THAT ONE: THE EFFECTS OF DISPLAYS OF ANGER AND CONTEMPT DURING
THE 2008 PRESIDENTIAL DEBATES

by

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THESIS ABSTRACT

THAT ONE: THE EFFECTS OF DISPLAYS OF ANGER AND CONTEMPT DURING THE 2008 PRESIDENTIAL DEBATES

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The present research investigates how the emotional content of negative political discourse might affect candidate evaluations. Of specific interest is how the display of two emotions of negative valence, anger versus contempt, will affect participants' evaluation of Barack Obama and John McCain from the 2008 presidential debates. The literature review focuses on establishing a conceptual framework for the characteristics of anger and contempt and their social functions and discusses research into the effects of negative campaigning. Participants filled out questionnaires before and after watching an excerpt from the 3rd 2008 US Presidential debate. Participants were randomly assigned to one of three groups, in which they rated either their feelings of anger and contempt toward the candidates, their favorable or unfavorable impressions of the candidates, or the candidates' expressions of anger and contempt. It was predicted that anger would be more effective than contempt for unaffiliated participants (H1: unsupported); strong Democrats would feel more contempt relative to unaffiliated participants (H2: data in predicted direction but non-significant); strong Democrats would perceive more contempt relative to unaffiliated participants (H3: unsupported); contempt would be more effective
for Republicans, conservatives, and strong partisans from both parties as compared to Democrats, liberals, and weak partisans respectively (H4a & b: unsupported; H5: data in predicted direction but non-significant). Supplementary analyses found that watching the debate improved Obama's favorability, McCain displayed more anger and contempt than Obama, and that liberals are significantly more expressive of anger and contempt than moderates and conservatives. The theoretical and practical implications of this research are discussed as insight into what types of negative political messaging (campaigning) works best and for which audiences.

*Keywords*: Anger, Contempt, Expressed Emotion, Negative Campaigning, Debates
"There was an energy bill on the floor of the Senate loaded down with goodies, billions for the oil companies, and it was sponsored by Bush and Cheney. You know who voted for it? You might never know. That one. You know who voted against it? Me."

- John McCain during the 2nd Presidential Debate, 10/7/2008

Political debate and discourse is at the heart of American democracy. No matter how much money candidates for President spend on getting their message out, they will still inevitably have to debate their opponent live and in front of the nation. This presents a unique problem to the candidates at the podiums: they actually have to talk to each other face to face in front of a lot of people. One wrong move in this scenario can do irreparable harm to one's candidacy.

Take for example John McCain's quote from the beginning of the passage. This quote sparked controversy from what was otherwise considered a fairly boring debate (Allen, 2008; Associated Press, 2008). Specifically the reference to then Senator Obama as "that one" spawned a large amount of controversy, material for late night talk shows, and even a website dedicated to selling "that one" merchandise (http://www.thatone08.com). Taken by itself as emotionless text, the quote does not seem all that inflammatory, so why did these two words draw so much attention?

To answer that question one must first watch how McCain delivers this quote, which is far from emotionless. In the literature, what McCain is doing here is called "going negative" (Lau & Rovner, 2009). He's criticizing his opponent's voting record (though he is doing it in a comparative manner). Though the content of what McCain says here is not in any way outside the bounds of the debate, this study aims to examine if it is not what he said but rather how, and conveying which emotions, he said it.
Research into the effectiveness of negative campaigning shows that "going negative" only works sometimes (Lau & Rovner 2009). This finding raises the questions: when does "going negative" succeed and when does it fail? When on goes negative, are certain negative emotional expressions more or less effective for garnering support? Do certain negative emotional expressions work better for people of different political party identifications and ideologies? How does the strength of one’s political partisanship effect how they react to going negative? This study investigates the use of different emotions in order to help answer these questions by examining whether "going negative" using anger vs. contempt is more effective, or whether the different emotions are differentially effective for different audiences, such as partisans vs. people unaffiliated to a political party.

Anger and Contempt

Anger

In the realm of discrete emotion research, anger is one of the more well-researched emotions. It belongs to a family of emotions Roseman (2011) calls attack emotions, which in general function to move people against objects, events, others, or one's self. Roseman's model of emotions as syndromes characterizes anger in several ways. Anger typically is accompanied by thoughts of injustice perpetrated by the target of the emotion, and feelings that are usually explosive in nature. The pan-cultural facial expression that prototypically accompanies anger involves lowered brows and a square mouth (Izard, 1983). The typical behavior that accompanies anger is generally verbally and/or physically aggressive such as yelling, hitting, or criticizing the target of the emotion. The emotivational goals that accompany anger involve hurting the target of the
emotion or getting revenge against the target in some manner.

Research on anger shows that it is a common and recognizable emotion that presents with physiological similarities across cultures. Cross-cultural research concerning the universality of different emotions' responses and patterning, which included nearly 3,000 respondents from 37 different countries on 5 different continents, found that respondents consistently reported similar physiological symptoms in response to anger. These included change in breathing, increased heart rate, muscle tensing, and feeling hot (Scherer & Wallbott, 1994). Other research shows that when participants from both Eastern and Western cultures are asked to rate the facial expressions of Olympic Judo competitors for emotionality, there were above chance levels of cross-cultural agreement on facial displays of anger (Matsumoto et al., 2009).

Contempt

In contrast to anger, there has been much less research dedicated to contempt. It belongs to a family of emotions Roseman (2011) calls rejection emotions, which in general function to move something away from one's self. Roseman's model of emotions as syndromes characterizes contempt in several ways. Contempt is accompanied by thoughts about the unworthiness of someone and feelings of revulsion toward the target of the emotion. The facial expression that accompanies contempt typically involves a sneer combined with an upward tilt of the head. The behavior that accompanies contempt involves actions that look down on or otherwise disparage the target of the emotion. The emotivational goals that accompany contempt involve the social exclusion of the target of the emotion. Contempt has been shown to play a role in individuals' antecedent appraisals of incompetent actions (Hutcherson & Gross, 2011). Additionally,
contemptuous feedback on task performance has been shown to increase interpersonal aggressiveness, but also improve subsequent task performance (Melwani & Barsade, 2011).

There is some evidence that it is a cross-culturally recognizable emotion. The same study on the emotional rating of Olympic Judo competitors facial expressions shows above chance levels of cross-cultural agreement on facial displays of contempt (Matsumoto et al., 2009). However, cross-cultural agreement on facial displays of anger was greater than cross-cultural agreement on facial displays of contempt (Matsumoto et al., 2009).

**Social Functions of Anger vs. Contempt**

In regard to the social functions of these emotions, there are several similarities between anger and contempt. Negative social interactions frequently involve one or both emotions and these emotions imply a negative appraisal of the other person or their intentions (Fischer & Roseman, 2007). However, research shows that the two emotions tend to occur under different conditions and serve different social functions. Fischer and Roseman (2007) conducted three studies aimed at determining the distinctive characteristics and the interpersonal causes/effects of anger and contempt. In the first study, participants recalled an event when they were either angry or contemptuous (but not feeling the other emotion), and filled out a questionnaire rating the characteristics of their emotional response. The results indicate that anger events involve more perceived control over and intimacy with the emotion target, more immediate verbal attacks, more long term reconciliation, more social coercion goals, and less relationship deterioration with the emotion target. Contempt events on the other hand involve less perceived control
over and intimacy with the emotion target, more immediate derogation, less long term reconciliation and more long term rejection, more social exclusion goals, and more relationship deterioration with the emotion target. The second study (Fischer & Roseman, 2007) reinforces these findings with a similar methodology, also showing that contempt is felt for longer and with greater intensity over the long term than anger. Findings from the second study also indicated that contempt can develop on top of anger, meaning that repeated instances of anger without reconciliation can build into feeling contempt. The third study (Fischer & Roseman, 2007) aims to determine the effect of the type of relationship with the emotion target on anger and contempt reactions. In this study, participants read a vignette about a drunk passenger on a train rudely berating the conductor for no reason and rated their emotional reactions. In one condition the drunk was a stranger and in the other condition the drunk was a close friend, otherwise the vignettes were identical. The results indicate that when the drunk was a friend the participants would react with anger and its typical responses. However, when the drunk was a stranger the participants would react with contempt and its typical reactions. The findings from all three studies taken together indicate that anger is characterized by short term attacks meant to control the target with the possibility of long term reconciliation, whereas contempt is characterized by rejection and social exclusion of the target in both the short and the long term with little hope of reconciliation (Fischer & Roseman, 2007).

**Politics, Political Ideology, and Emotion**

Thanks to long popular rational-choice models of voting behavior, emotions were believed to either have no effect on voting behavior or have a harmful effect (Riker & Ordeshook, 1968). Rejecting this conventional belief, Parker and Isbell (2009) conducted
a study that focuses on emotions' effect on political information processing. Participants were primed to feel angry or fearful and then were given access to information on the specific policy stances held by the ostensibly real candidates and general, vague demographic information on the candidates. Parker and Isbell found that those primed by fear based their voting decisions on detailed issue-agreement information while those primed by anger relied on less specific, and more general information. Through this study Parker and Isbell illustrated both that emotions do play a role in political processing and that different emotions play different roles. However, this study does not examine the role of emotions in political discourse or campaigns.

As political ideology is an important part of political decision making, it is necessary to look at the role of emotions in political ideological identification. Block and Block (2005) did a study in which children's personalities were rated in nursery school and then again at the age of 23. Children who were rated as self-reliant, resilient, and developing close relationships became relatively liberal young adults. In contrast, children who were rated as fearful, easily victimized and offended, and inhibited became relatively conservative young adults. This seems to indicate that those who are less fearful and have more affiliative goals lean liberal while those who are more fearful and have less affiliative goals lean conservative. Additionally, studies comparing liberals and conservatives on sensitivity to feeling disgust show that conservatives are more likely to feel disgust on a range of political issues, particularly on issues of socio-moral purity, than liberals (Inbar, Pizarro, & Bloom, 2008).

The above findings for conservatives particularly are consistent with Jost, Glaser, Kruglanski, and Sulloway's (2003) theory of conservatism as motivated social cognition.
In a meta-analysis of 88 studies where personality and conservatism were investigated, Jost et al. (2003) found that death anxiety and dogmatism were fairly strongly and positively correlated with conservatism whereas openness to experience and tolerance for ambiguity were negatively correlated with conservatism. Fear, particularly of death, seems to play an important role in pushing people toward conservatism. In fact, studies done by Nail, McGregor, Drinkwater, Steele, and Thompson (2009) illustrated that as mortality threat increases, dispositional and politically identified liberals begin to adopt psychologically and politically conservative stances on issues of capital punishment, abortion, and LGBTQ rights (Nail et al., 2009). The relationship between fear of death and conservatism has also been theoretically linked to the rise in neoconservatism after the attacks of 9/11 (Dixit, 2007).

Given this evidence, it is possible that the more conservative someone is, the more likely they are to avoid uncertainty by relying on the guidance of those higher in the social hierarchy for cues on how to think and feel. This will likely lead to conservatives mirroring the emotional displays of their leaders. Interestingly, this evidence indicates that liberals may also mirror the social cues of highly socially ranked others but not for the same reasons. Being more motivated by social inclusiveness and relationship building will likely cause liberals to mirror emotional displays of their fellows, including their leaders, out of empathy rather than fear. In regard to this study, when Democratic or Republican leaders make emotional displays during a debate it is theoretically possible that Democrat and Republican audience members may react by feeling those same emotions.

In order to further integrate the seeds of emotion research into the soil of political
research, it is necessary to find the proper place to plant. As both of the emotions that will be examined in this study are considered to be negative emotions and the use of these emotions will be directed toward the opposing candidate in a debate setting, it is important to note how negativity is understood to operate in political discourse. The majority of research on this topic has been done on negative campaigning.

**Going Negative**

Though there is some variation in how researchers define negative campaigning, it is generally held that negative campaigning refers to attacking an opponent’s "programs, accomplishments, qualifications and so on" (Lau & Pomper, 2001). Going negative and criticizing one’s opponent is also referred to as "attacking" them. On the other hand, positive campaigning refers to discussing "one’s own accomplishments, qualifications, programs, etc." (Lau & Pomper, 2001).

The effects of negative campaigning are a subject of great interest and especially so in the 2000’s. In 1980 there were only 17 stories on negative campaigning in the *New York Times*, *Washington Post*, the *Christian Science Monitor*, and the Associated Press newswire combined, whereas there were a total of 210 stories on negative campaigning in 2000, and still about 100 stories in 2004 (Lau & Rovner, 2009). Of the stories on the CBS evening news about political advertisements between 1972 and 2004, two thirds focused on negative advertisements (West 2005). In the social sciences the first empirical article on negative campaigning dates back to 1984, the first political science article comes from 1990 (Lau & Rovner, 2009). As of the end of 2006 there were 110 books, chapters, articles, and dissertations empirically addressing the effects of negative campaigning (Lau & Rovner, 2009).
Despite the large interest, little is known for certain about the effects of negative campaigning. Some research indicates that negative campaigns decrease one’s likelihood of voting and overall voter turnout across the board by 5% in comparison to positive campaigns (Ansolabehere et al., 1994; Ansolabehere & Iyengar, 1995). It has also been found that negative campaigning affects voter turnout in a curvilinear fashion, meaning that most observed levels of negativism in campaigns serve to stimulate voter turnout but extremely high levels of negativism serve to depress voter turnout (Lau & Pomper, 2001). However, this same research also indicates that negative campaigns stimulate voter turnout in political partisans and suppresses voter turnout in political independents (Lau & Pomper, 2001). Along these lines, it has been found that when a campaign engages in negativity that violates voters’ sense of good taste or is grossly dishonest, also known as mudslinging, it can suppress voter turnout across the board and especially for independents (Kahn & Kenney, 1999). When examining the effects of negative attacks on people’s evaluations of the attacker and the target, research shows opinions of both attacker and target become less favorable, though the target suffers a greater hit if they decide to take the high road and stay positive (Kahn & Kenney, 2004).

**Anger vs. Contempt in Political Debate**

This study aims to fill in a number of gaps in the literature concerning both emotional attack and rejection displays and their role in political discourse and debate. It is unclear from the literature exactly why "going negative" sometimes succeeds and sometimes fails. This may be because much of the literature is not necessarily geared towards how one makes such an attack or what the content of that attack is, just whether or not the statement is categorized as an attack by virtue of being critical of one’s
opponent. It is possible that the success or failure of "going negative" depends on whether anger or contempt are used in the message, as evidenced by Parker and Isbell's (2009) findings that different emotions differentially affect how people process political information, in conjunction with evidence of negative campaigning both increasing and suppressing voter turnout (Ansolabehere et al., 1994; Ansolabehere & Iyengar, 1995; Lau & Pomper, 2001). However, we are not certain of this due to other possible explanations of negative campaigning's effectiveness such as its impact on candidates' likability, candidates' attractiveness, and the perceived appropriateness of the message (Glaser & Salovey, 1998; Lau & Pomper, 2001). The effects of anger and contempt may also differ along political party lines or liberal vs. conservative political ideologies, as evidenced by the differences in the personalities of liberals and conservatives (Block & Block, 2005; Jost et al., 2003). Additionally, much of the literature focuses on attack ads and press statements rather than debates. A negative attack in an ad or press statement essentially occurs in a vacuum. It does not afford the voter a view of the attacker's manner in attacking, the target's reaction to the attack, nor vice versa in the case of a target's potential rebuttal attack. This study aims to investigate the effects on candidate evaluation of displaying anger and contempt in front of an audience in a debate context.

This study will examine the effects of anger vs. contempt on candidate evaluations by testing the following hypotheses.

Is anger more effective than contempt for unaffiliated participants?

H1: The association between candidates' anger displays and their change in favorability among unaffiliated participants will be significantly more positive than the association between candidates' contempt displays and their change in
favorability among unaffiliated participants.

Rationale: It is unknown why some people do not choose a particular political allegiance. It is possible that politics bores, intimidates, or otherwise turns people off from getting involved. More negativity in campaigns seems to cause independents to disengage while stimulating partisan support to a point (Lau & Pomper, 2001). It is possible that candidates’ use of contempt, with its implied lack of situational control and lack of hope for reconciliation with the target (Fischer & Roseman, 2007), might further turn off independents, especially if it is perceived as more negative. Anger on the other hand (with its implied situational control and hope of reconciliation) might be more effective in engaging independents because it might be perceived as less negative as long as the anger displayed remains within the boundaries of "good taste."

**H2: Strong Democrats will feel more contempt for McCain than will unaffiliated participants.**

Rationale: Due to increasing evidence illustrating emotion playing a major role in political beliefs and decision making (Dixit, 2007; Inbar, Pizarro, & Bloom, 2008; Parker & Isbell, 2009), it is theoretically possible that strength of partisanship is linked to one's emotional attachment to one's political party and what values the party represents. It is also possible that one of the aspects that may drive increased partisanship are repeated instances of feeling angry or offended at the opposing party to the point of becoming contemptuous (see Fischer & Roseman, 2007) of the opposition. The increased emotional involvement of strong partisans might in turn cause them to feel more contempt (especially for the opposing candidate) than unaffiliated participants while watching political debate.
**H3: Strong Democrats will perceive more use of contempt by McCain than unaffiliated participants.**

Rationale: If strong partisans are more emotionally involved and engaged in politics than unaffiliated participants, it is possible they will pay more attention and be more in tune with the emotional output of the candidates. If this is the case, strong partisans will be more perceptive than unaffiliated participants of any emotion expressed. However, since there is evidence that anger is more easily and accurately identified emotion than contempt it is not predicted that strong partisans will perceive more anger than unaffiliated participants (Matsumoto et al., 2009). Additionally, it is possible that strong partisans might be more sensitive and defensive of their party’s candidate and therefore see false instances of contempt from the opposing candidate. It is also possible that if strong partisans do feel more contempt (as mentioned in H2) they might see more contempt expressed by their own candidate by virtue of seeing themselves as like their chosen candidate (Mitchell, Banaji, & Macrae, 2005). In other words, it is possible that the emotions participants perceived may not be the emotion expressed by the candidates.

**Is contempt more effective for conservatives than for liberals?**

**H4a: The association between the more conservative candidate’s use of contempt and the increase in favorability for the more conservative candidate among conservatives will be significantly greater than the association between the more liberal candidate’s use of contempt and the increase of favorability for the more liberal candidate among liberals.**

Rationale: Given that research seems to indicate that conservatives are generally more easily offended (Block & Block, 2005) and more dogmatic (Jost et al., 2003), it
seems likely that they will experience more instances than liberals of offense to their values. It is possible that repeated instances of offense can lead to contemptuous feelings toward said causes and those things associated with them (Fischer & Roseman, 2007). Given that research seems to indicate that conservatives are generally less open to experience and less tolerant of ambiguity (Jost et al., 2003), it is possible that reconciliations with causes of offense are not very likely if the reconciliations might require conservatives to leave their dogmatic comfort zones or accept the existence of gray areas. On the other hand, research seems to indicate liberals are generally less likely to be offended and more concerned with building relationships (Block & Block, 2005). It is possible that liberals will experience fewer instances of offense or will have greater chances of reconciliation with causes of offense, thus reducing the development of contempt among liberals. In sum, it is possible that conservatives are more prone to feel contempt than liberals. Given that research also indicates that people are generally more persuaded by emotions that they typically feel (Roseman, Abelson, & Ewing, 1986), it is possible that conservatives will resonate more with contemptuous messages than liberals will.

**Is contempt more effective for Republicans than for Democrats?**

**H4b:** The association between the Republican candidate's use of contempt and the increase in favorability for the Republican candidate among Republicans will be significantly greater than the association between the Democratic candidate's use of contempt and the increase of favorability for the Democratic candidate among Democrats.

**Rationale:** This is an extension of H4a, since in modern American politics the
Republican party is mainly made up of conservatives and the Democratic party is mainly made up of liberals.

Is contempt more effective for strong partisans than for weak partisans?

H5: The association between a candidate's use of contempt and the increase in favorability for that candidate will be significantly stronger for strong partisans as compared to weak partisans.

Rationale: Similar to the rationales in H2 and H3, if partisanship is positively related to emotional involvement it is possible that strong partisans feel more contempt than weak partisans and that contemptuous messages may therefore be more persuasive for strong partisans more than weak partisans. It is possible that weak partisans are in a stage of transition between strong partisanship and being unaffiliated. In this case it is possible that weak partisans feel less contempt than strong partisans and contemptuous messages will not resonate as much for weak partisans as compared to strong partisans.

Method

Design

This study employed questionnaire methodologies that have been utilized in emotion research (e.g., Fischer & Roseman, 2007; Rozin, Lowery, Imada, & Haidt, 1999), public opinion research (University of Michigan, 2006), and real-time response attitude measurement (e.g. Maier, Maurer, Reinemann & Faas, 2007). Participants were assigned to one of three different conditions: Audience Emotion (in which participants indicated when they felt anger or contempt toward either of the candidates; n = 45), Candidate Evaluation (in which participants indicated when they had a favorable or unfavorable impression of either of the candidates; n = 44), or Speaker Expression (in
which participants indicated when each candidate expressed anger or contempt; n = 46).

**Participants**

<table>
<thead>
<tr>
<th>Gender</th>
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<table>
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<tr>
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**Political Party and Partisanship**

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<th>Weak Republican</th>
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**Political Ideology**

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<tr>
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<td>35</td>
<td>19</td>
<td>12</td>
</tr>
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*Note: All categories were mutually exclusive on the questionnaire except for Race where participants could indicate that multiple categories best described them.*

Participants were 135 students from introductory psychology classes at an urban east coast university, who participated in the study in partial fulfillment of course requirements. Participants were excluded from the analyses if they were missing data on the questionnaire items being examined (n = 13) or if their button press productivity rates
exceeded three standard deviations from the mean of their experimental condition group (n = 1). No participant was excluded for having too few or no button presses since no low productivity rates exceeded three standard deviations from the mean of any experimental condition group. The final analyses included n = 37 in the Speaker Expression condition and n = 39 in the Audience Emotion condition. Exploratory analyses with all usable data included n = 121 participants and will be described below. Demographic information is located in Table 1 above. In general, the participants in this study tended to be white, liberal, and young (Median year born = 1990, Year born range = 1965 -1991, Minimum age = 18, Maximum age = 43). All data were collected between November 2008 and May 2011.

Procedure

Participants in this study came into a computer lab where they were randomly assigned to computers and conditions for the study. The participants were then given the pre-debate questionnaire (included here as Appendix A), which included questions on political party identification, political involvement/interest, television exposure, and pre-debate viewing feeling thermometer ratings of the candidates and their respective parties. The thermometer questions ask participants to rate their level of favorability toward a candidate or political party on a scale of 0° to 100° where 0° indicates a "very cold or unfavorable feeling," 50° indicates "no feeling at all," and 100° indicates a "very warm or favorable feeling." Thermometer ratings have been used in previous research and have been shown to be a reliable means of determining participants' favorable or unfavorable feelings towards candidates and political parties and are correlated with voting preferences (Brody & Page, 1973).
After the pre-debate questionnaire, each participant read written instructions for performing the task in his or her condition (included here as Appendix B), and then practiced the task while watching a 4 minute and 44 second excerpt from the first 2008 presidential debate. The topics discussed during this section of the debate were the 2008 financial crisis and each candidate's respective plans to address it. Then participants in this study viewed the first 55 minutes of the 3rd 2008 presidential debate. The topics discussed during this section of the debate were the candidates' economic plans, taxes, spending, budget, bucking political party norms, negative campaigning, Bill Ayers and Acorn, the candidates' running mates, energy and trade, and health care. The first debate was used as practice for the protocol because it set the stage for the later 2 debates. The 3rd debate was chosen because it was the most recent for participants who participated in the study and because the media focused on this debate due to its greater number of emotional displays. The segment starting at the beginning of the 3rd debate (and running for as much time as we could put into an experimental session) was chosen in order to present the material as original debate viewers experienced it and to avoid potential biases involved with picking and choosing various segments.

While watching the video the participants in the Audience Emotion condition pressed one of 4 labeled keys on the number pad of the computer keyboard to indicate each time they felt either anger or contempt (scorn) toward either Obama or McCain. The participants in the Candidate Evaluation condition pressed one of 4 labeled keys on the number pad of the computer keyboard to indicate each time they had either a favorable or unfavorable impression of either Obama or McCain. The participants in the Speaker Expression condition pressed one of 4 labeled keys on the number pad of the computer
keyboard to indicate each time each candidate expressed either anger or contempt (scorn). Each time a participant pressed a button, the corresponding phrase, such as "Obama expresses ANGER," flashed on the screen. Once the videos were finished, the participants were then given the post-debate questionnaire (included here as Appendix C), which incorporated post-debate thermometer ratings and items measuring political identification, political involvement, and interest. The post-debate questionnaire also included questions on who the participants thought did a better job during the debate and why; how often each candidate had made them feel various emotions (e.g. fear, pride, hope, admiration, anger, and contempt); whether each candidate has important desirable and undesirable qualities; and whether each candidate would cause desirable and undesirable outcomes if elected President. In addition, participants were asked to rate their own liberal/conservative political ideology on a 7-point scale from 1 (extremely liberal) to 7 (extremely conservative). Finally participants filled out demographic questions on their date of birth, gender, marital status, level of education, employment status (whether or not they are employed, how many hours per week they work, and what their main occupation is), family income level, and race. The demographic questions came from the American National Election Studies and the questions about candidates' performance in the debates came from the USA Today/Gallup opinion poll (http://www.pollingreport.com/wh08a.htm; http://www.electionstudies.org/studypages/2008prepost/2008prepost_qnaire_pre.pdf).
Results

Data Analysis

SPSS 20, Excel 2010, and Vassar Stats (http://www.vassarstats.net) were used for the statistical analyses in this study. SPSS 20 was used to compute all $t$-tests and ANOVAs. Excel 2010 was used to compute correlations and log base 10 (x+1) button press transformations. Vassar Stats was used to compute Fisher $r$-to-$z$ transformations, $z$-tests, and tests of significance for correlation coefficients.

Variables: Constructs

The variables in the following analyses are derived from participants' answers to items from the pre- and post-test questionnaires as well as participants' responses (button press data) from the debate watching task.

The "change in favorability" variable is derived from subtracting the participants' pre-test feeling thermometer ratings of the candidates (questionnaire items 12 & 13) from the participants' post-test feeling thermometer ratings of the candidates (questionnaire items 24 & 25). That is, change in favorability = thermometer rating 2 - thermometer rating 1, for each of the candidates.

"Party identification" and "partisanship" variables are derived from participants' answers to items 8 through 11 on the pre-test questionnaire. Their answers were used to categorize participants into the following groups: strong Democrats, weak Democrats, unaffiliated participants, weak Republicans, and strong Republicans. In analyses that only involve political party affiliation, "strong" and "weak" partisanship groups are combined for their respective political parties. The unaffiliated group is comprised of those participants who answered questionnaire item 8 with "independent" (n = 16), "no
preference" (n = 27), or "don't know" (n = 8).

The "political ideology" variable is derived from participants' answers to item 67 on the post-test questionnaire. Their answers were used to categorize participants into the following groups: liberals, moderates, and conservatives. The liberal group is comprised of those participants who answered questionnaire item 67 with "extremely liberal," "liberal," and "slightly liberal." The moderate group is comprised of those participants who answered questionnaire item 67 with "moderate: middle of the road." The conservative group is comprised of those participants who answered questionnaire item 67 with "extremely conservative," "conservative," and "slightly conservative." The pre-test questionnaire is included as Appendix A and the post-test questionnaire is included as Appendix C.

**Productivity Issues**

In order to address the potential confound of individual differences in productivity rates (some participants may tend to push buttons more or less than others), two methods were devised. The first method consisted of calculating percentages based on the number of one type of presses divided by the total number of button presses by the participant for that candidate. For example: Obama’s rated contempt percentage per participant in the SE condition is the number of contempt-expressed-by-Obama button presses divided by (the number of contempt-expressed-by-Obama button presses + the number of anger-expressed-by-Obama button presses). A drawback of this method is that it creates a term which combines the effects of contempt and anger in relation to one another, rather than being able to examine the effects of anger and contempt separately.

The second method consisted of transforming all button press data using a log
base 10 \((x+1)\) function in order to normalize the data and minimize the effects of individual participant differences in button pressing productivity. Using this method it is possible to examine the effects of anger and contempt separately for each analysis, while at the same time reducing the impact of individual differences in productivity. This type of transformation is frequently recommended for continuous positive data (Keene, 1995). The drawbacks of transforming the data in this manner however are that it restricts the range of the button press data and may give undue weight to small values (Keene, 1995). For these reasons, all analyses were run using transformed and untransformed data and all cases in which the untransformed data yield different results than the transformed data are reported.

**Hypotheses and Tests**

Is anger more effective than contempt for unaffiliated participants?

H1: The association between candidates' anger displays and their change in favorability among unaffiliated participants will be significantly more positive than the association between candidates' contempt displays and their change in favorability among unaffiliated participants.

Pearson correlation coefficients were computed for the associations between number of button presses for each candidate's perceived emotion expression and the change in favorability for each candidate among participants who said they usually think of themselves as Democrats, as Republicans, or as unaffiliated (those who indicated they were independent, had no preference, or didn't know). Separate correlations were calculated for expressions of anger and contempt. These data are shown in Table 2.
Table 2

*Correlations Between Log Transform (X+1) of Perceived Emotion Button Presses and Change in Favorability, by Party Identification (Speaker Expression Condition)*

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Perceived Anger Button Presses</th>
<th>Perceived Contempt Button Presses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Democrats (n=14)</td>
<td>Unaffiliated (n=18)</td>
</tr>
<tr>
<td>Obama</td>
<td>-.53</td>
<td>-.24</td>
</tr>
<tr>
<td>McCain</td>
<td>.15</td>
<td>.14</td>
</tr>
</tbody>
</table>

*Note:* Bold typeface items are compared in analyses. Items marked with <sup>b</sup> are compared in subsequent analyses for hypothesis 5.

As shown in bold typeface in the “Unaffiliated” columns of Table 2, nonsignificant decreases in favorability (from before to after the debate) were associated with Obama’s perceived expressions of anger ($r = -.24, p = .34$) and contempt ($r = -.12, p = .64$). Nonsignificant increases in favorability were associated with McCain’s perceived expressions of anger ($r = .14, p = .58$) and contempt ($r = .09, p = .73$). Fisher z-tests showed that the differences between the anger and contempt correlations were not significant for Obama ($z = -0.34, p = 0.73$) or McCain ($z = 0.15, p = 0.88$). Thus, hypothesis 1 was not supported. It should be noted that due to small sample size (n = 18) and the samples being paired rather than independent the assumptions of the z-test were violated.
H2: Strong Democrats will feel more contempt for McCain than will unaffiliated participants.

Table 3 shows the mean number of times participants in the Audience Emotion condition felt anger and contempt toward Obama and McCain, broken down by strength of party identification.

Table 3
Mean Felt Anger and Contempt Button Presses (with SDs) by Party Identification (Audience Emotion Condition)

<table>
<thead>
<tr>
<th>Target Candidate</th>
<th>Felt Anger Button Presses</th>
<th>Felt Contempt Button Presses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong Dems (n=11)</td>
<td>Weak Dems (n=13)</td>
</tr>
<tr>
<td>Obama</td>
<td>2.09 (3.62)</td>
<td>3.69 (6.36)</td>
</tr>
<tr>
<td>Log (x+1) Obama</td>
<td>0.31 (0.37)</td>
<td>0.36 (0.51)</td>
</tr>
<tr>
<td>McCain</td>
<td>41.45 (40.35)</td>
<td>17.46 (15.75)</td>
</tr>
<tr>
<td>Log (x+1) McCain</td>
<td>1.45 (0.43)</td>
<td>1.05 (0.55)</td>
</tr>
</tbody>
</table>

Note: Dems = Democrats; Unaf = Unaffiliated participants; Reps = Republicans. Bold typeface items are compared in analyses.

As shown by the bolded values in the table, strong Democrats did feel more contempt toward McCain \( (M = 1.25, SD = 0.61) \) than did unaffiliated participants \( (M = 0.96, SD = 0.60) \), as predicted, but this difference was not significant, \( t (18) = 1.07, p = 0.30 \), two-tailed. The magnitude of the difference in the means (mean difference = 0.29, 95% CI: -0.28 to 0.87) was moderate (eta squared = 0.06).
In order to determine if the restriction of range caused by the \( \log(x+1) \) transformation of the data was obscuring a difference between strong Democrats and unaffiliated participants on contempt felt toward McCain, a one-tailed \( t \)-test was conducted using the untransformed button press data. As shown above the bolded values in Table 3, strong Democrats did feel more contempt toward McCain (\( M = 33.91, SD = 36.36 \)) than did unaffiliated participants (\( M = 15.11, SD = 13.01 \)), as predicted. An independent-samples \( t \)-test assuming unequal variances revealed a marginally significant difference in the predicted direction, \( t(13) = 1.59, p = 0.07 \), one-tailed. As with the transformed data, the magnitude of the difference in the means (mean difference = 18.80, 95% CI: 25.47 to 35.49) was moderate (eta squared = 0.12). Due to there being too few strong Republican participants, a two-tailed \( t \)-test was not conducted to test if strong Republicans reported more felt contempt for Obama than unaffiliated participants.

As an exploratory measure to test if there was a difference between strong Democrats and weak Democrats on contempt felt toward McCain a 2-tailed \( t \)-test was conducted. Strong Democrats did feel more contempt toward McCain (\( M = 1.25, SD = 0.61 \)) than did weak Democrats (\( M = 0.99, SD = 0.48 \)), but this difference was not significant, \( t(22) = 1.17, p = 0.26 \), two-tailed. The magnitude of the difference in the means (mean difference = 0.26, 95% CI: -0.20 to 0.72) was moderate (eta squared = 0.06).

Thus, although the means were in the predicted direction, there was not significant support for hypothesis 2 in this small sample.
H3: Strong Democrats will perceive more use of contempt by McCain than will unaffiliated participants.

Table 4 shows the mean number of times participants in the Speaker Expression condition perceived anger and contempt expressed by Obama and McCain, broken down by strength of party identification.

Table 4

Average Perceived Emotion Button Presses (with SDs) by Party Identification (Speaker Expression Condition)

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Perceived Anger Button Presses</th>
<th>Perceived Contempt Button Presses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong Dems (n=6)</td>
<td>Weak Dems (n=8)</td>
</tr>
<tr>
<td>Obama</td>
<td>4.67 (2.73)</td>
<td>9.63 (10.34)</td>
</tr>
<tr>
<td>Log (x+1) Obama</td>
<td>0.70 (0.24)</td>
<td>0.84 (0.46)</td>
</tr>
<tr>
<td>McCain</td>
<td>18.00 (14.27)</td>
<td>21.00 (16.32)</td>
</tr>
<tr>
<td>Log (x+1) McCain</td>
<td>1.19 (0.30)</td>
<td>1.21 (0.38)</td>
</tr>
</tbody>
</table>

Note: Dems = Democrats; Unaf = Unaffiliated participants; Reps = Republicans. Bold typeface items are compared in analyses.

As shown by the bolded values in the table, unaffiliated participants perceived a nearly equal amount of contempt expressed by McCain (M = 1.26, SD = 0.41) as strong Democrats did (M = 1.28, SD = 0.19), and this difference was not significant, t (22) = 0.16, p = 0.87, two-tailed. The magnitude of the difference in the means (mean difference
was very small (eta squared = 0.001). Due to there being too few strong Republican participants, a two-tailed $t$-test was not conducted to assess whether strong Republicans perceived more expressed contempt by Obama than unaffiliated participants. Thus, there was no support for hypothesis 3 in these data.

In order to more fully explore how partisanship may affect emotional perception, another $t$-test was performed comparing strong Democrats to unaffiliated participants on perceived anger displays made by McCain. The difference between the amount of anger expressed by McCain that was perceived by strong Democrats ($M = 1.19$, $SD = 0.3$) and the amount perceived by unaffiliated participants ($M = 1.26$, $SD = 0.45$) was also not significant, $t(22) = -0.35, p = 0.73$, two-tailed. Due to there being too few strong Republican participants, a two-tailed $t$-test was not conducted to test if strong Republicans perceived more expressed anger by Obama than unaffiliated participants. Taken together, these results seem to indicate that partisanship may not affect emotional perception (at least for strong Democrats and negative emotions).

As an exploratory measure to test if there was a difference between strong Democrats and weak Democrats on perceived contempt displays made by McCain, a 2-tailed $t$-test was conducted. Strong Democrats did perceive more contempt from McCain ($M = 1.28$, $SD = 0.20$) than did weak Democrats ($M = 1.24$, $SD = 0.33$), but this difference was not significant, $t(12) = 0.26, p = 0.80$, two-tailed.

Is contempt more effective for conservatives than for liberals?

H4a: The association between the more conservative candidate’s use of contempt and the increase in favorability for the more conservative candidate among
conservatives will be significantly greater than the association between the more liberal candidate's use of contempt and the increase in favorability for the more liberal candidate among liberals.

Pearson correlation coefficients were computed for the associations between the number of button presses for each candidate's perceived use of contempt and the change in favorability for each candidate, among liberal, moderate, and conservative participants. These data are shown in Table 5.

Table 5
Correlations Between Log Transform (X+1) of Perceived Emotion Button Presses and Change in Favorability, by Ideology (Speaker Expression Condition)

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Perceived Anger Button Presses</th>
<th>Perceived Contempt Button Presses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liberals (n=16)</td>
<td>Moderates (n=9)</td>
</tr>
<tr>
<td>Obama</td>
<td>-0.01</td>
<td>-0.08</td>
</tr>
<tr>
<td>McCain</td>
<td>-0.42</td>
<td>-0.09</td>
</tr>
</tbody>
</table>

Note: Bold typeface items are compared in analyses.

As shown in bold typeface in the “Liberals” and "Conservatives" columns of Table 5, nonsignificant increases in favorability (from before to after the debate) were associated with Obama’s perceived expressions of contempt amongst liberals (r = .03, p = .91). Nonsignificant increases in favorability were also associated with McCain’s perceived expressions of contempt amongst conservatives (r = .05, p = .59). Fisher z-tests showed that the difference between the correlations was not significant (z = 0.05, p = 0.96). Thus, there is no support for hypothesis 4a.
Looking at the associations between the number of button presses for each candidate’s perceived use of anger and the change in favorability for each candidate, among liberal, moderate, and conservative participants reveals an unpredicted pattern. As shown in Table 5, nonsignificant decreases in favorability were associated with McCain’s perceived anger expression amongst liberals \((r = -0.42, p = 0.11)\) and nonsignificant increases in favorability were associated with McCain’s perceived anger expression amongst conservatives \((r = 0.43, p = 0.25)\). A Fisher z-test showed that the difference between the correlations was marginally significant \((z = -1.84, p = 0.07)\). Table 5 also shows that McCain’s perceived anger was associated with increased favorability toward him among conservatives, but Obama’s perceived anger was unrelated to changes in his favorability among liberals. This finding is convergent with reports concerning conservative media (Fox News, Conservative Talk Radio, etc) and conservative movements (Tea Party) being notably angry in tone and content (Zernike, 2010). This finding is exploratory and the implication is speculative, though further investigation along these lines may be warranted.

Is contempt more effective for Republicans than for Democrats?

**H4b**: The association between the Republican candidate's use of contempt and the increase in favorability for the Republican candidate among Republicans will be significantly greater than the association between the Democratic candidate's use of contempt and the increase of favorability for the Democratic candidate among Democrats.
Pearson correlation coefficients were computed for the associations between number of button presses for each candidate's perceived use of contempt and the change in favorability for each candidate among Democrat and Republican participants. These data were shown above in Table 2. As was shown by the correlation coefficients marked by subscripted a “b” in the “Democrats” and "Republicans” columns of Table 2, nonsignificant decreases in favorability (from before to after the debate) were associated with Obama’s perceived expressions of contempt amongst Democrats (r = -.04, p = .89). However, significant decreases in favorability were associated with McCain’s perceived expressions of contempt amongst Republicans (r = -.95, p = .01) (note: due to the low number of Republicans, n = 5, the assumptions of the test to determine if r is significantly different from 0 have been violated). A Fisher z-test showed that the difference between the correlations was significant (z = 2.33, p = 0.02), though in the opposite direction than predicted. Hypothesis 4b was not supported. Instead, perceiving contempt expressed by McCain was associated with decreased favorability amongst Republicans, whereas perceiving contempt expressed by Obama was essentially uncorrelated with changes in favorability among Democrats.

Is contempt more effective for strong partisans than for weak partisans?

H5: The association between a candidate's use of contempt and the increase in favorability for that candidate will be significantly stronger for strong partisans as compared to weak partisans.

Pearson correlation coefficients were computed for the association between ratings of each candidates' perceived emotion use (anger and contempt) and the change in
favorability for that candidate among participants who usually think of themselves as strong Democrats, weak Democrats, unaffiliated (those who indicated they were independent, had no preference, or didn’t know), weak Republicans and strong Republicans. These data are shown in Table 6.

Table 6

*Correlations Between Log Transform (X+1) of Perceived Emotion Button Presses and Change in Favorability, by Party Identification (Speaker Expression Condition)*

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Perceived Anger Button Presses</th>
<th>Perceived Contempt Button Presses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong Dems (n=6)</td>
<td>Weak Dems (n=8)</td>
</tr>
<tr>
<td>Obama</td>
<td>-0.44</td>
<td>-0.72*</td>
</tr>
<tr>
<td>McCain</td>
<td>0.73</td>
<td>-0.26</td>
</tr>
</tbody>
</table>

*Note: Dems = Democrats; Unaf = Unaffiliated participants; Reps = Republicans. Bold typeface items are compared in analyses.*

As shown in bold typeface in the "Strong Democrats" and "Weak Democrats" columns of Table 6, nonsignificant increases in favorability (from before to after the debate) were associated with Obama’s perceived expressions of contempt amongst strong Democrats ($r = 0.38, p = 0.46$) while nonsignificant decreases in favorability were associated with Obama’s perceived expressions of contempt amongst weak Democrats ($r = -0.33, p = 0.42$). A Fisher $z$-test showed that the difference between the correlations was not significant ($z = 1.02, p = 0.31$). Thus, the difference between the groups was in
the predicted direction, but hypothesis 5 was not significantly supported in this small sample.

**Supplemental and Exploratory Analyses**

Did the candidates differentially change in favorability as a result of participants watching the debate?

In order to investigate if there was a difference between Obama's and McCain's change in favorability as a result of participants watching the debate, a $t$-test for paired samples was conducted across all participants. The means and standard deviations of the candidates' change in favorability across all participants are shown in Table 7.

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Mean Change in Favorability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama</td>
<td>3.71 (13.16)</td>
</tr>
<tr>
<td>McCain</td>
<td>-7.74 (17.29)</td>
</tr>
</tbody>
</table>

The difference between the increase in favorability for Obama ($M = 3.71$, $SD = 13.16$), and the decrease in favorability for McCain ($M = -7.74$, $SD = 17.29$) was significant, $t(120) = 5.23, p < 0.0001$ (two-tailed). The mean difference in change in favorability ratings was 11.46 with a 95% confidence interval ranging from 7.12 to 15.79. The eta squared statistic (0.19) indicated a large effect size. Thus, Obama fared more favorably than McCain in the watched section of the debate according to the participants.
Were there differences in the amounts of perceived anger and contempt displayed by the candidates?

In order to investigate if there were differences in the amount of perceived anger and contempt expressed by the candidates during the debate, a series of \( t \)-tests for paired samples were conducted. The means and standard deviations of each candidate’s perceived anger, contempt, and anger and contempt combined across all participants in the Speaker Expression Condition are shown in Table 8.

Table 8
Mean Perceived Emotion Button presses (with SDs) Across All Participants in the Speaker Expression Condition (\( n = 37 \))

<table>
<thead>
<tr>
<th>Candidate Rated</th>
<th>Perceived Anger</th>
<th>Perceived Contempt</th>
<th>Total Perceived Anger and Contempt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obama</td>
<td>8.84 (8.67)</td>
<td>15.73 (19.32)</td>
<td>24.57 (25.59)</td>
</tr>
<tr>
<td>Log (x+1) Obama</td>
<td>0.81 (0.43)</td>
<td>0.98 (0.48)</td>
<td>1.20 (0.47)</td>
</tr>
<tr>
<td>McCain</td>
<td>23.92 (24.08)</td>
<td>24.41 (23.50)</td>
<td>48.32 (44.55)</td>
</tr>
<tr>
<td>Log (x+1) McCain</td>
<td>1.24 (0.38)</td>
<td>1.24 (0.40)</td>
<td>1.57 (0.32)</td>
</tr>
</tbody>
</table>

The difference between perceived Obama anger expressions (\( M = 0.81, SD = 0.43 \)) and perceived McCain anger expressions (\( M = 1.24, SD = 0.38 \)) was significant, \( t (36) = -8.72, p < 0.0001 \) (two-tailed). The mean difference in perceived anger was -0.43 with a 95% confidence interval ranging from -0.53 to -0.33. The eta squared statistic (0.68) indicated a large effect size. Thus, McCain was perceived to express significantly more anger than Obama.
The difference between perceived Obama contempt expressions ($M = 0.98, SD = 0.48$) and perceived McCain contempt expressions ($M = 1.24, SD = 0.40$) was also significant, $t(36) = -4.67, p < 0.0001$ (two-tailed). The mean difference in change in favorability ratings was -0.26 with a 95% confidence interval ranging from -0.38 to -0.15. The eta squared statistic (0.38) indicated a large effect size. Thus, McCain was perceived to express significantly more contempt than Obama.

The difference between all perceived Obama anger and contempt expressions ($M = 1.20, SD = 0.47$) and all perceived McCain anger and contempt expressions ($M = 1.57, SD = 0.32$) was significant as well, $t(36) = -7.57, p < 0.0001$ (two-tailed). The mean difference in change in favorability ratings was -0.37 with a 95% confidence interval ranging from -0.48 to -0.27. The eta squared statistic (0.61) indicated a large effect size. Thus, McCain was perceived to express significantly more anger and contempt combined than Obama.

**Were the candidates perceived to display more anger or more contempt?**

The difference between perceived Obama contempt expressions ($M = 0.98, SD = 0.48$) and perceived Obama anger expressions ($M = 0.81, SD = 0.43$) was significant, $t(36) = 2.68, p = 0.01$. The mean difference between contempt and anger was 0.17 with a 95% confidence interval ranging from 0.04 to 0.30. The eta squared statistic (0.16) indicated a large effect size. Thus, Obama was perceived to express significantly more contempt than anger.

The difference between perceived McCain anger expressions ($M = 1.24, SD = 0.38$) and perceived McCain contempt expressions ($M = 1.24, SD = 0.40$) was not
significant, $t\ (36) = 0.06, p = 0.95$. Thus, McCain was perceived to express an almost equal amount of anger and contempt.

**Do Democrats, unaffiliated participants, and Republicans in the Audience Emotion condition differ in button press productivity?**

While addressing the issue of differences in participants' productivity (as mentioned at the beginning of the results section), questions arose concerning why some participants were more productive than others. One possibility for participants in the Audience Emotion condition is that certain people are more or less emotional or emotionally expressive than others and that differences in felt emotion or in emotional expressiveness might vary along political party and/or ideological lines. As mentioned previously, using the log $(x+1)$ transformation on the button press data may give undue weight to small values and restrict the range of the data (Keene, 1995). This may obscure an effect, especially when the sample sizes of the groups being compared are generally small and unequal. In order to examine emotional expressiveness more directly and avoid issues of range restriction, the untransformed (raw) button press data were used for some of these exploratory analyses.

In order to explore the impact of political party identification on participant emotional expressiveness, as measured by the participants' total number of button presses in the AE condition, two one-way ANOVAs were conducted. Participants were divided into three groups based on their answers to Questionnaire 1, item 8 on political party affiliation (Group 1: Democrats; Group 2: Unaffiliated participants; Group 3: Republicans). The means and standard deviations, both log $(x+1)$ transformed and raw
button press data, for the groups can be seen in Table 9. There was not a statistically significant difference in emotional expressiveness for the three political party groups with the log (x+1) button press data: $F(2, 36) = 0.17, p = 0.85$, or for the raw button press data: $F(2,36) = 0.90, p = 0.42$.

Table 9  
Mean Total Felt Emotion Button Presses (with SDs) by Party Identification (Audience Emotion Condition)

<table>
<thead>
<tr>
<th>Data type</th>
<th>Democrats (n=24)</th>
<th>Unaffiliated (n=9)</th>
<th>Republicans (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untransformed</td>
<td>57.50 (59.28)</td>
<td>54.22 (51.88)</td>
<td>25.00 (8.97)</td>
</tr>
<tr>
<td>Log (x+1)</td>
<td>3.05 (1.39)</td>
<td>3.16 (1.76)</td>
<td>2.74 (0.67)</td>
</tr>
</tbody>
</table>

Do liberals, moderates, and conservatives in the Audience Emotion condition differ in button press productivity?

In order to explore the impact of political ideology on participant emotional expressiveness, as measured by the participants’ total number of button presses in the AE condition, two one-way ANOVAs were conducted. Participants were divided into three groups based on their answers to Questionnaire 2, item 67 on political ideology (Group 1: Liberals; Group 2: Moderates; Group 3: Conservatives). The means and standard deviations, both log (x+1) transformed and raw button press data, for the groups can be seen in Table 10.
Table 10
Mean Total Felt Emotion Button Presses (with SDs) by Political Ideology (Audience Emotion Condition)

<table>
<thead>
<tr>
<th>Data type</th>
<th>Liberals (n=20)</th>
<th>Moderates (n=11)</th>
<th>Conservatives (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untransformed</td>
<td>72.9 (66.51)</td>
<td>33.36 (19.43)</td>
<td>30.17 (8.91)</td>
</tr>
<tr>
<td>Log (x+1)</td>
<td>3.41 (1.48)</td>
<td>2.70 (1.26)</td>
<td>3.00 (0.58)</td>
</tr>
</tbody>
</table>

Levene Tests showed significantly different variances for the three groups with both the log (x+1) transformed button press data: \( W (2, 34) = 3.75, p = 0.03 \), and the raw button press data: \( W (2, 34) = 8.60, p = 0.001 \). Therefore, due to violations of the assumption of homogeneity of variance, the Welch and Brown-Forsythe robust tests of equality of means were used. There was not a statistically significant difference in emotional expressiveness for the three political ideology groups with the log (x+1) button press data: Welch \( (2, 19.59) = 1.02, p = 0.38 \); Brown-Forsythe \( (2, 29.69) = 1.57, p = 0.22 \).

However, there was a statistically significant difference at the \( p < 0.05 \) level in emotional expressiveness for the three political ideology groups with the raw button press data: Welch \( (2, 22.02) = 3.79, p = 0.04 \); Brown-Forsythe \( (2, 24.81) = 6.44, p = 0.01 \). The effect size was large: \( \text{eta squared} = 0.15 \). Due to the violation of homogeneity of variance, post-hoc comparisons were conducted using the Games-Howell post-hoc test. Post-hoc comparisons using the Games-Howell test indicated that the mean score for liberals \( (M = 72.9, SD = 66.51) \) was marginally significantly different from moderates \( (M = 33.36, SD = 19.43) \) \( (p = 0.05, \text{mean difference} = 39.54, 95\% \text{ CI: -0.35 to 79.43}) \) and significantly different from conservatives \( (M = 30.17, SD = 8.91) \) \( (p = 0.03, \text{mean difference} = 42.73, \text{95\% CI: -1.45 to 86.90}) \).
95% CI: 4.15 to 81.32). Moderates did not differ significantly from conservatives. This result means that, according to this measure, liberals were more emotionally expressive than both moderates and conservatives, though this relationship only appears in the untransformed button press data. This is likely due to both the large variance seen in button press scores for liberals and the restriction of range caused by the log (x+1) transformation.

**General Discussion**

The hypotheses in this study revolve around two basic ideas. The first is that partisanship functions similarly to emotional attachment to a particular political party and rejection of the opposing political party, in that as one's partisanship increases so does one's level of negative feelings for the opposing side's candidates. The result was theorized to be functionally equivalent to the drunk on the train anecdote from Fischer and Roseman (2007) whereas familiarity decreased, contempt increased, only in this case decreased familiarity is replaced by increased partisanship. The second idea is that political ideology will moderate the effects that particular negative emotional displays have on participants. Conservatives were expected to be more favorable to contempt displays than liberals due to prior evidence that conservatives are generally more fearful, less affiliative, and more likely to feel disgust (Block & Block, 2005; Jost et al., 2003; Inbar et al., 2008) than liberals. In this framework, unaffiliated and moderate participants were conceived to be essentially emotionally neutral, though they would likely be turned off by excessive negativity (Lau & Pomper, 2001). Overall, the evidence from this study provides mixed support for and lack of support for these hypotheses.
**Hypothesis 1: Is anger more effective than contempt for unaffiliated participants?**

As was shown in Table 2, for unaffiliated participants perceived anger was not associated with significantly more positive changes in favorability than perceived contempt, for either of the candidates. This could be due to unaffiliated participants not in fact being emotionally neutral as theorized. It is possible that unaffiliated participants are a mix of both the politically disengaged and those who are so politically engaged that they do not find that either party represents them. Of the 18 participants in the "unaffiliated to a political party" group, 7 consider themselves liberal and 4 consider themselves conservative whereas only 4 consider themselves moderate and 3 claim to not know.

**Hypothesis 2: Strong Democrats will feel more contempt for McCain than will unaffiliated participants.**

As was shown in Table 3, the general trend the data follow is that anger and contempt felt toward a candidate is highest for strong partisans of the opposing candidate's party and lowest for strong partisans of the candidate's own party. Additionally, the magnitude of the difference in contempt between strong Democrats and unaffiliated participants (1.25 vs. 0.96) is nonsignificantly larger than the magnitude of the difference in anger between Democrats and unaffiliated participants (1.45 vs. 1.27), which is consistent with the hypothesized difference in contempt in particular. There are exceptions: unaffiliated participants report more felt anger than weak Democrats for McCain and weak Republicans report more felt contempt for Obama than strong Republicans. For unaffiliated participants this exception is likely due to the effect the 7
liberals in the unaffiliated group are exerting on the felt emotion scores. For the Republicans the sample sizes are simply too small to meaningfully speculate on the cause behind this exception.

Although strong Democrats did feel more contempt toward McCain than unaffiliated participants, the difference did not reach significance. However, the lack of significance may be due to the small number of participants in the analysis. In fact, strong Republicans could not be compared to unaffiliated participants simply because there weren't enough strong Republicans in the sample. Future research that examines political partisanship and emotions will need to take the challenges of recruiting these particular populations into consideration.

**Hypothesis 3: Strong Democrats will perceive more use of contempt by McCain than will unaffiliated participants.**

As shown in Table 4, strong Democrats perceived roughly the same amount of contempt expressed by McCain as unaffiliated participants, though strong Democrats were predicted to perceive more. An additional analysis showed that strong Democrats also perceived roughly the same amount of anger expressed by McCain as did unaffiliated participants. This points to the possibility that participants' political affiliations and partisanship do not affect their ability to judge the amount of contempt and anger being displayed. Evidence that political affiliations and partisanship do not bias people's observations of expressed emotions is potentially useful for future research in this vein, as it may be one less confound that needs to be controlled for. Additionally, being able to accurately perceive emotions, even in one's opponents, may be adaptive
since the expression of emotions such as anger and contempt are associated with increased probability of important behaviors such as aggression and social exclusion (Fischer & Roseman, 2007). However, more research, especially with Republican participants, is needed on this question.

**Hypothesis 4a and 4b: Is contempt more effective for conservatives and Republicans than for liberals and Democrats?**

As was shown in Table 5, there was practically no difference in the associations between perceived contempt and change in favorability for Obama amongst liberals in comparison to McCain amongst conservatives. Previous research has linked conservatism to disgust, especially on issues of moral purity (Inbar, Pizarro, & Bloom, 2008), and possibly due to fear of death (Jost et al., 2003). Given that conservatives are more dogmatic, hostile to groups that violate their ideas of communal norms, and more in favor of maintaining hierarchy (e.g., against the redistribution of wealth), they were hypothesized to react more favorably to contempt. This however was not the case.

However, as was shown in Table 2, there was a significant difference in the associations between perceived contempt and change in favorability for Obama amongst Democrats compared to McCain amongst Republicans, though this difference was in the opposite direction than what was predicted. The relationship was that perceived contempt from McCain was very negatively associated with change in favorability amongst Republicans \( (r = -.95) \) and perceived contempt from Obama was only very slightly negatively associated with change in favorability amongst Democrats \( (r = -.04) \). Although it is possible that Republicans surprisingly dislike their own candidates
showing contempt or that McCain's displays of contempt were particularly unlikable (possibly made him look bad, especially since he lost the election), it is possible that the unusually strong correlation is due to random error associated with having only five Republican participants. Further evidence for this possibility can be seen in Table 5, in which the correlation between McCain's perceived contempt expressions and change in favorability for McCain amongst the nine conservatives is \( r = 0.05 \), which is both very small and in the opposite direction of the same correlation amongst Republicans.

There is some indication that anger may be more effective for conservatives than for liberals, as was shown Table 5. As previously mentioned, this finding is convergent with reports concerning the markedly angry tone of conservative media and conservative movements, especially the Tea Party (Zernike, 2010). This finding may make sense to anyone who has ever watched an episode of The O'Reilly Factor, which is hosted by the explosively hot-tempered Bill O'Reilly, is frequently the top rated cable news program in America, and had 2.987 million total viewers in May 2013 (http://www.huffingtonpost.com/2013/06/03/may-cable-news-ratings_n_3378226.html). However, further research with a larger sample of conservatives is necessary before any strong conclusions can be made.

**Hypothesis 5: Is contempt more effective for strong partisans than for weak partisans?**

Although, as shown in Table 6, the association between perceived contempt and change in favorability for Obama amongst strong Democrats \( (r = .38) \) was considerably more positive than the association between perceived contempt and change in
favorability for Obama amongst weak Democrats \((r = -.33)\), the difference did not reach significance. The direction of the means is consistent with the hypothesis that partisanship functions like degree of emotional attachment, which results in more felt contempt. As theorized in Fischer and Roseman (2007), repeated instances of anger toward a target without reconciliation with said target may lead to the development of contempt for the target. In this case, repeated instances of one's felt anger toward the Republican party over one's life without reconciliation may, at least partially, be driving participants not only to become stronger Democrats but also to develop and feel more contempt for the Republican party. Furthermore, if strong Democrats tended to feel the most contempt for McCain, they may also be most responsive to contempt expressed by Obama. Roseman, Abelson, and Ewing (1986), for example, found that participants who reported often feeling anger were more responsive to persuasive messages with anger content, and participants who reported often feeling pity were more responsive to persuasive messages with pity content. However, due to such small sample sizes in both the strong Democrat and weak Democrat groups, and no comparative relationship able to be shown between weak Republicans and strong Republicans, no firm conclusions can be drawn.

**Supplemental and Exploratory Analyses**

As shown in Table 7, watching the debate did significantly affect candidates' favorability among the participants. As a result of participants viewing the debate, Obama on average gained 3.71 "degrees" on the feeling thermometer while McCain on average lost 7.74 "degrees," and the difference between these outcomes had a large effect size.
This means that McCain lost more than twice as much ground as Obama gained as a result of the debate and that this difference is meaningful.

As shown in Table 8, and by the series of paired sample t-tests on the data, there is evidence that participants perceived McCain expressing significantly more anger, contempt, and anger and contempt combined than Obama. Also, participants perceived Obama expressing significantly more contempt than anger and McCain expressing almost the same amount of anger and contempt. Taking these findings with the findings above on the difference in change in favorability for Obama and McCain, it is possible that McCain showing so much more anger and contempt during the debate may have hurt his favorability while Obama showing so much less anger and contempt may have helped his favorability. Additionally, Obama showing significantly more contempt than anger and coming out of the debate more favorably and McCain showing almost the same amount of anger and contempt and coming out of the debate less favorably may indicate that anger displays particularly hurt McCain’s favorability amongst participants. This may be a function of how anger is perceived in a debate context, in that anger in general may be perceived as particularly negative or disagreeable (more so than contempt). It is also possible that McCain’s anger displays were uniquely disagreeable to participants and that this finding is specific to McCain and how he is perceived. However, these findings are exploratory and should be regarded as tentative.

As shown in Table 9, political party affiliation did not significantly affect the total number of button presses for participants in the audience emotion condition. Interestingly however, as shown by the untransformed data in Table 10, political ideology did significantly affect the total number of button presses for participants in the audience
emotion condition. It is possible that political ideology might be a more clear and consistent metric than political party affiliation for delineating groups in political and emotion research. The finding that liberals were significantly more emotionally expressive than both moderates and conservatives (at least when pushing buttons to indicate feelings of anger and contempt toward Obama and McCain) is also interesting in its own right, since it is consistent with the stereotype of the overly emotional "bleeding heart liberal." Emotional expressiveness across political ideologies could be a promising subject for future research. However, given the relatively small number of conservatives in this sample, these findings must be regarded as tentative until they can be replicated with greater sample sizes.

With regard to the two basic ideas that led to the hypotheses in this thesis, what have we learned? As seen in H2 and H5, there is some evidence that partisanship does function like emotional attachment to a party and its candidate as well as an emotional distaste for an opposing party and its candidate. However, there was not strong evidence overall that partisanship's relationship to anger and contempt functions in the exact predicted linear manner: where if one's partisanship is low they are more approving of anger displays (as tested in H1), and as one's partisanship increases so does one's approval of contempt usage (as tested in H5). There were some indications of strong Democrats liking Obama's contempt displays more so than weak Democrats (H5) and feeling more contempt toward McCain than weak Democrats (H2), so it is possible that increased partisanship does lead to increased feeling and approval of contempt.

There is also some evidence that political ideology does play a differential role in how people process emotional data, though it may not affect how people respond to
negative emotional displays as predicted. Conservatives were not more favorable toward contempt than liberals as was predicted. In fact, as seen in Table 5, the strongest correlation for conservatives' perceived emotion button presses and change in favorability was for McCain's anger displays ($r = .43, p = 0.25$). This means there is some evidence that conservatives like anger displays, which does converge with real world evidence provided by Fox News and the Tea Party movement (Zernike, 2010). Given the small number of conservatives in this sample, no conclusions should be drawn from this data, but it suggests that displaying anger may be an effective means of garnering favor amongst conservatives.

There was also little evidence that moderates and unaffiliated participants were emotionally neutral. Similarly, there was little evidence that unaffiliated participants were in fact moderate. Future research should avoid this conceptual mistake and recognize that the connections between political ideology and party affiliation are more complex than were assumed at the outset of this study.

Through supplemental analyses, Obama was found to have garnered more favorability among participants than McCain did as a result of watching the debate. It was also found that McCain displayed significantly more anger and contempt than Obama. This seems to indicate that McCain's abundant negative emotional displays may have hurt him in the eyes of participants. Additionally, Obama's relative lack of negative emotional displays, particularly his lack of anger displays, may have helped him in the eyes of participants. These findings shed light on the original question that this research set out to answer: Is anger or contempt the more effective emotion to use in a debate? These preliminary findings indicate that showing too much of either can hurt candidates'
favorability, but that contempt may be more effective than anger in a debate as long as the displays remain within acceptable limits. Furthermore, liberals were found to be significantly more (negatively) emotionally expressive than moderates and conservatives. This finding is interesting and may have implications for how much emotional expression liberals deem is acceptable both in a political debate and in general day-to-day life.

Much has been learned over the course of this research, though these findings must be regarded tentatively. Partisanship may lead to more felt contempt and approval of its usage (at least by one's own candidate). Political ideology seems to be associated with processing emotional data differently, such that liberals might be more emotionally expressive than other groups and conservatives might particularly like anger expressed by their own candidates. Too much emotional negativity in a debate, at least in comparison to a candidate's opponent, may hurt a candidate's favorability and in turn may hurt their chances of winning an election.

**Limitations**

There are a number of limitations to this study. Chief among them are the underpowered analyses due to the small sample sizes used in the various tests of the hypotheses. Although the study included 135 participants overall, once it was decided to examine participants in specific experimental conditions and the data were cleaned (extreme outliers and participants with missing data were removed) there were 37 participants in the Speaker Expression condition and 39 in the Audience Emotion condition. Furthermore, once it was decided to examine differences between participants grouped by political party identification, partisanship, and political ideology, the sample
sizes dwindled further which led to insufficient power to reject the related hypotheses. As can be seen in Tables 2, 3, and 4, this dwindling of our sample size lead to the inability to meaningfully test any hypotheses involving Republicans. Even in the groups that were compared, the risk of a Type 2 error is particularly high due to each compared group's small size.

Another limitation of this study, which compounds the first, is that participants were recruited solely from introductory psychology classes at Rutgers-Camden. This group tended to be young (on average born between 1988 and 1989), left leaning (liberals = 45%, moderates = 29%, conservatives = 16%, don’t know = 10%, Democrats = 46%, Unaffiliated = 42%, and Republican = 12%), educated enough to have graduated high school, and affluent enough to attend a state university. According to the 2010 CIA World Fact Book, American’s median age is 37.2 years old (Central Intelligence Agency, 2010). In 2010, Gallup reported that 31% of Americans identified as Democrat, 29% identified as Republican, and 38% identified as independent (Jones, 2011). In 2012, the United States Census Bureau found that of those Americans aged 25 or over 87.65% were high school graduates and 57.28% had attended some college (U.S. Bureau of the Census, 2012). While it is difficult to say how well this population will generalize to that of the United States, it is clear our sample is fairly different from the population at large. Additionally, out of all 135 original participants only 12% identified as Republican, meaning that any analyses planning to compare Republicans to any other group were necessarily exploratory.

The use of button presses as a means of measuring participant response may be another limitation of this study. While button presses are a seemingly straightforward
(and affordable) means to collect feedback from participants who are watching a debate, because of individual differences in productivity the data turn out to be noisier and less easy to interpret than expected. Additionally, button press measures require participants to actively participate. While the issues presented by participants pressing buttons can be controlled somewhat through data transformations, the issues presented by participants not pressing the buttons at all in certain situations (for example: a participant in the Speaker Expression condition never indicating they perceived Obama display anger) are more difficult to address and interpret. On one hand it may be that participants have no data to report in a given instance (they never saw Obama express anger or never felt contempt toward McCain), but on the other hand it may be that some participants simply became bored and decided not to participate. Unfortunately, the issue of low button press productivity in this study is exacerbated by the restricted sample sizes. This is because a score of zero gains greater weight to pull down the mean of a group with a small n once the data have been transformed. For example the log (x+1) of zero is still zero while the log (x+1) of 99 is 2.

Another limitation in this study is that there is little way of knowing (from the data collected) the degree to which the content being discussed in the debate was driving participants’ responses. For example, a participant may have had an emotionally negative reaction to something Obama said about health care because they substantially disagree with his policy position, as opposed to his expressed emotionality while speaking about it. While it may be possible to examine the transcript and button press data together to approximate reactions to content, further qualitative methods would be required to accurately tease apart what was said versus how it was said and which had the greater
effect on the audience. However, it is likely that both content and form of a message or emotional expression work together rather than separately to make an impression on someone.

Finally, we cannot be sure that the emotions perceived by participants were the emotions actually expressed by the candidates. Future research could use an objective coding scheme, such as the Facial Action Coding System (Ekman, Friesen, & Hager, 2002), to determine the emotions the candidates actually expressed. This could qualify the relationships between candidates’ emotions and audience favorability. The present study analyzes relationships between the candidate emotions perceived by viewers and the viewers’ responses.

Directions for Future Research

In light of the data analyses reported in this thesis, there are a number of potentially interesting directions for future research. First, the issues of restricted sample sizes for all groups should be addressed, though particularly so for Republicans and conservatives. Future research could develop minimum thresholds for the size of groups to be compared based on the sorts of statistics the researchers wish to run. This could be done fairly simply through power analysis. Additionally, if Republicans and conservatives are hard to recruit in psychology classes at urban state universities, groups of participants could be sought outside the university.

Results from this study concerning Obama and participants’ emotional reactions to him, changes in favorability for him, and perceptions of his emotional displays could be retested through several means. One possibility could be to replicate this study with a
participant pool drawn from a different population. Another possibility (currently being explored) is to replicate this study using the 2012 presidential debates between Barack Obama and Mitt Romney. This would be interesting not only because it would allow for replication of findings, but also because it would allow a comparison of people's reaction to a successful candidate (Barack Obama) over time. Additionally, future studies could try to recruit and run participants on the night of the debates for future elections.

The exploratory finding that liberals were more emotionally expressive (of anger and contempt) than moderates and conservatives should also be both replicated and further investigated. Information concerning to what degree liberals are more emotionally expressive as well as explaining the reasons behind the differences (cultural, parental, genetic, etc.) would be interesting. Furthermore, investigating whether liberals are more emotionally expressive for positive, negative, or all emotions would be interesting as well.

The incidental finding which indicated that expressing anger may be more effective in garnering support among conservatives than liberals should also be investigated further. While there appears to be a fair amount of real world and anecdotal support for this finding, the parameters of how anger works in garnering support are unclear. Does anger garner support amongst all conservatives or just certain subsegments (poor vs. rich, etc.)? Does context make a difference in how liberals and conservatives react to expressions of anger (anger in regard to specific issues, offensive vs. retaliatory anger, etc.)? Do liberals dislike expressions of anger in general, or simply McCain’s expressions of anger?
The finding that contempt is more effective for garnering support amongst strong Democrats than weak Democrats should also be further investigated. Exploring whether this finding holds true for all strong partisans or simply strong Democrats, and why this may be, would be interesting. Learning if expressions of contempt could be thought of calculated risks, in that they might solidify one’s base while alienating less committed party members, would also be very helpful information for understanding the persuasive impact of different emotional messages.

Similarly, the effects of expressing any negative emotion by any candidate should be further investigated. Are greater amounts of negativity universally problematic or just for certain candidates, at certain amounts, or both? Do different political ideologies affect how people react to negative emotions? Are there optimum amounts of negative emotional expression, and in what contexts do these rules potentially apply?

There is plenty of work still to be done examining the complex interplay of emotions and politics, particularly in the area of the effects of negative campaigning. This exploratory study offers a test of two potential frameworks to apply in this field: partisanship as emotional attachment and political ideology as differential emotional lens. In the present study, these two frameworks met with mixed results. However, through further refinement, testing, and research, these initial steps may help us move towards a better understanding of important affective political dynamics.
Appendix A

ANONYMOUS CODE #_________
(not linked to your name)

Questionnaire OI Part I

- The directions for filling out this questionnaire are provided with each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.
- If no “SKIP” instruction is provided, you should continue to the NEXT question.
- When answering questions that require marking a box ☐, please use an “X”

1. Some people don't pay much attention to political campaigns. How about you? Would you say that you have been VERY MUCH interested, SOMEWHAT interested or NOT MUCH interested in the political campaigns so far this year?
   ☐ Very much interested
   ☐ Somewhat interested
   ☐ Not much interested

2. In 2004 John Kerry ran on the Democratic ticket against George W. Bush for the Republicans. Do you remember for sure whether or not you voted in that election?
   ☐ Yes, I voted
   ☐ No, I didn’t vote ⇒ SKIP to question 4.
   ☐ Don’t know ⇒ SKIP to question 4.

3. Which candidate did you vote for?
   ☐ George W. Bush
   ☐ John Kerry
   ☐ Other candidate (PLEASE SPECIFY) _________________
   ☐ Don’t know
4. In the 2008 Republican Presidential primary, John McCain ran against Mike Huckabee, Mitt Romney, Ron Paul, Rudolph Giuliani, Duncan Hunter, Fred Thompson, and Tom Tancredo for the Republican nomination. Do you remember for sure whether or not you voted in that election?

☐ Yes, I voted
☐ No, I didn’t vote  ⇒ **SKIP to question 6.**
☐ Don’t know  ⇒ **SKIP to question 6.**

5. Which candidate did you vote for?

☐ Rudolph Giuliani
☐ Mike Huckabee
☐ Duncan Hunter
☐ John McCain
☐ Ron Paul
☐ Mitt Romney
☐ Tom Tancredo
☐ Fred Thompson
☐ Don’t know

6. In the 2008 Democratic Presidential primary, Barack Obama ran against Hillary Clinton, John Edwards, Bill Richardson, Joe Biden, Chris Dodd, Dennis Kucinich and Mike Gravel for the Democratic nomination. Do you remember for sure whether or not you voted in that election?

☐ Yes, I voted
☐ No, I didn’t vote  ⇒ **SKIP to question 8.**
☐ Don’t know  ⇒ **SKIP to question 8.**

7. Which candidate did you vote for?

☐ Joe Biden
☐ Hillary Clinton
☐ Chris Dodd
☐ John Edwards
☐ Mike Gravel
☐ Dennis Kucinich
☐ Barack Obama
☐ Bill Richardson
☐ Don’t know
8. Generally speaking, do you usually think of yourself as a REPUBLICAN, a DEMOCRAT, an INDEPENDENT, or what?
   - Republican
   - Democrat $\Rightarrow$ SKIP to question 10.
   - Independent $\Rightarrow$ SKIP to question 11.
   - Other party (PLEASE SPECIFY) __________________ $\Rightarrow$ SKIP to question 11.
   - No preference $\Rightarrow$ SKIP to question 11.
   - Don’t know $\Rightarrow$ SKIP to question 11.

9. Would you call yourself a STRONG Republican, or a NOT VERY STRONG Republican?
   - Strong $\Rightarrow$ SKIP to question 12.
   - Not very strong $\Rightarrow$ SKIP to question 12.
   - Don’t know $\Rightarrow$ SKIP to question 12.

10. Would you call yourself a STRONG Democrat, or a NOT VERY STRONG Democrat?
    - Strong $\Rightarrow$ SKIP to question 12.
    - Not very strong $\Rightarrow$ SKIP to question 12.
    - Don’t know $\Rightarrow$ SKIP to question 12.

11. Do you think of yourself as CLOSER to the Republican Party or to the Democratic Party?
    - Closer to Republican
    - Closer to Democratic
    - Don’t know
In the next part of the questionnaire we would like to get your feelings toward some of our political leaders and other people who are in the news these days. We would like you to rate that person using something we call the feeling thermometer. Ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person. You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the person. If we ask about a person whose name you don't recognize, you don't need to rate that person.

<table>
<thead>
<tr>
<th>°</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°</td>
<td>Very warm or favorable feeling</td>
</tr>
<tr>
<td>85°</td>
<td>Quite warm or favorable feeling</td>
</tr>
<tr>
<td>70°</td>
<td>Fairly warm or favorable feeling</td>
</tr>
<tr>
<td>60°</td>
<td>A bit more warm or favorable than cold feeling</td>
</tr>
<tr>
<td>50°</td>
<td>No feeling at all</td>
</tr>
<tr>
<td>40°</td>
<td>A bit more cold or unfavorable feeling</td>
</tr>
<tr>
<td>30°</td>
<td>Fairly cold or unfavorable feeling</td>
</tr>
<tr>
<td>16°</td>
<td>Quite cold or unfavorable feeling</td>
</tr>
<tr>
<td>0°</td>
<td>Very cold or unfavorable feeling</td>
</tr>
</tbody>
</table>

12. How would you rate Barack Obama? _____
13. How would you rate John McCain? _____
14. How would you rate Joe Biden? _____
15. How would you rate Sarah Palin? _____
16. How would you rate the Republican Party? _____
17. How would you rate the Democratic Party? _____
18. The FIRST televised Presidential debate between Barack Obama and John McCain took place on Friday, September 26, 2008, and was moderated by Jim Lehrer. How much of the FIRST Presidential debate did you happen to watch?

☐ All of it
☐ Most of it
☐ Some of it
☐ None of it
☐ Not sure

19. The SECOND televised Presidential debate between Barack Obama and John McCain took place on October 7, 2008, and was moderated by Tom Brokaw. How much of the SECOND Presidential debate did you happen to watch?

☐ All of it
☐ Most of it
☐ Some of it
☐ None of it
☐ Not sure

20. The THIRD televised Presidential debate between Barack Obama and John McCain took place on Wednesday, October 15, 2008, and was moderated by Bob Schieffer. How much of the THIRD Presidential debate did you happen to watch?

☐ All of it
☐ Most of it
☐ Some of it
☐ None of it
☐ Not sure

21. On the average day, about how many hours do you personally watch television? ______

22. On the average weekday evening (Monday to Thursday, from 6pm to 11pm), about how many hours do you personally watch television? ______

23. How many days in the PAST WEEK did you watch the NATIONAL network news on TV?

☐ None
☐ One day
☐ Two days
☐ Three days
☐ Four days
☐ Five days
☐ Six days
☐ Every day
☐ Don’t know
Appendix B
Instructions (AE1)

This is a study of emotions resulting from watching political media. We are particularly interested in the emotions ANGER and CONTEMPT (SCORN). By contempt (scorn) we mean a feeling that another person is unworthy of respect.

In this study, you will be shown broadcasts of presidential debates. While you are watching, we would like you to indicate whenever you feel one or the other of these emotions toward Barack Obama or John McCain.

You will indicate which emotions you are feeling toward a candidate at different times by tapping different keys on the computer’s number keypad. When you tap a key, if you are pressing hard enough, your computer screen will show which number you have pressed. Other people in the room will also be tapping on their keypads, but they may be doing different tasks, and the numbers they are asked to tap are likely to have different meanings. In any case, we would like you to focus on your own responses, and not look at those made by other people.

Here is what your computer screen will look like when the program is running:

Please tap the keys as follows:

<table>
<thead>
<tr>
<th>7 on the number pad</th>
<th>9 on the number pad</th>
</tr>
</thead>
<tbody>
<tr>
<td>whenever you feel</td>
<td>whenever you feel</td>
</tr>
<tr>
<td>ANGER</td>
<td>ANGER</td>
</tr>
<tr>
<td>toward Barack Obama</td>
<td>toward John McCain</td>
</tr>
</tbody>
</table>

1 on the number pad whenever you feel
<table>
<thead>
<tr>
<th>3 on the number pad</th>
</tr>
</thead>
<tbody>
<tr>
<td>whenever you feel</td>
</tr>
<tr>
<td>CONTEMPT (scorn)</td>
</tr>
<tr>
<td>toward Barack Obama</td>
</tr>
<tr>
<td>toward John McCain</td>
</tr>
</tbody>
</table>

Once the computer program is running, you can start with one finger resting on the number 5 in the middle of the computer’s number keypad. You will then tap whichever keys correspond to your responses during the debate.

- You can make responses as frequently or infrequently as seems appropriate to you.
- You can make responses at any time from the moment the broadcast begins until the moment it ends.

Once the computer program is running, we will first show you a brief 5 minute excerpt from the first 2008 presidential debate, so that you can practice doing this task. After that, we will be showing you approximately 55 minutes from the start of the third 2008 presidential debate, while you do the same task.

IF YOU HAVE A QUESTION ABOUT WHAT YOU SHOULD DO TO FOLLOW THESE INSTRUCTIONS, PLEASE ASK THE EXPERIMENTER.
Instructions (SE1)

This is a study of emotions resulting from watching political media. We are particularly interested in the emotions ANGER and CONTEMPT (SCORN). By contempt (scorn) we mean a feeling that another person is unworthy of respect.

In this study, you will be shown broadcasts of presidential debates. While you are watching, we would like you to indicate whenever one or the other of these emotions is expressed by Barack Obama or John McCain.

You will indicate which emotions are being expressed at different times by tapping different keys on the computer’s number keypad. When you tap a key, if you are pressing hard enough, your computer screen will show which number you have pressed. Other people in the room will also be tapping on their keypads, but they may be doing different tasks, and the numbers they are asked to tap are likely to have different meanings. In any case, we would like you to focus on your own responses, and not look at those made by other people.

Here is what your computer screen will look like when the program is running:

Please tap the keys as follows:

7 on the number pad whenever Barack Obama expresses ANGER toward someone
9 on the number pad whenever John McCain expresses ANGER toward someone
1 on the number pad whenever Barack Obama expresses CONTEMPT (scorn) toward someone
3 on the number pad whenever John McCain expresses CONTEMPT (scorn) toward someone

Once the computer program is running, you can start with one finger resting on the number 5 in the middle of the computer’s number keypad. You will then tap whichever keys correspond to your responses during the debate.

- You can make responses as frequently or infrequently as seems appropriate to you.
- You can make responses at any time from the moment the broadcast begins until the moment it ends.

Once the computer program is running, we will first show you a brief 5 minute excerpt from the first 2008 presidential debate, so that you can practice doing this task. After that, we will be showing you approximately 55 minutes from the start of the third 2008 presidential debate, while you do the same task.

IF YOU HAVE A QUESTION ABOUT WHAT YOU SHOULD DO TO FOLLOW THESE INSTRUCTIONS, PLEASE ASK THE EXPERIMENTER.
Instructions (CE1)

This is a study of emotions resulting from watching political media.

In this study, you will be shown broadcasts of presidential debates. While you are watching, we would like you to indicate whenever you have a favorable or unfavorable impression of Barack Obama or John McCain.

You will indicate which impressions you are having at different times by tapping different keys on the computer’s number keypad. When you tap a key, if you are pressing hard enough, your computer screen will show which number you have pressed. Other people in the room will also be tapping on their keypads, but they may be doing different tasks, and the numbers they are asked to tap are likely to have different meanings. In any case, we would like you to focus on your own responses, and not look at those made by other people.

Here is what your computer screen will look like when the program is running:

Please tap the keys as follows:

- 7 on the number pad whenever you have a FAVORABLE impression of Barack Obama
- 9 on the number pad whenever you have a FAVORABLE impression of John McCain
- 1 on the number pad whenever you have an UNFAVORABLE impression of Barack Obama
- 3 on the number pad whenever you have an UNFAVORABLE impression of John McCain

Once the computer program is running, you can start with one finger resting on the number 5 in the middle of the computer’s number keypad. You will then tap whichever keys correspond to your responses during the debate.

- You can make responses as frequently or infrequently as seems appropriate to you.
- You can make responses at any time from the moment the broadcast begins until the moment it ends.

Once the computer program is running, we will first show you a brief 5 minute excerpt from the first 2008 presidential debate, so that you can practice doing this task. After that, we will be showing you approximately 55 minutes from the start of the third 2008 presidential debate, while you do the same task.

IF YOU HAVE A QUESTION ABOUT WHAT YOU SHOULD DO TO FOLLOW THESE INSTRUCTIONS, PLEASE ASK THE EXPERIMENTER.
Appendix C

ANONYMOUS CODE #_________
(not linked to your name)

Questionnaire OI Part II

- The directions for filling out this questionnaire are provided with each question. Because not all questions will apply to everyone, you may be asked to skip certain questions.
- If no “SKIP” instruction is provided, you should continue to the next question.
- When answering questions that require marking a box ☐, please use an “X”
In the first part of this questionnaire, we would again like to get your feelings toward some of our political leaders and other people who are in the news these days, using the feeling thermometer.

Remember, ratings between 50 degrees and 100 degrees mean that you feel favorable and warm toward the person. Ratings between 0 degrees and 50 degrees mean that you don't feel favorable toward the person and that you don't care too much for that person. You would rate the person at the 50 degree mark if you don't feel particularly warm or cold toward the person.

If we ask about a person whose name you don't recognize, you don't need to rate that person.

24. How would you rate Barack Obama? _____

25. How would you rate John McCain? _____

26. How would you rate Joe Biden? _____

27. How would you rate Sarah Palin? _____

28. How would you rate the Republican Party? _____

29. How would you rate the Democratic Party? _____
30. Regardless of which candidate you happen to support, who do you think did the better job in the debate you just watched?

☐ Barack Obama
☐ John McCain

31. How has your opinion of Barack Obama been affected by the debate? Is your opinion of Barack Obama more favorable, less favorable, or has it not changed much?

☐ More favorable
☐ Less favorable
☐ Not changed much
☐ Unsure

32. Please briefly explain your answer to question 31.

33. How has your opinion of John McCain been affected by the debate? Is your opinion of John McCain more favorable, less favorable, or has it not changed much?

☐ More favorable
☐ Less favorable
☐ Not changed much
☐ Unsure

34. Please briefly explain your answer to question 33.
35. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama would cause important UNDESIRABLE OUTCOMES, if he was elected President?

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

36. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama would cause important DESIRABLE OUTCOMES if he was elected President?

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

37. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama has important UNDESIRABLE QUALITIES?

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree

38. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that Barack Obama has important DESIRABLE QUALITIES?

- [ ] Strongly agree
- [ ] Agree
- [ ] Neither Agree nor Disagree
- [ ] Disagree
- [ ] Strongly Disagree
39. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that John McCain would cause important UNDESIRABLE OUTCOMES, if he was elected President?
   - Strongly agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree

40. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that John McCain would cause important DESIRABLE OUTCOMES if he was elected President?
   - Strongly agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree

41. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that John McCain has important UNDESIRABLE QUALITIES?
   - Strongly agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree

42. Think about what you thought and felt while you were watching the debate today. While you were watching the debate, to what extent did you agree or disagree that John McCain has important DESIRABLE QUALITIES?
   - Strongly agree
   - Agree
   - Neither Agree nor Disagree
   - Disagree
   - Strongly Disagree
43. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel afraid?
   □ Yes
   □ No  ⇒ **SKIP to question 45.**
   □ Don’t know  ⇒ **SKIP to question 45.**

44. If you answered yes to question 43, how often would you say you’ve felt afraid?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

45. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel hopeful?
   □ Yes
   □ No  ⇒ **SKIP to question 47.**
   □ Don’t know  ⇒ **SKIP to question 47.**

46. If you answered yes to question 45, how often would you say you’ve felt hopeful?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

47. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel angry?
   □ Yes
   □ No  ⇒ **SKIP to question 49.**
   □ Don’t know  ⇒ **SKIP to question 49.**

48. If you answered yes to question 47, how often would you say you’ve felt angry?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know
49. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel proud?

☐ Yes
☐ No  ⇒ **SKIP to question 51.**
☐ Don’t know  ⇒ **SKIP to question 51.**

50. If you answered yes to question 49, how often would you say you have felt proud?

☐ Very often
☐ Fairly often
☐ Occasionally
☐ Rarely
☐ Don’t know

51. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel contemptuous (scornful)?

☐ Yes
☐ No  ⇒ **SKIP to question 53.**
☐ Don’t know  ⇒ **SKIP to question 53.**

52. If you answered yes to question 51, how often would you say you’ve felt contemptuous (scornful)?

☐ Very often
☐ Fairly often
☐ Occasionally
☐ Rarely
☐ Don’t know

53. Has Barack Obama, because of the kind of person he is or because of something he has done, ever made you feel admiring?

☐ Yes
☐ No  ⇒ **SKIP to question 55.**
☐ Don’t know  ⇒ **SKIP to question 55.**

54. If you answered yes to question 53, how often would you say you’ve felt admiring?

☐ Very often
☐ Fairly often
☐ Occasionally
☐ Rarely
☐ Don’t know
55. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel afraid?
   - Yes
   - No  ⇒ **SKIP to question 57.**
   - Don’t know  ⇒ **SKIP to question 57.**

56. If you answered yes to question 55, how often would you say you’ve felt afraid?
   - Very often
   - Fairly often
   - Occasionally
   - Rarely
   - Don’t know

57. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel hopeful?
   - Yes
   - No  ⇒ **SKIP to question 59.**
   - Don’t know  ⇒ **SKIP to question 59.**

58. If you answered yes to question 57, how often would you say you’ve felt hopeful?
   - Very often
   - Fairly often
   - Occasionally
   - Rarely
   - Don’t know

59. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel angry?
   - Yes
   - No  ⇒ **SKIP to question 61.**
   - Don’t know  ⇒ **SKIP to question 61.**

60. If you answered yes to question 59, how often would you say you’ve felt angry?
   - Very often
   - Fairly often
   - Occasionally
   - Rarely
   - Don’t know
61. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel proud?
   □ Yes
   □ No  ⇒ SKIP to question 63.
   □ Don’t know  ⇒ SKIP to question 63.

62. If you answered yes to question 61, how often would you say you have felt proud?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

63. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel contemptuous (scornful)?
   □ Yes
   □ No  ⇒ SKIP to question 65.
   □ Don’t know  ⇒ SKIP to question 65.

64. If you answered yes to question 63, how often would you say you’ve felt contemptuous (scornful)?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know

65. Has John McCain, because of the kind of person he is or because of something he has done, ever made you feel admiring?
   □ Yes
   □ No  ⇒ SKIP to question 67.
   □ Don’t know  ⇒ SKIP to question 67.

66. If you answered yes to question 65, how often would you say you’ve felt admiring?
   □ Very often
   □ Fairly often
   □ Occasionally
   □ Rarely
   □ Don’t know
67. We hear a lot of talk these days about liberals and conservatives. Here is a scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale?

![Liberals/Conservatives Scale]

- [ ] Extremely liberal
- [ ] Liberal
- [ ] Slightly liberal
- [ ] Moderate; middle of the road
- [ ] Slightly conservative
- [ ] Conservative
- [ ] Extremely conservative
- [ ] Don’t know

68. Generally speaking, would you say that you personally cared a good deal who won the presidential election this fall, or that you didn’t care very much who won?

- [ ] Cared a good deal
- [ ] Didn’t care very much

69. On the day before the election, who did you think would be elected President in November?

- [ ] Barack Obama
- [ ] John McCain
- [ ] Other candidate (PLEASE SPECIFY)________________
70. In talking to people about elections, we often find that a lot of people were not able to vote because they weren’t registered, they were sick, or they just didn’t have time.

How about you--did you vote in the elections this November?

☐ Yes, I voted
☐ No, I didn’t vote  ⇒ SKIP to question 73.
☐ Don’t know  ⇒ SKIP to question 73.

71. How about the election for President? Did you vote for a candidate for PRESIDENT?

☐ Yes, I voted for President
☐ No, I didn’t vote for President  ⇒ SKIP to question 73.
☐ Don’t know  ⇒ SKIP to question 73.

72. Who did you vote for?

☐ Barack Obama  ⇒ SKIP to question 75.
☐ John McCain  ⇒ SKIP to question 75.
☐ Chuck Baldwin  ⇒ SKIP to question 75.
☐ Bob Barr  ⇒ SKIP to question 75.
☐ Jeffrey “Jeff” Boss  ⇒ SKIP to question 75.
☐ Roger Calero  ⇒ SKIP to question 75.
☐ Gloria La Riva  ⇒ SKIP to question 75.
☐ Cynthia McKinney  ⇒ SKIP to question 75.
☐ Brian Moore  ⇒ SKIP to question 75.
☐ Ralph Nader  ⇒ SKIP to question 75.

73. How about the election for President? Did you prefer one of the candidates for PRESIDENT?

☐ Yes
☐ No  ⇒ SKIP to question 76.
☐ Don’t know  ⇒ SKIP to question 76.

74. Who did you prefer?

☐ Barack Obama
☐ John McCain
☐ Chuck Baldwin
☐ Bob Barr
☐ Jeffrey “Jeff” Boss
☐ Roger Calero
☐ Gloria La Riva
☐ Cynthia McKinney
☐ Brian Moore
☐ Ralph Nader
75. Would you say that your preference for this candidate was STRONG or NOT STRONG?
   - [ ] Strong
   - [ ] Not strong
   - [X] Don’t know

76. Do you feel things in this country are generally going in the right direction, or do you feel things have pretty seriously gotten off on the wrong track?
   - [ ] Right direction
   - [ ] Wrong track
   - [X] Don’t know
77. What is the month and year of your birth?  

- **Month:**  
  - January  
  - February  
  - March  
  - April  
  - May  
  - June  
  - July  
  - August  
  - September  
  - October  
  - November  
  - December  

- **Year:** 19___

78. What is your sex?

- ☐ Male
- ☑ Female

79. Are you now married, widowed, divorced, separated, or never married?

- ☐ Married
- ☐ Widowed
- ☐ Divorced
- ☐ Separated
- ☐ Never married
- ☐ Don’t know

80. What is the highest level of school you have completed or the highest degree you have received?

- ☐ Less Than 1st Grade
- ☐ 1st, 2nd, 3rd, or 4th Grade
- ☐ 5th or 6th Grade
- ☐ 7th or 8th Grade
- ☐ 9th or 10th Grade
- ☐ 11th grade
- ☐ 12th grade No Diploma
- ☐ High School Grad – Diploma or Equivalent
- ☐ Some College But No Degree
- ☐ Associate Degree
- ☐ Bachelor’s Degree
- ☐ Master’s Degree
- ☐ JDC, STD, THD
- ☐ LLB, JD
- ☐ MD, DDS, DVM, MVSA, DSC, DO
- ☐ PhD, LIT, SCD, DFA, DLIT, DPH, DPHIL, JSC, SJD
81. Are you doing any work for pay at the present time?
   ☐ Yes
   ☐ No  ⇒ SKIP to question 81.

82. About how many hours do you work on your job in the average week?_____

83. What is your main occupation? What kind of work do you do?

84. Please mark the box of the income group that includes the income of all members of your family living in your household in 2008 before taxes. This figure should include salaries, wages, pensions, dividends, interest, and all other income.
   ☐ None or less than $2,999
   ☐ $3,000 – $4,999
   ☐ $5,000 – $6,999
   ☐ $7,000 – $8,999
   ☐ $9,000 – $10,999
   ☐ $11,000 – $12,999
   ☐ $13,000 – $14,999
   ☐ $15,000 – $16,999
   ☐ $17,000 – $19,999
   ☐ $20,000 – $21,999
   ☐ $22,000 – $24,999
   ☐ $25,000 – $29,999
   ☐ $30,000 – $34,999
   ☐ $35,000 – $39,999
   ☐ $40,000 – $44,999
   ☐ $45,000 – $49,999
   ☐ $50,000 – $59,999
   ☐ $60,000 – $69,999
   ☐ $70,000 – $79,999
   ☐ $80,000 – $89,999
   ☐ $90,000 – $104,999
   ☐ $105,000 – $119,000
   ☐ $120,000 and over
85. What racial or ethnic group or groups best describes you?

☐ Black
☐ Asian
☐ Native American
☐ Hispanic or Latino
☐ White
☐ Other (Please specify)_________________
☐ Don’t know

THANK YOU VERY MUCH FOR YOUR WORK ON THESE QUESTIONNAIRES!
References


http://www.thatone08.com