entail. In this way, nationalistic cues can operate below the radar to maintain and reinforce nationalism and related ideologies (see also Althusser, 1994; Augoustinos, 1999; Bem & Bem, 1970; Freedon, 2000; Jost, Banaji, & Nosek, 2004). This suggests the possibility that such cues might be both associated with a rich array of knowledge, and able to activate that knowledge without people’s awareness or consent.

Consistent with this possibility, research in social and cognitive psychology has demonstrated that the mere perception of a given stimulus can lead to a host of implicit effects on behavior (e.g., Dijksterhuis, Chartrand, & Aarts, 2007; Greenwald & Banaji, 1995; Hassin, Uleman, & Bargh, 2005). In particular, the perception of any stimulus activates an array of associated memories that can then nonconsciously influence how the person interprets and responds to his or her world. This research would therefore predict that we may at times unknowingly and unintentionally think or behave in line with nationalistic cues, even those by which we would prefer to remain uninfluenced (see Wilson & Brekke, 1994).
In the current article we examined whether American cues are implicitly associated with one of the most salient themes in contemporary public discourse about the nation: aggression. A sizable portion of daily news about the nation is concerned with America’s aggressive pursuits toward other countries or groups, America being the target of aggression by other entities or individuals, and aggression occurring between and among Americans. Given the salience of this theme, we tested whether an automatic link in memory between the nation and aggression exists, and whether the mere perception of American cues automatically leads to increased accessibility of aggressive concepts in memory, more aggressive judgments of other people, and more aggressive behavior following a minor provocation. In the following sections, we discuss research on implicit effects of nationalistic cues, implicit effects of American symbols in particular, and potential moderators of the link between America and aggression.

**Implicit Effects of Nationalistic Symbols**

There is a long history throughout the social sciences of the notion that the beliefs and doctrines associated with a given nation (or any political, social, or economic system) can influence people’s thought and behavior in an implicit manner. In fact, many scholars have argued that ideological knowledge operates primarily nonconsciously (e.g., Altemeyer, 1998; Bem & Bem, 1970; Berger & Luckmann, 1966; Brewer, 1979; Freedon, 2000; Sidanius & Pratto, 1999; Tajfel, 1982) and can be activated outside of awareness by symbols, events, and icons relevant to the ideology (e.g., Billig, 1995; Gardner, Gabriel, & Lee, 1999; Jost, Banaji, & Nosek, 2004; Kay & Jost, 2003). For example, in his work on banal nationalism, Billig (1995, p. 8) noted that

In so many little ways, the citizenry are daily reminded of their national place in a world of nations. However, this reminding is so familiar, so continual, that it is not consciously registered as reminding. The metonymic image of banal nationalism is not a flag which is being consciously waved with fervent passion; it is the flag hanging unnoticed on the public building.

Billig (1995) argued that knowledge associated with a given nation can be activated easily and unintentionally from cues in the environment and that such an implicit influence is one reason for the durable and pervasive influence of nationalism on people’s thought and behavior. Citizens simply do not realize that their assumptions and beliefs about their nation are being activated and reinforced (see also Jost, Banaji, & Nosek, 2004; Jost, Fitzsimons, & Kay, 2004; Jost & Kay, 2005; Jost, Pelham, & Carvallo, 2002; Kay & Jost, 2003), and thus they have no opportunity to control the influence of that knowledge on their behavior (see also Wilson & Brekke, 1994).

Researchers have also argued that cultural symbols and icons have incredibly rich meaning because of their denotation of many elements of a given culture (see Betsky, 1997; Gardner et al., 1999; Nisbett, 2003; Ortner, 1973, p. 1339). In particular, an icon can represent a large assortment of culturally relevant values, beliefs, principles, behaviors, and emotions. Nationalistic cues, such as the American flag, constitute a quintessential example of such cultural icons. Hong, Morris, Chiu, and Benet-Martinez (2000), for instance, demonstrated that when bicultural individuals explicitly and intentionally thought about the icons of one of the cultures to which they belonged, they subsequently expressed values consistent with that culture. This work suggests that explicit and conscious exposure to nationalistic symbols has the potential to shift one’s attitudes in line with the kinds of information associated with those symbols. But what about the potential for such nationalistic symbols to influence people nonconsciously?

Whereas many social science researchers have speculated on how nationalistic symbols may influence people implicitly, work in social and cognitive psychology over the last two decades provides empirical support for such a possibility. This work demonstrates that a wide range of types of information can become associated in memory with a given stimulus and become activated on the mere perception of that stimulus (e.g., Bargh & Ferguson, 2000; Greenwald & Banaji, 1995; Hassin et al., 2005). Once that information has been activated, it can influence the stimuli to which the perceiver then attends, as well as the ways in which the perceiver interprets and responds to subsequently encountered stimuli more generally. This literature suggests that the (conscious or nonconscious) perception of American symbols should inevitably activate a wealth of information, which should then have the potential to implicitly influence one’s subsequent thought and behavior. What kinds of implicit effects might American cues have on thought and behavior?

**Implicit Effects of American Symbols**

Although there is some work on people’s explicit and conscious thoughts and reactions to American symbols (e.g., Hong et al., 2000), there has been very little work on the implicit effects of such symbols (though see Butz, Plant, & Doerr, 2007; Devos & Banaji, 2005). One exception is recent work by Devos and Banaji (2005). These researchers showed that American participants possessed an implicit association between America and Whiteness (versus non-White ethnicities). Such an
association suggests that for some people America might be associated at an implicit level with a subtle, pro-White bias. Given the evidence for the predictive validity of implicit attitudes, this kind of bias should have implications for intergroup attitudes and behavior (e.g., see Fazio & Olson, 2003; Poehlman, Uhlmann, Greenwald, & Banaji, 2005).

But, beyond effects on intergroup attitudes, what about more general constructs that would potentially influence a person’s behaviors across groups and situations? For instance, are American symbols associated with the values and principles that are commonly identified as part of the American ethos, such as liberty and justice? Interestingly, Butz et al. (2007) recently found that American symbols do seem to be associated with egalitarianism, at least for those participants who highly identify with the nation. The fact that America seems to be associated with an implicit pro-White bias on one hand (Devos & Banaji, 2005) and egalitarianism on the other speaks to the purported richness of information and knowledge associated with such familiar, highly visible cultural icons (see Betsky, 1997; Ortner, 1973, p. 1339). Indeed, there are potentially many implicit effects of such symbols, and these effects should depend on various personal and situational factors.

We seek to expand on the research on implicit American nationalism by arguing more broadly that the kinds of constructs, goals, attitudes, beliefs, and so on associated with America should depend on the images and themes that are commonly discussed or considered in reference to the nation. Although such themes would surely include values and principles that are part of the widely endorsed American ethos, they should also include the salient issues and matters evident in contemporary national news and politics. In particular, we focus on the construct of aggression. This construct has consistently been a salient aspect of public discourse about the nation. With regard to the second consideration, is it likely that people who regularly follow the news, however, should be acutely aware of the American involvement in Iraq and the related aggression and violence (possibly in terms of both violence against Americans and violence perpetrated by Americans). For such people, memories about aggression and violence may become immediately accessible as soon as they perceive an American cue. Those who do not regularly follow the news, however, should be relatively less accessible and influential for them compared with those who do follow the news. For example, although people who do not follow the news presumably know that America is waging a violent war in Iraq, the information about such violence may not be among the first kinds of memories that become activated in memory as soon as they perceive an American cue.

How likely is it that following the American news media leads to the formation of an association between America and aggression? This arguably depends on two considerations: whether there is a salient pairing of America and aggression in the news, and whether people are capable of learning that association. With regard to the first consideration, there is ample anecdotal evidence that American news has focused over the last 5 years on national issues related to terror, war, and violence. Additionally, analyses of the content of American news by the Project for Excellence in Journalism (part of the Pew Research Center; see www.journalism.org) confirm that the war on terror has consistently been a major news story over the last several years, across news media (print, television, Web). This suggests that the association between America and aggression is indeed a salient part of public discourse about the nation. With regard to the second consideration, is it likely that people pick up on this association? Research suggests that those who watch the media are capable of learning such an association. People can learn and then behave in line with aggressive tendencies and concepts from watching violent media (e.g., see Anderson & Bushman, 2002; Berkowitz, 1984; Bushman & Cantor, 2003). People also adjust their opinions according to the way in which the news media covers topics and policies (e.g., see Iyengar & Kinder, 1987; McCombs & Shaw, 1991; Strange & Leung, 1999). It therefore seems likely that people who repeatedly see the pairing between America and aggression on the news tend to form a stronger association between the two compared with those who do not repeatedly see such a pairing.

American News Media

Should everyone possess an implicit association in memory between America and aggression? Because this association is highly visible and salient in the American news media, those who watch and follow the news should possess an especially strong association and therefore may be the most likely to show the predicted implicit effects. The news provides a steady stream of details and commentary about the role of the nation in aggressive pursuits (e.g., the wars in Iraq and Afghanistan), the nation as a target of aggressive acts by others (e.g., terrorists), and the violence and aggression that occur between Americans (e.g., school shootings). Indeed, the news is the primary source of information about such national events, concerns, and policies. Moreover, although people who do not watch the news are undoubtedly aware of such events and concerns, the association should be relatively less accessible and influential for them compared with those who do follow the news. For example, although people who do not follow the news presumably know that America is waging a violent war in Iraq, the information about such violence may not be among the first kinds of memories that become activated in memory as soon as they perceive an American cue.
It should also be noted that people who possess a strong association in memory between America and aggression, for whatever reason, might also be more likely to follow the news in the first place. News watchers may follow the news to stay abreast of information relevant to the association that they already possess. For instance, those who are particularly concerned about America’s role in foreign affairs may be more likely to follow the news about such ventures. It seems likely that the association for such people would only be strengthened by repeatedly viewing information consistent with it. We test whether the association in memory between America and aggression is in fact stronger in news watchers versus nonnews watchers, but we return to the issue of the development of that association in the General Discussion section.

Interestingly, the moderator of exposure to American news media may be even more important for predicting aggression than people’s political party and ideological orientation. Conservative students are more willing than liberal students to display the American flag in their dorm rooms, which suggests that the two groups may differ in terms of their identification with, and reaction to, the national flag (see Carney, Jost, & Gosling, 2005). However, given the abundance of evidence for dissociations between conscious beliefs and implicit effects (e.g., see Wilson & Brekke, 1994), even though liberals and conservatives may differ in their conscious endorsements of the flag, they may nevertheless share the same implicit association between America and aggression as long as they follow the news. We addressed this possibility in each experiment.

Overview of Research

Across the experiments, we exposed participants to American symbols in a subtle, covert manner. In Experiment 1, a subtle reminder of the flag was present in the lab for some participants (but not others). Importantly, because we sought to test the implicit effects of American cues on judgment and behavior, the presence of the flag was subtle, and we extensively debriefed participants to ascertain their awareness of the flag. In Experiment 2, we used the established and well-known scrambled sentences task (e.g., Srull & Wyer, 1979) as the implicit priming method (see also Bargh & Chartrand, 2000). Again, in Experiment 2 we carefully ensured that participants were not aware of any “reminders” of America. Finally, in Experiment 3, an American symbol was subliminally primed via a computer task to further decrease any chance that participants were aware of the prime. Thus, across all three experiments we tested the kinds of effects that unintentionally and nonconsciously follow from the mere perception of American cues.

We also used three measures of aggression across the experiments. Experiment 1 tested whether the perception of the American flag increased the accessibility of war and aggression according to a word-fragment completion task. Experiment 2 examined whether the covert perception of American cues led to more aggressive judgments of another person. Finally, Experiment 3 tested whether the subliminal perception of the American flag increased relative displays of aggressiveness following a mild provocation.

In all experiments, as described earlier, we predicted that the effects should emerge most strongly for those with high versus low exposure to American news.

Whereas the measurement of party orientation as a variable is well established (Green, Palmquist, & Schickler, 2002; Miller & Shanks, 1996), our measurement of news exposure was developed in the present research. We therefore conducted a pilot study to ensure the validity of the news exposure variable.

PILOT STUDY

To the extent that people report following U.S. political news, we expected them to possess more knowledge about current events, as well as political knowledge in general, compared with those who say that they rarely follow the news.

Method

Participants. Participants were 24 undergraduates at Cornell University who participated in exchange for course credit.

Materials. Questions assessing knowledge of current events were chosen by monitoring newspapers (The New York Times, Los Angeles Times, The Washington Post) and news Web sites (CNN, MSNBC, Fox) to identify well-covered current events during the 2 weeks before the experiment. Twelve questions were selected to gauge participants’ knowledge of current events. These questions are listed in the Appendix and include events such as the announcement of the retirement of Justice Sandra Day O’Connor, a recent insurgency attack in Iraq, and the coverage surrounding the leak concerning Valerie Plame. Participants were also given 10 questions (see the Appendix) that assessed their knowledge of people in key political positions. For example, participants were asked to identify the governor of their home state, the secretary of state, and the people commonly referred to by the press as “Neo-Cons.”
Procedure. Participants were asked to complete a questionnaire that contained current events and political knowledge questions. Afterward, participants were asked to answer additional questions, including filler questions (e.g., academic questions) and questions about their media habits and political orientation. Participants were asked to indicate how often they watched television according to a 9-point scale (0 = not at all, 8 = more than 5 hours a day), the extent to which they followed U.S. political news on average according to a 10-point scale (1 = rarely, 10 = multiple times a day), how often they watched political news on the television according to a 10-point scale (1 = rarely, 10 = multiple times a day), how often they read The New York Times, how often they watched The Daily Show With Jon Stewart, and how often they watched the Fox news channel, all according to 10-point scales (1 = never, 10 = everyday).

Participants were then asked to list the number and names of daily newspapers they read, news magazines they read regularly, news Web sites they visited regularly, news blogs they read regularly, news programs on the radio they listened to frequently, and the number of political organizations to which they belonged. Participants were then asked questions about school (e.g., grade point average [GPA], major) and the degree to which they identified as Democratic, Republican, independent, conservative, and liberal on 8-point scales (0 = not at all, 7 = strong; Green et al., 2002; Miller & Shanks, 1996). Participants were asked to list the political issues that are important to them and to provide some description of each issue. After participants had completed the questionnaires, they were then fully debriefed and thanked for their participation.

Results and Discussion

Three participants indicated that they were foreign students visiting the United States (and Cornell in particular) for the summer. These participants were excluded from the analyses.

News exposure. We first assessed whether news exposure correlated with amount of television watching in general and found the two were unrelated, r(21) = -.08, p > .7. This suggests that news exposure is not simply a proxy for how much one watches television. However, as expected, news exposure was significantly correlated with watching news on television, r(21) = .56, p = .008. Next, we assessed whether news exposure was related to type of news exposure (The New York Times, The Daily Show With Jon Stewart, Fox news). The results suggested that news exposure is significantly correlated with reading The New York Times, r(21) = .65, p = .001, but unrelated to watching The Daily Show With Jon Stewart, r(21) = .32, p = .16, and Fox news, r(21) = .16, p > .5. News exposure also did not correlate with any of the explicit political orientation items (all ps > .25) or with GPA (p > .4).

News exposure and sources. News exposure was significantly correlated with number of newspapers read regularly, r(21) = .61, p = .003, and was marginally significantly correlated with number of magazines read regularly, r(21) = .37, p = .099, and number of news Web sites visited regularly, r(21) = .37, p = .097. News exposure was uncorrelated with blog visiting (p > .17), listening to radio programs (p > .17), and membership in political organizations (p > .9). News exposure did not correlate with the number of political issues participants generated (p > .4).

News exposure and knowledge of current events and political figures. To assess whether news exposure predicts current events and political knowledge, we computed the percentage of total questions answered correctly. News exposure was significantly correlated with total percentage correct, r(20) = .55, p < .01. Participants high in news exposure according to a median split correctly answered more than twice as many questions correctly (M = 37.5%) compared with those low in news exposure (M = 17%), t(18) = -2.35, p = .03.

We then assessed the relationship between news exposure and the current event questions versus names of key political figures. News exposure was significantly correlated with the percentage correct of current events questions, r(20) = .60, p = .006, and marginally significantly correlated with percentage correct of political knowledge questions, r(20) = .42, p = .069. Participants high in news exposure according to a median split correctly answered more than 2.5 times more current events questions (M = 44%) than those low in news exposure (M = 17%), t(18) = -2.67, p = .01 (two-tailed), and correctly answered marginally more political knowledge questions (M = 31%) compared with those low in news exposure (M = 16.5%), t(18) = -1.63, p = .06 (one-tailed).

Percentage total correct significantly correlated with reading The New York Times, r(20) = .49, p = .028, and watching The Daily Show With Jon Stewart, r(20) = .62, p = .004, but did not correlate with watching Fox news or any of the explicit political orientation items (all ps > .13). It also did not correlate with GPA (p > .26).

These results indicate that reported news exposure reflects the degree to which participants know about current events and political figures. The results also suggest that those with high media exposure may be
EXPERIMENT 1

In this experiment, participants were subtly primed with the American flag, or not, in a manner that approximates real-life exposure. They then completed a series of word fragments that gauged the accessibility of aggressive constructs. We also collected information on participants’ news exposure and political orientation.

Method

Participants. Participants were 74 undergraduates who participated in the experiment in exchange for course credit.

Materials. To measure the accessibility of war and aggression, the fragments “wa_” (war, was), “gu_” (gun, gum, guy, gut), and “hi_” (hit, him, hip, his) were included. The remaining fragments were semantically unrelated to war and aggression (e.g., comp_ter).

Procedure. On arrival at the lab, participants signed in on a sheet placed next to a pile of textbooks. For some participants, the top textbook was placed front side up so that the American flag on the cover was visible (the title of the book was obscured). For the others, the textbook was placed front-side down. Participants then sat at separate desks and completed the word-fragments and filler questions unrelated to politics. They then answered questions concerning their news exposure and party orientation. They indicated the extent to which they typically follow the U.S. news exposure and party orientation, and the four interaction terms. Priming condition was a significant predictor, B = 6.6, β = .27, t = 2.36, p = .02, such that those in the flag prime condition generated more aggression completions (M = 34%) than those in the no-prime condition (M = 22%). However, this main effect was qualified by the predicted interaction between priming condition and news exposure, B = 2.76, β = .27, t = 2.35, p < .02 (see Table 1). Whereas news exposure was uncorrelated with percentage of aggression completions in the no-prime condition, r(39) = -.21, p > .19, news exposure and percentage of aggression completions were positively and significantly correlated in the flag condition, r(34) = .34, p = .05. As shown in Figure 1, the predicted values of this interaction were graphed using the minimum and maximum news exposure scores (Aiken & West, 1991). Those high in news exposure generated more aggression completions in the flag prime condition (M = 53%) compared with the no-prime condition (M = 8%). However, this difference was absent for those low in news exposure.

Discussion

The results suggest that for news watchers, the casual and everyday perception of the American flag spontaneously increased the accessibility in memory of aggression and war. It is also noteworthy that participants’ political orientation did not moderate the effects of the American prime, suggesting that both Democratic and Republican news watchers share this association.

That news exposure was not related to aggression in the control condition might seem at odds with evidence that television watching in general increases aggressive tendencies (e.g., see Anderson & Bushman, 2002; Bushman & Cantor, 2003). However, these results suggest that news watching in particular may exert its influence through more specific routes—not in a higher incidence of aggressiveness in default circumstances but rather through those cues frequently shown in news programs.
What are the downstream implications of news watchers’ enhanced accessibility of aggression and war when primed with the American flag? Given that more (vs. less) accessible constructs influence judgment and behavior (e.g., Higgins, 1996), in the next experiment we tested whether the perception of American cues implicitly shapes the judgments of another person.

**EXPERIMENT 2**

In this experiment, participants were implicitly primed with American cues, or not, and then read a vignette about a fictitious target whose behavior was ambiguously aggressive. This vignette has been used in previous research to examine the influence of accessible aggressive constructs on judgment (e.g., Srull & Wyer, 1979). Participants were then asked to rate the target along a number of personality dimensions, some of which were descriptively or evaluatively consistent with aggression.

In this experiment we also examined whether participants’ reported mood would be influenced by exposure to American cues. On one hand, given the obviously negative content of aggression, news watchers who are subtly exposed to American cues may also feel worse subjectively. On the other hand, it is also possible that the effect emerges only implicitly and remains introspectively unavailable to participants’ conscious experience (e.g., Nisbett & Wilson, 1977; Wilson & Dunn, 2004).

**Method**

Participants. Participants were 61 undergraduates who participated in the experiment in exchange for course credit.

Materials. The American cues used in a scrambled sentence task (see the next section) were the words American, USA, flag, and patriots. The description of the ambiguously aggressive target was developed in previous research (Srull & Wyer, 1979).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>R²</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of war/aggression completions (Exp. 1)</td>
<td>.16</td>
<td>6.6*</td>
<td>0.36</td>
<td>0.36</td>
<td>2.76*</td>
<td>0.46</td>
<td>.51</td>
<td>0.14</td>
</tr>
<tr>
<td>Hostility ratings (Exp. 2)</td>
<td>.25</td>
<td>0.20</td>
<td>0.08</td>
<td>0.09</td>
<td>0.15**</td>
<td>-0.03</td>
<td>.03</td>
<td>0.02</td>
</tr>
<tr>
<td>Negative trait ratings (Exp. 2)</td>
<td>.20</td>
<td>0.09</td>
<td>0.01</td>
<td>0.04</td>
<td>0.14**</td>
<td>0.01</td>
<td>.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Relative hostility of behavior (Exp. 3)</td>
<td>.15</td>
<td>0.24</td>
<td>0.13</td>
<td>-0.14</td>
<td>0.52*</td>
<td>-0.06</td>
<td>.12</td>
<td>0.02</td>
</tr>
</tbody>
</table>
| **TABLE 1:** Unstandardized Beta Weights, Standard Errors, and Standardized Beta Weights From Multiple Regression Analyses

NOTE: The multiple regression analysis predicts percentage of war and aggression completions, or hostility ratings, or negative trait ratings, or hostile behavior with (1) priming condition, (2) news exposure, (3) political orientation, (4) Priming Condition × News Exposure, (5) Priming Condition × Political Orientation, (6) News Exposure × Political Orientation, and (7) the interaction among all three factors. The first number in each cell is the unstandardized beta, the second number is the standard error, and the third number is the standardized beta.

*p < .05. **p < .008.

![Figure 1](http://psp.sagepub.com)

Figure 1  Average percentage of war and aggression completions as a function of priming condition and minimum and maximum scores on news exposure (Experiment 1).
Procedure. Participants first completed a linguistic task in which they created grammatically correct four-word sentences out of multiple five-word groups. All participants completed 30 sentences. Participants were randomly assigned to the USA or no-prime condition. In each of 4 (of 30) sentences, one word was directly related to America, or not. Participants then read a description of a target person named Joe whose behavior was ambiguously aggressive (e.g., Srull & Wyer, 1979). Participants then rated Joe on six traits related to hostility (hostile, unfriendly, dislikable) and antonyms of those traits (considerate, kind, thoughtful), and six traits that were evaluatively (but not descriptively) consistent with hostility (narrow-minded, boring, conceited, intelligent, dependable, and interesting), using 10-point scales (1 = not at all, 10 = extremely). Participants then reported the degree to which they were feeling positive and negative on 11-point scales (1 = not at all, 11 = very much), completed filler questions, and reported demographic information about their GPA, SATs, party and ideological orientation (6-point scales), news exposure (11-point scale), and news-following habits. Participants then completed a funneled debriefing questionnaire in which they provided opinions about the study, including whether they noticed any themes related to America. Participants were then debriefed and thanked for their participation.

Results

None of the participants reported noticing anything unusual about the linguistic task, nor did anyone report noticing a theme about America. Five participants had been in a similar previous experiment and so were excluded.

Political orientation was computed in the same way as in the previous experiment. News exposure was not correlated with political orientation, average number of hours per week spent watching television, average weekly time spent surfing the Web, GPA, math SAT, or verbal SAT (all ps > .28). News exposure was significantly correlated with watching political programs on television, \( r(56) = .46, p < .001 \); watching Fox news programs, \( r(56) = .27, p = .04 \); watching The Daily Show With Jon Stewart, \( r(56) = .53, p < .001 \); and reading The New York Times, \( r(56) = .58, p < .001 \). News exposure was also significantly correlated with the number of newspapers, \( r(56) = .46, p < .001 \), and news magazines, \( r(56) = .29, p = .027 \), referenced regularly.

Target impressions. After reverse-coding the positive traits, we combined ratings for the six hostility-related traits and regressed the average onto priming condition (no prime, USA prime), news exposure, political orientation, and the four interaction terms.4 As summarized in Table 1, the only significant effect was the predicted interaction between priming condition and news exposure, \( B = .15, \beta = .40, t = 2.84, p = .007 \). Whereas news exposure and hostility ratings were uncorrelated in the no-prime condition, \( r(31) = -.12, p = .54 \), the two were positively and significantly correlated in the USA prime condition, \( r(25) = .51, p = .009 \). As shown in Figure 2, using the minimum and maximum news exposure scores (Aiken & West, 1991), those high in news exposure generated higher hostility ratings in the flag prime condition (\( M = 9.06 \)) than in the no-prime condition (\( M = 7.09 \)). However, those low in news exposure did not show this pattern.

In line with previous research, we expected participants to form evaluatively coherent impressions of the target (e.g., Asch, 1946; Bodenhausen & Macrae, 1994; Srull & Wyer, 1989). To examine this, we combined the other evaluatively negative traits (after reverse-coding the positive traits) and regressed the average of these ratings onto priming condition (no prime, USA prime), news exposure, political orientation, and the four interaction terms. As predicted, the only significant effect was the interaction between priming condition and news exposure, \( B = .14, \beta = .44, t = 3.04, p = .004 \). In the no-prime condition, news exposure was negatively correlated with negative trait ratings, \( r(31) = -.36, p = .04 \). In the USA condition, however, news exposure was marginally positively correlated with negative trait ratings, \( r(25) = .38, p = .06 \). As shown in Figure 3, those
high in news exposure generated more negative ratings in the USA condition (M = 6.85) than in the no-prime condition (M = 5.3). Those low in news exposure, however, showed higher negative ratings in the no-prime (M = 6.5) versus USA prime condition (M = 5.52).

**Mood.** Participants’ negative mood ratings were subtracted from their positive mood ratings. These differences scores were regressed onto priming condition (no prime, USA prime), news exposure, political orientation, and the four interaction terms. No significant effects emerged (all ps > .11).

**Discussion**

These results replicate and extend the findings from Experiment 1 and show that news watchers’ implicit association between America and aggression influenced how they interpreted the ambiguous social behavior of another person. The perception of USA cues unintentionally led to more hostile (and negative) judgments. The fact that the cues led to judgments that were more hostile, and more negative generally, is in line with previous research (Asch, 1946; Bodenhausen & Macrae, 1994; Srull & Wyer, 1989). This previous work showed that participants tend to form evaluatively coherent impressions of others and thus that the effect of aggressive primes in particular can generalize to negative personality traits more generally. It seems therefore that the influence of American cues on the judgment of others is not confined to the aggression dimension but extends to other evaluatively negative dimensions as well.

These findings again also suggest that news watchers do not show a chronically heightened accessibility of aggression. In the control (no prime) condition, news watchers actually showed less aggressive and negative person judgments than those low in news exposure. This again raises the possibility that for news watchers, the construct of aggression is strongly connected in memory with nationalistic cues and will become activated especially upon perception of those cues.

The pattern of results shows that participants’ political orientation did not moderate the results. This implies that at least under some circumstances, the implicit effects of nationalistic symbols do not depend on a person’s conscious endorsement of a particular political party but instead rest on the person’s exposure to news concerning the nation. It is worth noting that in more politically diverse samples, one’s consciously reported political orientation might indeed moderate these effects. We discuss this possibility in more detail in the General Discussion section.

Finally, there were no effects on participants’ explicit, conscious mood. This preliminarily raises the interesting possibility that the perception of nationalistic cues influences how people (spontaneously) interpret, judge, and behave in the world around them, but does not influence their introspective queries about themselves. We now turn to the experiment that tested for an implicit effect on behavior.

**EXPERIMENT 3**

In this experiment, participants experienced a (bogus) computer malfunction (see Bargh, Chen, and Burrows, 1996; Cesario, Plaks, & Higgins, 2006). Although this is a very mild provocation, we expected that news watchers primed with the flag (vs. a control image) would display relatively more aggressive behavior toward the experimenter than those not primed. We also again tested for whether the subtle perception of American cues might influence participants’ conscious, affective state.

**Method**

**Participants.** Participants were 58 undergraduates who participated in the experiment in exchange for course credit.

**Materials.** In the flag priming condition, a color image of the flag was used. For those in the no-prime condition, a colored control image with lines and squares was used. The dot displays (see the next section) consisted of groups of scattered dots in a random pattern. The number of dots varied between 7 and 17, and alternated between an even and odd number.
Procedure. The task was based on previous research (Bargh et al., 1996; Cesario et al., 2006). Participants were asked to estimate whether the number of dots in each of a series of displays was even or odd. Before each display, a prime image was presented subliminally (17 ms) and immediately masked by the dot display. The prime image was either the U.S. flag or a control image, depending on the condition to which the participant had been randomly assigned. After 80 trials of the dot task, the screen flashed and an error message of “DATA SAVING FAILURE” appeared. The experimenter then announced that the data had apparently been lost and that the participant would have to do the task over again. Throughout the experiment, the participant’s face was secretly videotaped by a hidden camera placed in the computer speaker next to the computer.

The experimenter then told each participant that he or she could fill out some measures while the experimenter prepared the computer task again. The first measure was a mood measure. Participants reported the degree to which they were feeling positive, negative, annoyed, and happy using 11-point Likert scales (1 = not at all, 11 = very much). They then completed filler questions and the same demographic questions gathered in the previous experiments. While each participant filled out the mood measure, the experimenter (who was unaware of the priming condition) rated the participant along the dimensions of angry, hostile, irritated, warm, and friendly on 11-point Likert scales (1 = not at all, 11 = extremely). Participants completed a funneled debriefing questionnaire in which they provided their opinions about the study so far, including whether they had seen any figures flash during the dot task. They were then told that they would not have to complete the task a second time. They were debriefed about the hidden camera, and the nature of the experiment and hypotheses, and were asked for their consent to use the video-recorded data. They were thanked for their participation.

Results

No participant reported seeing the flag, or noticing anything unusual in the study (beyond the fact that the data were lost). Two participants reported being suspicious of the error message and so were excluded from analyses. All participants gave their consent for the use of their video-recorded data.

Political orientation was computed in the same way as in the previous experiments. News exposure was not correlated with political orientation (p > .10). News exposure was significantly correlated with watching news programs on CBS, r(56) = .36, p = .007; NBC, r(56) = .32, p = .015; ABC, r(56) = .31, p = .02; and Fox, r(56) = .26, p = .049. News exposure was also significantly or marginally correlated with the number of newspapers, r(56) = .30, p < .025; radio news programs, r(56) = .23, p < .09; and news Web sites, r(56) = .38, p < .005, referenced regularly.

Two raters observed the videotape of each participant as the participant reacted to the experimenter’s news about the computer malfunction incident. They first rated participants for hostility, anger, and irritability, and then rated them on warmth, friendliness, and happiness using 11-point scales (1 = not at all, 11 = extremely). For each rater, the three positive dimensions, and the three negative dimensions, were highly intercorrelated (all ps < .001); thus, the respective items were combined into a positivity and negativity index. The positivity and negativity indices were negatively correlated with each other (both raters, ps < .001); therefore, the positivity index was subtracted from the negative index (larger numbers thus reflect relatively greater hostility). The raters’ difference scores were adequately correlated, r(56) = .56, p < .001, and were averaged together to form a relative hostility score. These hostility scores were regressed onto the predictors of priming condition (no prime, flag prime), news exposure, political orientation, and the four interaction terms (see Table 1). Only the predicted interaction between priming condition and news exposure was significant, B = .52, β = .34, t = 2.4, p = .01. In the no-prime condition, news exposure was not correlated with relative hostility, r(27) = -.31, p = .12. However, in the flag prime condition, news exposure was marginally positively correlated with relative hostility, r(29) = .32, p = .09. This interaction is graphed in Figure 4 using the minimum and maximum news exposure scores.

The experimenter’s two positive ratings (friendly, happy) were correlated with each other, as were her three negative ratings (hostile, angry, irritable; all ps < .001). Thus, a positivity index was formed by averaging the two positive items, and a negativity index was formed by averaging the three negative items. A difference score was then computed by subtracting the positive index from the negative index. The experimenter’s scores were significantly correlated with the average scores of the two raters, r(56) = .57, p < .001. The experimenter’s scores were then submitted to a regression analysis with priming condition, news exposure, political orientation, and the four interactions terms as predictors. However, the interaction between priming condition and news exposure failed to reach significance (p = .15).

Participants’ two negative mood ratings (negative, annoyed) were significantly correlated, r(56) = .45, p < .001, and therefore were combined into one negative index. Participants’ positive mood ratings (positive, happy) were also correlated, r(56) = .73, p < .001, and
therefore were combined into a positive index. The positive index was then subtracted from the negative index to form an overall negative mood score. The mood scores were then regressed onto priming condition, news exposure, political orientation, and the interactions between them as predictors. No significant effects emerged (all \( p > 0.2 \)).

**Discussion**

The results demonstrate that news watchers who were nonconsciously primed with American cues behaved in a relatively more aggressive (or relatively less friendly) manner after a mild provocation. There were also no effects on participants’ consciously reported moods and no effect of participant’s political orientation on their behavior.

**GENERAL DISCUSSION**

Findings across three experiments show that American news watchers who were subtly or nonconsciously primed with American cues exhibited greater accessibility of aggression and war constructs in memory, judged an ambiguously aggressive person in a more aggressive and negative manner, and acted in a relatively more aggressive manner toward an experimenter following a mild provocation, compared with news watchers who were not primed. These effects were absent for those with low exposure to the American news media. In two of the experiments, American cues were presented to participants in naturalistic ways that are likely to be similar to the situations in which people unknowingly encounter nationalistic cues outside of the lab. Moreover, even though conservatives and liberals may consciously hold different attitudes about the flag (Carney et al., 2005), none of the results were moderated by participant’s political and ideological orientation, which preliminarily suggests that liberal and conservative news watchers alike share this implicit association.

These findings are consistent with the growing literature on the implicit effects of “merely” perceived stimuli in our social environment (e.g., Bargh, 2007; Dijksterhuis et al., 2007; Greenwald & Banaji, 1995; Hassin et al., 2005). They speak in particular to the implicit influence of one of the most visible symbols in the American cultural and political landscape—the American national flag. Evidently, the kinds of information that are repeatedly and saliently presented in reference to the nation can be implicitly activated for some people as soon as they perceive symbols of the nation (see also Butz et al., 2007; Devos & Banaji, 2005).

**Implicit American Nationalism**

This work joins the growing body of evidence for the implicit effects of nationalistic stimuli on attitudes and behavior (Butz et al., 2007; Devos & Banaji, 2005). In addition to an implicit association between America and Whiteness (Devos & Banaji, 2005), the current findings suggest that there also exists an implicit association between America and aggression, at least for news watchers. Whereas these two lines of results seem potentially compatible with one another, neither one at first glance seems congruent with recent work by Butz and Plant and colleagues on the implicit link between America and egalitarianism (Butz et al., 2007). Indeed, how is it that people can possess such seemingly contradictory knowledge about their nation? Decades of research in psychology famously suggest, however, that this kind of incongruence happens frequently, such as when people simultaneously adhere to fairness goals and show prejudice, or when smokers hold anticigarette beliefs and attitudes. Social stimuli, especially those that are highly familiar, such as group members or cultural icons, are likely associated with extensive arrays of knowledge and information, and this knowledge can be differentially accessible and influential depending on various situational and personal variables. In this way, current and previous results on this topic suggest the potentially myriad ways in which nationalistic icons can implicitly influence people’s thought, attitudes, and behavior as a function of particular moderating variables. Future research can continue to identify such moderating variables and examine the mutual exclusivity of these kinds of effects under certain circumstances.
As one example of a direction for future research, and an attempt to reconcile the present findings with those of Butz et al. (2007), we found in this line of experiments that participants low in news exposure did not show implicit effects on the aggression-related dependent measures. It may be that these people possess stronger associations between America and the values and principles, such as egalitarianism, that constitute the American ethos. In other words, perhaps people low in news exposure may tend to be more nationalistic and possess associations between America and classical ideals and values (as would be suggested by the work by Butz et al., 2007). However, we should note that in other research we have so far failed to find any relationship between news exposure and nationalism, patriotism, and political orientation (Ferguson & Hassin, 2006). Still, it would seem fruitful to continue examining this possibility.

More broadly, we assume that America is linked in memory with a diverse array of memories, some positive and prosocial in nature, and some relatively more negative and potentially antisocial in nature. Given the wide variety of memories likely associated with America for most people, it is worth reiterating that the implicit perception of American cues should at times lead to an assortment of positive and prosocial effects. America should be connected in memory with those prosocial values, ideals, and objectives that are part of the American ethos, and the perception of American cues might activate those ideals and values depending on both situational and personal factors (see Butz et al., 2007). Moreover, news watchers in particular may possess certain positive concepts associated with America (e.g., generous, industrious, innovative) that we did not examine in the present research. Future research can more systematically investigate other possible implicit effects.

The present pattern of results also speaks to recent work on how system-justifying ideologies exert their influence implicitly (e.g., Jost et al., 2004; Kay & Jost, 2003). Jost and Kay and colleagues have argued that people possess ideologies that strengthen the legitimacy of cultural, social, and economic systems. When people encounter an instance of injustice that threatens the stability of the system, they spontaneously generate stereotypes and beliefs that mollify that injustice and restore legitimacy to the system(s). People may be unaware that their interpretation and reaction to an injustice is guided by a collection of such stereotypes and beliefs, and this implies that ideological knowledge can operate without awareness or intention. In a similar way, the current work demonstrates that people’s nationalistic knowledge can be unknowingly and unintentionally activated from relevant cues in the environment and then guide subsequent interpretation and action. It would be interesting to examine the degree to which nationalistic cues are associated implicitly with various system-justifying beliefs and attitudes.

Another pertinent question for this line of work is whether the current effects are specific to American symbols or extend to nationalistic cues more generally. Given the preponderance of American news that explicitly links the nation with aggressive themes (e.g., America’s current involvement in the Iraq war), we suspect that these effects might be particularly tied to American symbols. However, this is clearly an open empirical question, and it could be that any citizens whose nation is connected repeatedly with aggressive themes in arenas of public discourse would show similar effects.

**News Exposure as a Moderator**

What is responsible for news watchers’ association between America and aggression? Given that the news media have been shown to influence people’s opinions and behavior, as well as the respective nation’s policy making and agenda setting (e.g., Anderson & Bushman, 2002; Berkowitz, 1984; Bushman & Cantor, 2003; Iyengar & Kinder, 1987; McCombs & Shaw, 1991; Strange & Leung, 1999), it may have a direct influence on people’s memories about America and aggression. If American news programs frequently present themes of war and aggression with references to America, people who are frequently exposed to the news should be more likely to learn such information compared with those who are not.

It is important to note that this kind of association may take some time to develop and would probably not emerge after watching only a handful of nightly newscasts, for instance. Rather, the development of an association in memory between two concepts—such that the activation of one concept automatically leads to the activation of the other concept—emerges after repeated pairings of those two concepts (e.g., Gawronski & Bodenhausen, 2006; Hebb, 1949; Neely, 1977; Sloman, 1996; Smith & DeCoster, 1999; Strack & Deutsch, 2004). Presumably, this repetition should be necessary especially when the two concepts are already highly familiar and associated with diverse arrays of information, as is the case with America and aggression. Future research might test the causal impact of the news media on this kind of association in a longitudinal manner.

The association between America and aggression in news watchers could also—alternatively or additionally—be due to self-selection factors. Those who possess such an association may simply be more likely to follow the news in the first place, irrespective of any direct influence of the content of the news. For example, news
watchers may be particularly concerned about the nation’s involvement in war and thus tune in to the news more frequently. It is worth emphasizing that news watchers did not exhibit more aggression overall compared with news neglecters. In other words, it is not the case that news watchers show a chronically higher accessibility of aggression in general. In fact, across all three experiments, news exposure was unrelated (or negatively related) to aggression in the no-prime conditions. Instead, it seems that news exposure is positively related with aggression only in the presence of American cues in particular. Future research can shed light on other types of cues (e.g., ethnic groups, jobs, locations) that news watchers may associate with aggression.

In addition to investigating how news watchers develop their unique set of associations with the flag, it also seems critical to further examine the specific types of news that people follow. One noteworthy aspect of the current research is that there were few people who closely watched clearly conservative news sources, such as Fox news. (The vast majority of participants reporting watching CNN and the major network news programs.) It would therefore be informative to sample participants who vary more widely on the types of news they follow. One interesting question would be whether the current effects differ for those who watch purportedly conservative versus liberal news sources.

**Cues in the Political Realm**

Research suggests that people make decisions about politics and voting choices based on consciously endorsed values and beliefs, such as party orientation (e.g., Bassili, 1995; Campbell, Converse, Miller, & Stokes, 1960; Caprara, Schwartz, Capanna, & Vecchione, 2006; Cohen, 2003; Conover & Feldman, 1984; Feldman, 1988; Miller & Schanks, 1996). For example, when deciding whether to support America’s war in Iraq, people may intentionally refer to their political party’s platform, or representatives, to make their choices. And yet the current findings suggest that people might also be influenced in a more passive, nonconscious manner by nationalistic cues in the background. Namely, one’s perception—even if in passing—of American cues may increase the accessibility in memory of constructs related to aggression, which can then influence how that person disambiguates her or his social environment. For news watchers, a relevant action or comment that might otherwise seem ambiguous might be interpreted as more aggressive, for instance. In this way, the present findings join the rapidly growing literature concerning the nonconscious and implicit influences on choice and behavior (e.g., Dijksterhuis, 2004; Greenwald & Banaji, 1995; Hassin et al., 2005; Todorov, Mandisodza, Goren, & Hall, 2005).

Although there was variability across these samples in participants’ political orientation, it would be valuable to examine whether these effects obtain in more diverse populations. For instance, although some participants in these samples strongly identified as Republican, the intensity and stability of their orientation might be comparatively weaker than other groups of Republicans. Both liberal and conservative students’ political orientation
more generally might be somewhat unstable, and a test of the implicit effects of American cues in nonstudent populations would undoubtedly prove informative and interesting.

**Conclusion**

Far from being passive elements of the background, nationalistic symbols can influence people’s judgment and behavior. The current findings show that some of this influence is in line with themes that are salient and prominent parts of contemporary public discourse about the nation. That this influence happens automatically, without people’s awareness or intention, suggests its potential uncontrollability. Without knowledge of whether or how a stimulus implicitly shapes our reaction to the world around us, we stand little chance of regulating it (e.g., see Wilson & Brekke, 1994). This suggests that the flags and other national cues that pervade the American cultural and political landscape may together shape our interpretation of the world around us.

**APPENDIX**

Current event questions

1. Which Supreme Court Justice recently retired?
2. Who is the current Chief Justice on the Supreme Court?
3. What was the name of the last hurricane to hit Florida?
4. Describe the biggest insurgency attack in Iraq last week.
5. Which senior White House staff member is currently under investigation for leaking secret information to the press?
6. What are the details of the above leak?
7. Who is Judith Miller?
8. Who is Robert Novak?
9. What terrorist occurrence happened in London on this past July 7th?
10. What major event is scheduled to happen in the Gaza Strip next month under Sharon?
11. What is the G-8 meeting?
12. When and where was the last G-8 meeting?

Political knowledge questions

1. Who is the Homeland Security Chief?
2. Who are the senators of your home state?
3. Who is the governor of your home state?
4. Who is Bush’s Chief of Staff?
5. Who is the Secretary of State?
6. Who is the White House Press Secretary?
7. Who was the last White House Press Secretary before the current one?
8. Who is the Secretary of Defense?
9. Who makes up the group of political leaders often referred to as the Neo-Cons?

**NOTES**

1. All participants were tested in mid-July 2005.
2. One participant did not complete the current event and political knowledge questions.
3. Across experiments, continuous variables were centered for the regression analyses.
4. Three participants did not fill out any of the questions about political orientation and therefore could not be included in the analyses that used this information.

**REFERENCES**


Received February 6, 2007
Revision accepted May 3, 2007